# GLOBAL ENVIRONMENTAL STUDIES MAJOR & MINOR



## UNDERGRADUATE PROGRAM GUIDE ACADEMIC YEAR 2020-21

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#### PROGRAM OVERVIEW

#### GLOBAL ENVIRONMENTAL STUDIES OVERVIEW

#### Global Environmental Studies (GES) majors study the relations between society and environment.

The major is structured so that students can critically understand how economic, cultural and political processes transform the earth's environment and develop skills to respond to these transformations. Completing the GES major involves taking classes that explore the relationship between society and environment from different disciplinary perspectives. This means that although the major is administered by the School of Geography, GES majors can take classes that count towards the major in other programs, including: Biology; Economics; Environmental Science; International Development, Community and Environment; Management; Philosophy; Physics; Political Science; Psychology; Sociology; and Visual & Performing Arts.

Completing the GES major requires student to take 12 courses with GES attributes. These courses are listed in this handbook. The major is structured so that students build foundational knowledge in their core courses, and then move on to develop one of three specialized sets of skills. Your selection of classes and specialization should be undertaken in collaboration with your GES advisor. Given the breadth of the GES major, it is imperative that students actively construct their major, understanding why they are taking particular classes and identify specific learning outcomes for the major.

#### LEARNING OBJECTIVES OF THE MAJOR

- Build foundational knowledge in society-environment relations from different disciplinary perspectives
- Develop a specialized skill set that is applicable to particular scholarly and vocational areas
- Understand both conventional and critical perspectives on society-environment relations
- Build an awareness of the ways in which peoples can actively manage and change their environments

#### GLOBAL ENVIRONMENTAL STUDIES MAJOR & MINOR

#### DECLARING A MAJOR OR MINOR IN GLOBAL ENVIRONMENTAL STUDIES

Whether you are planning to major or minor in Global Environmental Studies, the first thing you should do is read this guide. Once you've done that, you should talk with the Program Assistant, who will help you in this preliminary stage and will arrange for you to meet with the Program Director for comprehensive academic advice. Both the Program Assistant and the Program Director can assist you in choosing an Advisor (a professor to be determined by mutual agreement between you and the Advisor).

Contact Information in the School of Geography:

- Director, Global Environmental Studies Program Rinku Roy Chowdhury (<a href="mailto:rroychowdhury@clarku.edu">rroychowdhury@clarku.edu</a>)
- Program Administrator
   Joseph Getzoff (<u>igetzoff@clarku.edu</u>)

Each student is required to regularly complete a worksheet for the major. This worksheet should be filled out when the student first declares the major, and then updated at each advising period. The worksheet enables the student to (a) identify courses already taken, (b) courses that are planned for the future, and (c) the GES specialization the student is developing.

#### GLOBAL ENVIRONMENTAL STUDIES MAJOR REQUIREMENTS [12 COURSES]

- 5 Core Courses
- 2 Skills Course
- 4 Specialization Courses
- 1 Capstone Course/Credit

#### GLOBAL ENVIRONMENTAL STUDIES MINOR REQUIREMENTS [8 COURSES]

- 5 Core Courses
- 1 Skills Course
- 2 Specialization Courses

#### CORE OVERVIEW

#### (5 core courses required for the Major and the Minor)

Core courses develop knowledge in the basic concepts that are used to understand the relations between society and environment. Core courses should be taken at the beginning of your major, since later specialization courses often have pre-requisites and optimal learning in 200-level classes can only be achieved with some foundational learning being already completed.

The GES program's core courses are divided into 4 types:

- **State of the Earth [one course required]**: What are the contemporary relations between society and environment? How do we begin to critically understand these relations?
- ❖ Natural Science [one course required]: What are the earth's physical, chemical and biological processes that shape the landscapes of the planet?
- ❖ **Politics and Economy:** How does the economy impact the environment? How do different nations impact the climate? How do governments and social institutions seek to intervene and shape human-environment relations?
- Culture: How do we understand the environment? What landscapes are protected and why? How do we learn to appreciate and value the living world?

At the end of the major, students should therefore have completed 1 "State of the Earth" course, 1 "Natural Science" course, and a selection of 3 other core courses from any combination of the four types of core courses. This allows students to combine social science and natural science training in the way that best suits their personal and career goals. Each year, several 000-level and 100-level core courses are identified in this guide. In certain cases, a 200-level course may be used to fulfill a core course requirement, subject to the approval of the student's GES advisor.

