CaliforniaState
UniversityChico

## Executive Memorandum 24-003

January 24, 2024
From: Stephen Perez, President
Subject: Approval of the New Option in Landscape Studies within the BA in Geography

Upon the recommendation of the Academic Senate and with the concurrence of the Provost, I approve the Option in Landscape Studies within the Bachelor of Arts in Geography, Department of Geography and Environmental Studies. The new option will require 21 units, will use CSU code 22061 with a related CIP code of 45.0701 , and will be effective fall 2024.

| Policy Title: | EM 24-003 Option in Landscape Studies |
| :--- | :--- |
| Contact: | Department of Geography and Environmental Studies |
| Supersedes: |  |
| Revision: |  |
| Enabling Legislation or <br> Executive Order: |  |

## New Undergraduate Option

Program Name: $\qquad$

Program named above is an option within:
BA in Geography
(degree program name)

Department Contact(s) w/phone \#(s):
LaDona Knigge - 898-5285

## Required Signatures

The Department of Department of Geography and Planning has reviewed and approved this new program

| $\frac{\text { LaDona Knigge }}{\text { Chair, Department Curriculum Committee }}$ |  | May 4, 2023 |
| :--- | :--- | :--- |
| LaDona Knigge |  | Mate 4, 2023 |
| Department Chair |  | Date |

The College of
Behavioral and Social Sciences
has reviewed and approved this new program

| William Nitzky <br> Willim Nitzky May $4,202320.55$ PDTT) | May 4, 2023 |
| :---: | :---: |
| Chair, College Curriculum Committee | Date |
| Ryan Patten | May 4, 2023 |
| College Dean | Date |

Send signature page with proposal attached to Curriculum Services at zip 128

Curriculum Review Completed

9/13/23
Date


Note: The department will be notified of the dates for EPPC, Academic Senate, WASC, and Chancellor's Office review.

## Proposal for a New Option

## I. Landscape Studies in Geography

II. Academic year of intended implementation. 2024-25
III. Name of the department and college submitting the proposal.
A. Department of Geography and Planning (pending name change to

Department of Geography and Environmental Studies)
College of Behavioral and Social Sciences
B. The level of the option is undergraduate
IV. Statements on questions of need and demand.
A. Relation of the program to the University Strategic Plan. The Option in Landscape Studies supports both the Strategic Priorities of Equity, Diversity \& Inclusion, specifically the Strategic Goal to "Address real-world issues of equity, diversity, and inclusion through interdisciplinary and international experiences"; and Resilience \& Sustainable Systems, specifically the Strategic Goal to "integrate sustainability and resilience into curriculum, research, and campus operations to better serve students and meet the needs of society."

This is done through examining human and physical landscapes from multiple perspectives and scales. Human built and natural landscapes (hereafter, the landscapes) are ever changing. Studying landscapes leads to an appreciation and synthesis of human and natural environments in the past, present, and future. Landscapes have been shaped by natural processes over time. So, too have they been shaped by, and shape, the diverse cultures of people that inhabit them. Students critically examine how culture manifests itself within natural and human-made landscapes. Students learn about real-world social and environmental issues while recognizing and drawing from the diverse peoples and knowledges to become more mindful citizens as they engage in environmental stewardship, policy, and land-use planning to support equity, diversity, and inclusion.
B. Need for the proposed option.

1. Identify other CSU campuses with the proposed option. None of the 18 other CSU campuses that have a geography department or program offer an option that is similar to our proposal.
2. Identify neighboring institutions with the proposed option. UC Berkeley is the nearest non-CSU institution that offers BA in Geography. However, it is outside our service area and the

Department of Geography at UC Berkeley does not offer an option that is similar to our proposal.
3. Identify differences, if any, between these programs and the proposed program.
Neither the 18 other CSU campuses nor the UC Berkeley duplicates the option that we are proposing.

Three CSU campuses in Northern California (excluding the Bay Area campuses) offer BA or BS in Geography.