#### SKILLS OVERVIEW

#### (2 skills courses required for the Major, 1 required for the Minor)

Skills courses develop research, literacy, numeracy, and mapping skills for generating and interpreting knowledge of society-environment relations. Your selection of skills courses should be made with a strong consideration of how these skills relate to your GES specialization. You are highly encouraged to discuss this connection between your skills selection and specialization with your GES advisor.

#### RESEARCH METHODS OVERVIEW

(Strongly recommended for the Major, not required for the Minor)

GEOG 141 Research Design and Methods in Geography is strongly encouraged for the GES major. It is advised that you to complete this course before taking your specialization courses, preferably during your sophomore year (particularly if you plan to study abroad). Research Methods is offered at least once per year, typically in the spring semester.

A student may be granted permission to substitute another skills class for GEOG 141 by their GES advisor. This permission usually appertains to GES students taking a humanities-based approach to the major.

#### SPECIALIZATION OVERVIEW

#### (4 specialization courses required for the major, 2 required for the Minor)

Specialization courses are designed to develop a skill set within a particular set of skills relating to society-environment relations. There are three specializations within the GES major:

- Political Ecology
- Climate Change and Sustainability
- Land and Resource Management

Students should recognize that these specializations are not discrete, but rather they are intertwined. If certain courses appear relevant to their specialization, they are encouraged to discuss with their advisor the possibility of incorporating other GES classes into their particular major specialization.

An important rationale behind the specializations within the GES major are the potential vocational and political arenas that our majors might move into. Specialization classes should therefore be selected in dialogue with skills classes. In general, specialization courses should be taken after the relevant core courses have been completed.

#### CAPSTONE OVERVIEW

#### (Required for the Major, not required for the Minor)

One Capstone credit is required for the GES major. At the university level, a capstone is defined as an experience - a course in the major or an independent project - through which students apply integrative learning. A capstone requires a complex individual or group project that is substantially defined and carried forward by the student and demonstrates accomplishment of Clark's Liberal Education goals, especially a capacity to practice within an academic or professional field effectively.

To meet the Capstone requirement in the GES major, the student must earn a 200 or 300 level credit that relates to the student's specialization. Consistent with the diversity of topics and methods in the three

areas of specialization, GES students may choose from multiple paths to earning the capstone credit, subject to the approval of their capstone advisor. The student's capstone advisor will help determine how any particular credit satisfies the capstone criteria. The advisor will make this determination based on the purpose of the capstone, which is for the student to integrate content and skills in GES, as applied to a particular topic.

#### **CAPSTONE TYPES**

- 1. A project completed in a specialization course (200/300 level)
- 2. Research experience (GES 299)
- 3. Directed Study with a faculty advisor (GES 299)
- 4. Research conducted through the Human Environment Regional Observatory (HERO) program, Forest Ecology Research Lab (FERL) work, Biogeosciences Research Group, Extractive Industries Research Group, or the Polar Science Research Laboratory
- 5. Internship (GES 298)
- 6. Honors thesis (GES 297)

Additionally, Geography 141, strongly recommended of all majors, trains students in the fundamentals of Research Design and Methods and proposal writing, which broadly prepares students to conceptualize, design and conduct original research relevant to a capstone experience across all three specialization areas.

#### 1. A specialization course (200/300 level)

A number of courses at the 200/300 level fulfill our capstone requirement across our specializations in Political Ecology, Climate Change and Sustainability, and Land and Resource Management. Several of these courses have pre-requisites within the respective specialization areas, in which students are expected to have developed relevant topical and methodological knowledge upon which they can build their capstone project.

#### 2. Research experience (GES 299)

Students may enroll in directed study for a research experience during the course of the semester. They may do so via two main avenues:

- a. An individual/independent research project conducted under the supervision of a faculty member. Student typically enroll in GES 299 during the completion of the work.
- b. Work done in collaboration with a research group or team, for instance, in which students may contribute as a research assistant. Examples of such projects and research teams include (but are not limited to): Human Environment Regional Observatory (HERO) program; Forest Ecology Research Lab (FERL); Biogeosciences Research Group; Extractive Industries

Research Group; and the Polar Science Research Laboratory. Most such research opportunities have a separate, competitive application process. Students accepted into these research teams/groups will be advised on how to register for academic (and capstone) credit.

#### 3. Internship (GES 298)

Students completing an on/off campus internship or LEEP project related to their GES major are encouraged to consider developing a capstone through that planned work. To do so, they must identify a faculty sponsor and apply to the Career Connections Center for academic credit the semester before the internship commences. The internship must directly contribute to the student's experiential learning relevant to their chosen specialization field. Once the internship is completed, the student should submit a synopsis of their internship experience or other materials as agreed on with their faculty sponsor and the Career Connections Center.

#### 4. Honors thesis (GES 297)

The honors program in GES provides eligible students with the opportunity to conduct a major independent research project. For further information about the honors program and eligibility criteria, please refer to the "Honors in GES" section below.

Capstone Form and process: Each student proposing a capstone needs identify a faculty advisor for the capstone. Before registration for the 200-level credit and beginning the qualifying activity, the student must complete and submit the Capstone Form under their advisor's guidance. The student and their capstone faculty sponsor sign the form, obtain the GES program advisor's signature, and submit the completed form to the Program Administrator. Towards the end of the semester or upon completion of the capstone work, the form is then updated, signed by all parties and then resubmitted. It is the student's responsibility to coordinate all processes necessary outside of the departmental requirements (i.e. internship registration, any other Clark forms needed, etc.).

All students completing capstones are strongly encouraged to present their work (e.g., as a poster or presentation) during Academic Spree Day or Fall Fest. They are also required to complete the capstone survey following the completion of their capstone, and before graduation.

#### MINORING IN GES

Students wishing to minor in GES must complete a total of eight courses, which constitute a subset of the major. These eight courses must adhere to the following:

- Core courses: five courses, with one course being from each of the four core course areas.
- Skills Course: one course required

Specialization Courses: two required, with one at the 200 or 300 level. Students should identify their area of specialization and take both classes in the identified specialization.

#### **ADDITIONAL RULES**

#### **Double Counting**

If students are double majors, 2 courses may be cross-counted with the GES major and minor. However, within the program, each GES course can satisfy only one requirement for the major or minor, meaning that no course can count in two areas toward the major or minor.

#### **Double Majors**

All majors must complete 12 GES courses in accordance with the plan described in this guide, even when they have a second major. Two credits at most can count simultaneously for a first and a second major, subject to the approval of the faculty advisor in each department.

#### **Substitutions**

**All majors must complete 12 GES-attributed courses** unless they have received approval from their faculty advisor and the Chair of the Undergraduate Studies Committee to substitute a non-GES course into their program.

To substitute a non-GES course to count towards a GES requirement, you will need to seek approval of your faculty advisor. In order to do this, you must complete the *Petition to Replace a GES Requirement* form.

If you have approval to count a non-GES course towards one of your GES requirements, **you are still expected to complete 11 GES courses** total, replacing the replacement credit with a GES elective.

#### **Letter Grades**

Letter grades of less than C- do not count towards the GES major or minor.

#### Pass/Fail

Credits with a grade of "Pass" can count towards the GES major or minor **only in the case of Internships to fulfill the Capstone requirement**. Other types of credits that are registered as Pass/No Record do not count towards the major or minor.

#### ADDITIONAL COMPONENTS

#### RESEARCH/INTERNSHIP CREDITS

Students are urged to take advantage of internship opportunities. Please view our <u>Careers and Internship website</u>,\* or contact Career Services to learn more about possible opportunities. If students satisfy the requirements for the internship to count as an academic credit at Clark, then the internship can count as a Specialization Course or Capstone toward the Major, subject to the approval of the Advisor.

Career Services can be reached at 508.793.7258 or careers@clarku.edu.

\*See also: School of Geography Moodle Page (in Resources).

#### TRANSFER CREDITS

Transfer credits are evaluated on a case-by-case basis for major/minor credit. If you have transferred to Clark from another university, or if you have taken courses elsewhere that you feel should count in place of a major/minor requirement, consult your advisor and they will instruct you on the process.

#### STUDYING ABROAD

The GES program encourages students to spend at least one semester studying abroad, which is an added reason to consult your advisor early in your program. For more information, contact the Study Abroad office at 508.793.7363 or <a href="mailto:studyabroad@clarku.edu">studyabroad@clarku.edu</a>.

#### HONORS IN GLOBAL ENVIRONMENTAL STUDIES

The Honors Program in GES gives eligible students the opportunity to conduct a major research project. To graduate with honors, a student must complete a two-semester honors project conducted under the supervision of two faculty members: the honors supervisor, and the honors reader. At least one of these faculty members must be a member of the Geography department. Students are encouraged to perform the honors project during the spring semester of the junior year and fall semester of the senior year.

GES Honors is open to juniors who, by the end of the first semester of the junior year, have a minimum grade point average of 3.25 overall and 3.50 in the GES major, and can obtain the approval of an honors supervisor and an honors reader.

For full information on the Honors Program, please view the <u>School of Geography's Guide to Undergraduate Honors.</u> Applications can be found at the same link.

Additionally, eligible students may choose to join Clark's chapter of **Gamma Theta Upsilon** (GTU), the International Geographical Honors Society. Visit the <u>GTU website</u> to learn more about the benefits of becoming a member.