- Cal Poly Humboldt
- BA in Geography
- CSU, Sacramento
- BA in Geography (with concentration)
- Geographic Information Systems and Analysis
- Human Geography
- Metropolitan Area Planning
- Physical Geography
- CSU, Sonoma
- BA in Environmental Studies, Geography and Planning
- BS in Environmental Science, Geography, and Management
These BA programs offer similar courses to those we offer, but all of them offer a large collection from which students select a smaller set of courses for a given category. Unlike these BA programs, our proposed option limits the number of courses, and students select only courses in the application areas. Our common courses in the core and option-core categories are a streamlined selection of courses from our preexisting curriculum. Only CSU, Sacramento has concentration areas that are similar to our proposed option. However, their core lists a large collection of courses from which students select one course for each of four categories. Under the current campuswide/departmental low enrollment/major challenge, the curriculum approach that these three CSU geography departments are taking is not sustainable in our opinion.

Unlike the CSU campuses mentioned above, UC Berkeley offers BA in Geography with concentration areas:

- Geospatial Representations
- Earth System Science
- Critical Environments
- Racial Geographies
- Political Economies

These are very focused areas and are different from our proposed option, which takes a more balanced approach with different application areas. UC Berkeley's BA program also allows students to select courses from large selections for different categories, which is not a route that we can take under our current low enrollment/major environment.
C. Identify other closely related curricula currently offered by the campus.

1. Explain the impact the proposed option will have on these programs.

The Landscape Studies option that we are proposing approaches the landscapes from both physical/environmental and social/behavioral paradigms-thus the geographic perspective. While the Departments of Anthropology; Earth and Environmental Sciences; and Recreation, Hospitality, \& Parks Management may examine some thematic aspects of the proposed option via some of their courses, our approach on campus has always been unique, using the integrated lenses and methodologies of space, time and scale, and does not overlap with their program scopes (see IV.-A.).

For efficiency, we have designed our proposed option using a new framework for our currently approved courses.
2. Explain how current programs do not meet the proposed option's objectives.

The department's current two discrete options are: human geography and planning; and physical and environmental geography. The proposed option is a combination of these two options so that students comprehensively examine and apply the disciplines of human and physical/environmental geography under one umbrella-with landscape as a framing concept.

The term 'landscapes' has significance in the study of geography. It refers to physical/environmental landscapes that account for climate, soils, biodiversity, and topography. It also refers to cultural landscapes - those that are modified by human settlement patterns and culture. As discussed in section C1, the courses in Anthropology and Earth and Environmental Science emphasize one aspect of this discussion. For example, the ERTH courses takes a scientific lab-based approach to analyzing earth processes. The ANTH course focuses heavily on the evolution of human societies and their cultural practices. Geography is
rooted in the social sciences and focuses on humanenvironmental interactions thereby addressing both the human and physical/environmental aspects of the discipline with applications in geospatial analysis, land planning, management, and policy development through the integrative use of environmental and behavioral science data.
D. Student demand for the program. (Narratives for both options should indicate that the numbers here (IV.-D.-2 and -3.) are for both optionsthe best-case scenario.)

1. Give evidence of serious student interest in the proposed option. Survey results from graduating students in GEOG 407 W (GWAR) in Spring 2022 clearly indicate the importance of a blended nature of the two geography options-human and physical/environmental geography. For example, students expressed that the current "planning" option should be incorporated into the overall curriculum, instead of a standalone option. The proposed option streamlines the discrete geography options and has three application areas that students elect to select.

While we are streamlining the curriculum and collapsing two discrete options (human geography and physical/environmental geography) into a cohesive option (Landscape Studies), students are still able to focus on the strengths in selected areas of human geography or physical/environmental geography by selecting an application area (VI.-F.), namely:

- Sustainable Planning
- Landscape Analysis and Visualization
- Landscape Stewardship

The best part of this streamlined option is that students will learn both human geography and physical/environmental geography in a balanced fashion to prepare for the area of application of their choice (VI.-E.).
2. Estimated number of students seeking the option
a. in the year of initiation. 6 (12)*
b. after three years. $18(36)^{*}$
c. after five years. $24(48)^{*}$
(*See the last paragraph of D.-2.-d. for the explanation of the number in the parentheses.)
d. Describe methodology for developing these estimates. Please note that our department is proposing two options: Environmental Studies and Landscape Studies. The following projections (estimated number of students
seeking the option and estimated number of options awarded) are for both options. While semester-to-semester variations are expected, each option will attract one half of the projected numbers over the long run.