#### **DEPARTMENTAL AWARDS & OPPORTUNITIES**

The geography department nominates a number of Geography, GES, and ESS students (juniors and seniors) each year to receive an array of departmentally-funded awards to recognize academic achievement. Additionally, the department nominates and recommends one graduating student for each of the University awards in the appropriate fields. To learn more about this, visit our website.

#### RESEARCH PRESENTATIONS

Each year, a number of GES students participate in one or more research presentations on and off campus. Students are encouraged to take advantage of these opportunities, as they are great platforms for sharing research, networking, and practicing public speaking and presentation skills. Students can also receive Capstone credit for presentations, subject to advisor approval.

- Fall Fest & Academic Spree Day
- <u>AAG Conference</u> (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 a number of events each academic year that students of all programs are welcome and encouraged to attend.

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

See our website and Facebook page for updates and listings of upcoming events.

#### STUDENT LIFE

#### **Clark Undergraduate Geography Association (CUGA)**

CUGA is the voice of Geography, GES, and 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. They also 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 <a href="mailto:clarkcuga@gmail.com">clarkcuga@gmail.com</a> to learn more.

#### INTERDISCIPLANARY PROGRAMS

#### **Urban Studies (formerly the Development Social Change Concentration)**

The <u>Urban Studies</u> concentration provides students majoring in any field with a structured program of study that enables them to understand the historical, social, economic and political factors that have shaped U.S. cities and how cities have, in turn, affected the lives of their inhabitants.

#### **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 across the USA, and awards and honors.

#### 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 that serves as a hub for online resources, job/internship postings, research opportunities, program materials, event postings, and more.

This page can be 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>Program Administrator</u>.

#### **GIS Help Desk**

Each year the geography department hires one or more undergraduate students to staff our GIS Help Desk; a departmental resource that provides free, one-on-one tutoring and guidance to undergraduate and graduate students seeking assistance in GIS programs and applications. The GIS Help Desk is located in the Geography Main Office (Jefferson 220) and runs during the week for set hours. These hours change each semester, so be sure to check our website and Facebook page for the most recent schedule. The Help Desk only runs when classes are in session and sometimes during finals, depending on availability of the staff.

#### **Map Library**

The Guy H. Burnham Map & Aerial Photograph Library is an active 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 (primarily on the subjects of 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 throughout New England.

#### **Clark Labs**

Since 1987, <u>Clark Labs</u> has been actively developing the IDRISI GIS and Image Processing software which has been used by professionals in a wide range of industries in more than 180 countries. In 2015, Clark Labs released the TerrSet Geospatial Monitoring and Modeling software which includes the IDRISI GIS and Image Processing tools, along with an additional constellation of software tools for monitoring and modeling the earth system.

#### **School of Geography Newsletters**

The department releases two digital newsletters per year, each of which feature highlights from the previous semester and announcements for upcoming months. These newsletters compile updates from departmental faculty, doctoral students, graduate students, undergraduate students, alumni, and staff, and are available online in our <u>digital archive</u>.

## 2020-21 COURSE OFFERINGS

#### **CORE COURSE OFFERINGS**

COURSE OFFERINGS ARE SUBJECT TO CHANGE.

#### **STATE OF THE EARTH | CORE COURSES**

COURSE #	COURSE TITLE	Instructor	Offered
EN 101	Environmental Science and Policy: Intro Cases	M. Ruelle	FA20
GEOG 017	Environment and Society	J. Getzoff	FA20
GEOG 052	Global Change, Regional Challenges	J. Murphy	INT20
GEOG 106	Water and the City [FYI]	R. Roy Chowdhury	FA20

#### **NATURAL SCIENCE | CORE COURSES**

COURSE #	COURSE TITLE	Instructor	Offered
BIOL 084	Biodiversity	A. Knudson	SP21
BIOL 101	Intro to Biology	J. Thackeray, E. Bone	FA20
BIOL 102	Intro to Biology II	Various	SP21
BIOL 105	Evolution	A. Knudson	FA20 / SP21
BIOL 114	Marine Biology	D. Robertson	FA20
BIOL 117	Epidemiology	J. Thackeray	SP21
EN 120	Discovering Environmental Science	T. Downs	FA20
GEOG 102	Weather and Climate	C. Williams	SP21
GEOG 104	Earth System Science	D. Kulakowski	SP21
GEOG 116	Forest Ecology	D. Kulakowski	FA20
GEOG 119	Arctic in the Anthropocene [FYI]	K. Frey	FA20

#### **POLITICS AND ECONOMY | CORE COURSES**

COURSE #	COURSE TITLE	Instructor	Offered
ECON 010	Economics and the World Economy	Various	FA20 / SP21
GEOG 016	Intro to Economic Geography	J. Murphy	FA20
GEOG 018	Environment and Development in the Global South	J. Getzoff	SP21
ID 108	What is Public Health?	Z. Dyer	FA20
ID 121	Culture, Health and Development	E. Foley	SP21
PSCI 157	U.S. Environmental Politics	E. Cohen	SP21

#### **CULTURE | CORE COURSES**

COURSE #	COURSE TITLE	Instructor	Offered
GEOG 136	Gender and the Environment	H. Rosko	FA20
GEOG 157	Psychogeography and Cultural Spaces	M. Davidson	FA20
ID 125	Tales from the Farside	N. Brissett	FA20
		P. Nirmal	SP21
IDND 015	ST: Black Lives Matter (0.5 credits)	N. Overstreet, A. Best	INT20
IDND 015	ST: Pandemic, Horror to Hope (0.5 credits)	D. Little	INT20
IDND 015	ST: COVID, Power, Inequality	C. Caron, J. Park	INT20
PHIL 131	Environmental Ethics	P. Derr	SP21

#### SKILLS COURSE OFFERINGS

Students should select skills courses with a strong consideration of how these skills relate to the desired GES specialization. Students are highly encouraged to discuss this connection between your skills selection and specialization with their GES faculty advisor.

Your objective in the selection of the below skills courses should be to develop congruent knowledge in one or two of the following "areas"

- (1) Spatial Analysis
- (2) Visualization and Film
- (3) Quantitative Analysis
- (4) Research Design
- (5) Communication
- (6) Qualitative Methods

Each skills course listed below is given an "area" label to aid your selection.

COURSE OFFERINGS ARE SUBJECT TO CHANGE.

COURSE #	COURSE TITLE	Instructor	Skill Area	Offered
ARTS 120	Introduction to Photography	Various	2	FA20
ARTS 121	Intermediate Photography	S. DiRado	2	FA20
ARTS 162	Exploring the Natural World: Seeding Artistic	V. Claff	2	FA20
	Process with Drawing and Mixed Media			
BIOL 106	Introductory Biostatistics	K. Mathis	3	SP21
EN 242	Sustainable Development Assessment & Planning	T. Downs	4	SP21
GEOG 110	Introduction to Quantitative Methods	L. Estes	3	FA20
		R. Pontius		SP21
GEOG 141	Research Design and Methods in Geography	R. Roy Chowdhury	4	INT20
		Staff		SP21
GEOG 190	Introduction to Geographic Information Science	J. Guz	1	FA20 / SP21
		R. Roy Chowdhury		FA20
		R. Krithivasan		INT20
GEOG 216	Field Methods for Environmental Science	D. Kulakowski	3	FA20
GEOG 242	Everyday Urban Life (Urban Ethnography Lab)	A. Best	6	SP21
GEOG 246	Geospatial Analysis with R	L. Estes	1	FA20
		L. Song		SP21
GEOG 247	Intermediate Quantitative Methods in Geography	R. Pontius	3	SP21
GEOG 260	GIS & Land Change Models	R. Pontius	1	FA20
GEOG 279	GIS & Map Comparison	R. Pontius	1	FA20

GEOG 282	Advanced Remote Sensing	J. Rogan	1	SP21
GEOG 287	New Methods in Earth Observation	M. Cecil	1	SP21
GEOG 293	Introduction to Remote Sensing	F. Sangermano	1	FA20
GEOG 296	Advanced Raster GIS	F. Sangermano	1	SP21
ID 220	Pedagogy for Social and Environmental Justice	J. Fernando	6	FA20
ID 282	Community Based Health Research	G. Chiriboga	4	SP21
ID 296	Advanced Vector GIS	Y. Ogneva-	1	FA20 / SP21
		Himmelberger		
IDND 020	Writing: Life Among Beasts	H. Macpherson	5	SP21
MGMT 203	Management Accounting	D. Wu	5	SP20
MGMT 260	Applied Art/Science of Management	D. Gallo	5	FA20 / SP21
SCRN 107	Introduction to Digital Filmmaking	S. Sorensen	2	FA20 / SP21

See the online Academic Catalog for complete Course Listings and Descriptions.

#### SPECIALIZATION COURSE OFFERINGS

COURSES SHADED IN GRAY ARE TBD, likely will not be offered during the current academic year.

COURSE OFFERINGS ARE SUBJECT TO CHANGE. If an anticipated semester is not written in, the course is not confirmed yet.