For AY 2023-24, there are 25 students admitted (but not yet accepted) to the current options of Geography and Planning. With active PR and recruitment efforts that the department is currently conducting, we expect an increasing number of those admitted students to consider accepting our degree program.

Examples of the PR and recruitment efforts include:

- Obtaining a list of the admitted students and contacting them by calling, sending a text message, and/or meeting through Zoom;
- Hired Tehama Group Communication Team to develop promotional strategies and materials;
- Receiving support from College of BSS for development and distribution on promotional materials for social media and events;
- PR intern is maintaining Twitter, Facebook, Instagram, and LinkedIn pages as well as creating/distributing new spotlight videos of faculty and students; and
- Sending PR materials to selected community colleges and high schools with AP Human Geography classes.

For the year of initiation:
We estimated that only $1 / 4$ of this (admitted) student pool decides to join us (that is, six of 25).

Assuming we keep attracting this same number of students each year (that is, six per year),
after three years: $\underline{18}$
after five years: $\underline{24}$
For the number for "after five years," we assume that the same number of students-six-keeps choosing our degree program and the same number of students complete our degree program in four years.

In addition, we typically attract 3-6** students every semester (either undeclared students or those changing majors). One of our newest GE courses, GEOG 139, has been successfully attracting students, and we offer a section
of GEOG 101 as a U-Course starting Fall 2023. Exposure of Geography and Planning in these freshman courses is expected to attract more potential students to our proposed option. We safely assume that these courses additionally attract 3-6*** new students. [These values (**, and ${ }^{* * *)}$ add up to 6-12 students.] We use the conservative low-end number (6 additional students) to the estimated number of students seeking the option. The new number for each of the year category is expressed in the parentheses (D.-2.-a.c.).
3. Estimate the number of options awarded
a. in the year of initiation. 0 (finishing up previous options)
b. after three years. $<12$
c. after five years. $\sim 12$
d. Describe methodology for developing these estimates. It will be at the end of the second year after initiation (i.e., AY 2025-26) when the first round of transfer students will have earned BA in Geography with the proposed Landscape Studies option. Thus, the number of options awarded in the year of initiation is 0 (D.-3.-a.).

Assuming our continuous PR effort and recruitment to reach out to admitted students is successful, the number of new students to our proposed option remains steady, and the average number of years to complete a degree program is 4 years, there are about 12 students graduating each year with BA in Geography with the proposed Landscape Studies option.
E. Identify professional uses for the proposed option.

Government agency (local/state) and nonprofit organization planner
Geographic Information Systems (GIS) analyst
Transportation planner
Environmental consultant and planner
Habitat restoration manager
Energy resources planner
Water resources planner
Environmental policy analyst
City and County Planner
Natural resource manager and planner
Irrigation district manager
City sustainability manager
Emergency manager
Fire mapping

Land management steward
Geopolitical analysts and lobbyists
Economic geographers
Market research analysts
Field survey technician
V. Resources
A. List the faculty members for the required courses in the program:

Scott Brady, PhD, Professor
Appointment status: Full-time
Date and Field of highest degree: 1996, Geography
Dean Fairbanks, PhD, Professor
Appointment status: Full-time
Date and Field of highest degree: 2001, Ecology
Professional experience: registered GIS Professional (GISP)
Don Hankins, PhD, Professor
Appointment status: Full-time
Date and Field of highest degree: 2005, Geography
LaDona Knigge, PhD, Professor
Appointment status: Full-time
Date and Field of highest degree: 2006, Geography
Naomi Lazarus, PhD, Assistant Professor
Appointment status: Full-time
Date and Field of highest degree: 2014, Geography
Noriyuki Sato, PhD, Associate Professor
Appointment status: Full-time
Date and Field of highest degree: 2008, Geography
Mark Stemen, PhD, Professor
Appointment status: Full-time
Date and Field of highest degree: 1999, Environmental History
B. List the faculty members for the elective courses in the program:

Same as listed in A.
C. List the resources needed to sustain the program for the first five years, including cost and funding source.