#### **POLITICAL ECOLOGY | SPECIALIZATION COURSES**

COURSE #	COURSE TITLE	Instructor	Offered
EN 217	Place based ecological knowledge	M. Ruelle	FA20
EN 251	Global Environmental Issues: Science, Technology, Policy	E. Gilmore	SP21
GEOG 248	Social Justice and the City	M. Davidson	SP21
GEOG 286	ST: Environmental Politics of the Middle East	J. Getzoff	FA20
GEOG 286	ST: Critical Environmental Histories of the US	J. Getzoff	SP21
HIST 235	The Atlantic World	W. Klooster	FA20
ID 208	Health (In)Equity: Social Determinants	G. Chiriboga	FA20
ID 221	Food Systems: Places, Politics, and Policy	R. Borges-Mendez	SP21
ID 233	Approaches to Community Health	G. Chiriboga	INT20
ID 248	Gender and Health	T. Masvawure	SP21
ID 257	Sex and Development	E. Foley	FA20
ID 277	Approaches to Global Health	E. Foley	FA20
ID 291	Refugees / Forced Migration and Belonging	S. Mitchell	FA20
PSCI 216	Comparative Environmental Politics	P. Posner	FA20

#### **CLIMATE CHANGE AND SUSTAINABILITY | SPECIALIZATION COURSES**

COURSE #	COURSE TITLE	Instructor	Offered
BIOL 216	Ecology	K. Mathis	FA20
EN 207	Climate Change, Energy and Development	E. Gilmore	SP21
EN 228	Food Security and Climate Change	M. Ruelle	SP21
GEOG 205	Introduction to Hydrology	C. Williams	FA20
GEOG 263	The Climate System and Global Environmental Change	K. Frey	SP21
GEOG 286	ST: Arboretum Research	J. Rogan	FA20
ID 234	ST: NEC Council Collaborative	W. Wright, S. Buie	SP21

#### LAND AND RESOURCE MANAGEMENT | SPECIALIZATION COURSES

COURSE #	COURSE TITLE	Instructor	Offered
BIOL 207	Conservation Biology	E. Bone	SP21
ECON 248	Living on the Edge?	J. Brown	FA20
EN 245	Natural Resource Management	C. Sham	SP21
ECON 253	Natural Resource Economics	D. Bauer	SP21
GEOG 259	Global Change, Food and Farming Systems	R. Roy Chowdhury	SP21
ID 257	Mega Development	D. Humphreys-	FA20
		Bebbington	
MGMT 262	Business Ethics and Law	W. O'Brien	FA20 / SP21

#### FORMS & PAPERWORK

In this section you will find a number of forms that you will need throughout your time as a GES major or minor. Most of these forms are kept for departmental records, but some of them should be submitted to the Registrar's office, etc. Please review the instructions on each form before submitting it. **All forms below are required unless otherwise noted.** 

#### MAJOR DECLARATION FORM

**Return to:** Program Administrator

This form is used when you are ready to formally declare a major, minor, or concentration. In GES, if you plan to declare the major, you will first 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>Program Administrator</u>. If you plan to declare a GES minor, you do not need to have a faculty advisor.

Once you have obtained your new faculty advisor's signature, return this completed form to the Program Administrator, who will make a copy for departmental records and then will send it over to the Registrar's Office to be processed.

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

**Must be completed by:** Undeclared students must declare a major before the second semester of their second year at Clark. Otherwise, if a student is adding GES as a minor or a second major, there is no specific deadline.

	Form completed	Date Completed:
MAJC	DR/MINOR WORKSHE	EETS
minor.	The department will keep emester. This is helpful fo	keep track of your progress throughout your time in the GES major or a copy of this sheet on hand and it is recommended that you update ir advising appointments so that your advisor can see which ed and which requirements still remain.
Returr	to: Program Administra	tor
	Form completed	Date Completed:

#### CAPSTONE FORM (REQUIRED FOR MAJORS ONLY)

This form is to notify the department of your plans to satisfy the capstone requirement. You should have this form signed twice: once before registering for the credit that will satisfy this requirement, and again before the end of the semester when you are nearing the end of your project. The department will hold onto this form when it is passed in the first time so that you can request it back to have it signed a second time at the end of the semester.