1. Faculty: Current tenure-track faculty and lectures
2. Staff: Current ASC sufficient
3. Facilities: New BSS building will be sufficient
4. Library resources: Current library resources sufficient; letter from library provided.
5. Equipment: Current equipment sufficient, but replacement from breakage and maintenance of lab/computer equipment conducted on an ad hoc basis through department OE, CSE funds, and course fees.
6. Specialized material: No new materials required.

While the resources required to initiate our new option are minimal, this can be accomplished by streamlining the curriculum, cooperating with other departments, and utilizing the existing campus resources.

By streamlining, we are reducing the number of courses/sections offered each semester to better utilize tenure-track faculty in order to address the current environment of declining campus student population. We are also rotating courses to maximize faculty's specialty to balance students' demand and enrollment. When the enrollment returns, we will revert our schedule and offer these courses more frequently.

We are also cooperatively working with other departments/programs to support and accommodate students' needs. For example, we are adding the section 72 component to our existing courses to support distance education as part of the on-going change that the Social Science program has made. In order to provide GIS skills to students (Geographic Information Systems - a collection of computer-assisted spatial and temporal analysis and visualization tools), we are contacting other departments regarding the timing of the relevant courses so that fewer students in other departments will have minimum time conflicts with the GIS courses that we offer. In addition, all of our faculty members are moving to instructing via ChicoFlex classrooms to maximize engagement with students. This will be fully utilized in the new BSS building starting in Fall 2024.
D. Additional support resources required, including source of support. While we are using existing resources and are not offering new courses, faculty's freed-up time will be used to conduct other important functions, such as: course preparations, online transition, advising, and recruitment (see IV.-D.-2.-d) to address an effort to reverse the trend of low enrollment/majors.

For example, all the department's faculty members are advisors, and the department holds the mandatory advising period each semester
for majors. Students must see faculty and lay out their schedules for an upcoming semester to have their registration block removed. The use of DPRs and Chico360 advising platforms have made the task efficient.

We acknowledge campus support resources, without which we cannot successfully initiate our proposed option:

- TLP support for the transition to Canvas from Blackboard Learn,
- Classroom Technology Services to support our offering courses in the ChicoFlex format and have the section 72 component,
- ITSS Technical and Computing Support to assist with reimaging of lab computers, student logins, and troubleshooting,
- Meriam Library for research activities for both students and faculty,
- Student Learning Center for academic support for students,
- Academic Advising and BSS Student Success Advising for general advising and advising for those who need to get back on track,
- GPAB (Geography and Planning Alumni-Advisory Board) for guidance and assistance for students' success,
- Big Chico Creek Ecological Reserve (BCCER) for outdoor classroom environment,
- The campus Bus Reservations for our field courses/field trips,
- Donors for Wildcat Awards associated with Geography and Planning as well as for departmental awards to recognize students'excellence.
VI. Curriculum

Note: Proposed curriculum should take advantage of courses already offered in other departments when subject matter would otherwise overlap or duplicate existing course content.
A. Total number of units required for option.

45 units [24 core (required) units +21 option-core and elective units]
B. Special criteria for admission and/or continuation (if applicable).
$N / A$
C. Explanation of any special program characteristics (e.g., terminology, credit units required, types of coursework, etc.).
$N / A$
D. List all new courses for the proposed program.

The new option does not require any new courses.
E. List all required courses for the program along with a rationale for why each one should be required.