second	time at the end of the se	emester.
		rm must be completed before registering for the capstone, and then a of the semester in which the credit was taken.
	Form completed (1) Form completed (2)	Date Completed:
GRAD	UATION CLEARANCE	FORM
require at Clarl	ments. <b>All students are k</b> (this normally happens	s intended to notify the Registrar's Office of your remaining required to complete this form once they have registered in 20 units by the end of the first semester of the third year). This form needs to be or each major/minor/concentration you are enrolled in.
your m major/r	ost recent unofficial trans minor worksheet. This wil	Ild make an appointment with your faculty advisor and bring a copy of script as well as the most recently completed version of your I help your advisor see what you have completed, and will also help n plan to take to satisfy your remaining requirements.
gradua	tion clearance form. If yo	gistrar's Office will notify you when you are eligible to complete a u do not complete the form by the given deadline, a hold will be put on e able to register for courses for the upcoming semester.
<b>Return</b> – ASEC)	3	9 Main Street, Room 305 in the Alumni and Student Engagement Center
	•	the Geography department. This form can be found on the <u>Registrar's</u> in the Geography office.
	Form completed	Date 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</u>

<u>Description</u>, then fill out the <u>Academic Internship Application</u> online. Next, you will need to download the following forms from the <u>Career Services</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 Services</u> website
Return to: Career Services
□ Forms completed Date Completed:
PETITION TO REPLACE A GES REQUIREMENT (OPTIONAL)  This optional form is only necessary if you plan to petition to include a non-GES course in your program curriculum. Some examples of when this request would be appropriate:
<ol> <li>if you took a non-GES course that you would like to count towards a specific GES requirement</li> <li>if you are a double major and you took a course that overlaps with a required GES course (e.g. research methods)</li> </ol>
This form is subject to the approval of your faculty advisor as well as the Chair of the Undergraduate Studies Committee. It is preferable that you complete this form <b>before</b> enrolling in the non-GES course.
Return to: Program Administrator
☐ Form completed Date Completed:
CHANGE OF ADVISOR FORM (OPTIONAL)
This optional form is only necessary if you wish to switch to a new faculty advisor within the program. This form can be found on the <u>Academic Advising Website</u> , or you can pick one up in the Geography office.
Return to: Program Administrator
☐ Form completed Date Completed:

To be completed by the student and advisor; kept on file with Program Administrator

#### MAJOR WORKSHEET

. ,		3		
STUDENT NAME:	E	EMAIL ADDRESS:		
INTENDED GRADUAT	TION YEAR: FACULTY A	DVISOR:		
CORE COURSE REQU	JIREMENTS			
CORE CATEGORIES (5 REQUIRED)	COURSE NUMBER & TITLE	SEMESTER & YEAR TAKEN	PROFESSOR	GRADE RECEIVED
State of the Earth (1 Required)				
Natural Science (1 Required)				
(indicate category from list below*):				
(indicate category from list below*):				
(indicate category from list below*):				

#### **SKILLS REQUIREMENTS**

SKILLS COURSES (2 REQUIRED)	COURSE NUMBER & TITLE	SEMESTER & YEAR TAKEN	PROFESSOR	GRADE RECEIVED
Skills Elective**				
Skills Elective				

Skills courses should align with the student's specialization area – see <u>page 15</u> (Skills Course Offerings) for categories and details.

\*\*It is strongly recommended that one of the Skills courses is **GEOG 141: Research Design & Methods in Geography** 

<sup>\*</sup>CORE CATEGORIES: STATE OF THE EARTH // NATURAL SCIENCE // POLITICS & ECONOMY // CULTURE

## MAJOR WORKSHEET (Continued) SPECIALIZATION REQUIREMENTS

Please **circle your specialization area**, or indicate if otherwise. All Specialization courses should be taken within the same category, unless otherwise advised by the student's faculty advisor.

POLITICAL ECOLOGY			CLIMATE CHANGE & SUSTAINABILITY			INABILITY
LAND AND RESOURCE MANAGEMENT		OTHER:				
SPECIALIZATION COURSES (4 REQUIRED, 3 MUST BE 200-LEVEL)	COURSE NU & TITI		SEMESTER & YEAR TAKEN	PRO	PFESSOR	GRADE RECEIVED
100 or 200 Level Course						
200 Level Course						
200 Level Course						
200 Level Course						
CAPSTONE REQUIREMENT  Please circle the type of Capstone Credit, or indicate if otherwise. All Capstone credits must be pre-approved by the student's faculty advisor before registering for the credit (see Capstone Form on page 27).  DIRECTED STUDY/RESEARCH WITH FACULTY  UPPER-LEVEL CLARK COURSE						
INTERNSHIP OTHER:						
CAPSTONE CREDIT TITLE		ourse Number & Title (if applicable)		SEMESTER & YEAR COMPLETED		
MEETINGS WITH ADVISO	DR .					
	OTES:					

#### MINOR WORKSHEET

to be completed by	the student and advisor, kept t	on the with the Pi	ogram Administrator	
STUDENT NAME: EMAIL ADDRESS:				
INTENDED GRADUAT	TION YEAR: FACULTY A	DVISOR:		
MAJOR/MINOR/CON	NCENTRATION:			
CORE REQUIREMEN	ITS			
CORE CATEGORIES (5 REQUIRED)	COURSE NUMBER & TITLE	SEMESTER & YEAR TAKEN	PROFESSOR	GRADE RECEIVED
State of the Earth (1 Required)				
Natural Science				
(1 Required) (indicate category from list below*):				
(indicate category from list below*):				
(indicate category from list below*):				

#### **SKILLS REQUIREMENTS**

SKILLS COURSES (2 REQUIRED)	COURSE NUMBER & TITLE	SEMESTER & YEAR TAKEN	PROFESSOR	GRADE RECEIVED
Skills Elective**				
Skills Elective				

Skills courses should align with the student's specialization area – see **page 15** (Skills Course Offerings) for categories and details.

MINOR WORKSHEET (Continued)
SPECIALIZATION REQUIREMENTS

<sup>\*</sup>CORE CATEGORIES: STATE OF THE EARTH // NATURAL SCIENCE // POLITICS & ECONOMY // CULTURE

Please **circle your specialization area**, or indicate if otherwise. All Specialization courses should be taken within the same category.

**CLIMATE CHANGE & SUSTAINABILITY** 

**POLITICAL ECOLOGY** 

LAND AND RESOURCE MANAGEMENT		0	THER:	
SPECIALIZATION COURSES (2 REQUIRED, 1 MUST BE 200-LEVEL)	COURSE NUMBER & TITLE	SEMESTER & YEAR TAKEN	PROFESSOR	GRADE RECEIVED
100 or 200 Level Course				
200 Level Course				
MEETINGS WITH ADVISO	PR (Optional)			
DATE: NO	OTES:			
DATE: NO	OTES:			
DATE: NO	OTES:			

## **CAPSTONE FORM**

Please submit this completed form to the Program Administrator <b>twice</b> : <b>once</b> before registering for the credit, and <b>again</b> after completion of the credit.
STUDENT NAME: EMAIL ADDRESS:
INTENDED GRADUATION YEAR: FACULTY ADVISOR:
CURRENT LEVEL (at time of first form submission):
<ul><li>□ First Year</li><li>□ Sophomore</li><li>□ Junior</li><li>□ Senior</li></ul>
NAME OF 200-LEVEL CREDIT, PROJECT, INTERNSHIP, etc.:
SIGNATURE OF PROFESSOR WHO INTENDS TO AWARD THE CREDIT:
SIGNATURE OF FACULTY ADVISOR APPROVAL:
SIGNATURE OF STUDENT:
FINAL DATE OF SUBMISSION://
SECOND SIGNATURE OF PROFESSOR WHO HAS AWARDED THE CREDIT:
SECOND SIGNATURE OF FACULTY ADVISOR:
SECOND SIGNATURE OF STUDENT:

This form is meant to stay in departmental 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 GES REQUIREMENT

Under extraordinary circumstances, the Chair of the Undergraduate Studies Committee, with consensus from the student's faculty advisor, may approve a non-GES course to count toward a GES 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 course syllabi, papers or materials, or a letter from an advisor/instructor for consideration.

In keeping with Program Guide requirements, **the student must still complete a total of 12 GES courses.** Please submit this signed form to the Program Administrator. This form should be kept on file with student's Major/Minor Worksheet.

STUDENT NAME:	ID NUMBER:	
MAJOR/MINOR/CONCENTRATION:		-
INTENDED GRADUATION YEAR: F.	FACULTY ADVISOR:	_
COURSE SUBSTITUTION (attach any su	upporting materials or letters)	
NUMBER & TITLE OF PROPOSED REPLA	ACEMENT COURSE:	_
INSTRUCTOR NAME:	DEPARTMENT:	-
PETITION TO REPLACE THE FOLLOWING	G GES REQUIREMENT:	
Specialization Course (can be 100 le	accepted, typically only in cases of double-majors) level <b>only if</b> student has already taken enough 200-levels)	
GES ELECTIVE COURSE THAT WILL FULF	FILL THE 12 <sup>th</sup> REQUIREMENT:	-
Student Signature:	Date://	
(This section to be completed by department faculty)	<del></del>	
	Date://	
USC Chair Signature:	Date://	
APPROVED DENIED		



Global Environmental Studies Major & Minor School of Geography, Clark University 950 Main Street, Worcester MA 01610

email: <a href="mailto:ges@clarku.edu">ges@clarku.edu</a>
phone: 508.793.7336 fax: 508.793.8881

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