## Core - 24-units required:

GEOG 101 Earth Systems and Physical Geography (3)
GEOG 102 People, Places, and Environments (3)
GEOG 111 Introduction to Geographic Methods (3)
GEOG 139 Visualizing Local Landscapes (3)
GEOG 211 Introduction to Geographical Information Systems (3)
GEOG 407GWAR Earth Systems Analysis of Global Change (3)
Select 2 courses from:
GEOG 301W Global Economic Geography (3)
GEOG 303 Geography and World Affairs (3)
GEOG 304 Sustainability and Climate Change Issues (3)
GEOG 305 Mobile, Wired, and Tracked: Our Digital Planet (3)
Rationale: The 8-course, 24-unit core is common for the two options that we are proposing: Environmental Studies and Landscape Studies.

The core courses prepare students to pursue either option by providing broad background in the discipline of geography and geospatial techniques. These courses cover human/cultural geography (GEOG 102 and GEOG 139), Earth systems and physical geography (GEOG 101), environment and sustainability (GEOG 304), geospatial methods/techniques (GEOG 111, GEOG 211, and GEOG 305), and global issues (GEOG 301W and GEOG 303). GEOG 407W (GWAR) provides a culminating experience for students in both options.

Except for two geospatial method/techniques courses (GEOG 111 and GEOG 211) and the GWAR course (GEOG 407W) in the core, all other courses are GE courses, which are offered every semester. It is noteworthy to point out that GEOG 101, 102, 139 and GEOG 304 are four courses that introduce the options of Environmental Studies and Landscape Studies, respectively.

In addition to the 24-unit core are the two required 15-unit option courses, which are specific to each option that we are proposing. Upperdivision courses in the option-core not only prepare students for application courses of their choice but also address the issue of lowenrollment by streamlining and reducing the number of courses that we regularly offer. The primary rationale for the required courses in the Landscape Studies option below is that they are the agreed balance of
courses between human and environmental/physical domains of geography.

Option-Core - 5 courses required:
GEOG 306 (F1) Geographies of Disaster (3)
GEOG 320 Introduction to Land Use Planning (3)
GEOG 343 Climatology (3)
GEOG 405 Conservation, Restoration, and Stewardship (3)
GEOG 439W American Cultural Landscapes (3)
Rationale: Students in Geography, which is a discipline that approaches issues surrounding both social/behavioral and physical sciences, study and answer spatial and temporal questions. Under two guiding courses in the option-core, GEOG 439W: American Cultural Landscapes and GEOG 405: Conservation, Restoration, and Stewardship, students comprehensively study changes that have occurred and are still occurring due to human and natural causes in different space and time frames. These courses address how human behaviors and cultures as well as natural events have played a role to shape unique landscapes. The other required 300-level courses provide broad background and prepare students to take 400-level courses.

GEOG 320 lays out solid foundation for (city/urban/rural) planning, while GEOG 343 provides in-depth knowledge of surface and atmospheric processes and skills for climate data analysis. GEOG 306 examines disasters from spatial perspectives, whose implications are exhibited in both built and natural environments. All these courses reinforce each other to prepare students for the 400-level option-core courses ("guiding courses").
F. List all elective courses for the program along with a general rationale for why each should be included as such.

All courses are three units.

## Application domains

Select 2 courses from one of the following application domain categories:
Sustainable Planning
GEOG 425 (F1) $\quad$ Planning for Sustainable Community and Regions (3)
GEOG 436 (F2) $\quad$ Sustainable Transportation Planning (3)
GEOG 438

GEOG 506 $\quad$| Urban Geography (3) |
| :--- |
| Community Service Practice in Geography (3) |

Rationale: The elective courses under 'Sustainable Planning' tackle issues related to community, urban, and transportation planning. They directly speak to the broad sub-field of human geography and how settlement patterns, development, and infrastructure modify cultural landscapes.

## Landscape Analysis and Visualization

GEOG 313 Introductory Cartography (3)
GEOG 315 Applied Statistical Methods in Geography (3)
GEOG 418 Remote Sensing of Environment (3)
Rationale: The elective courses under 'Landscape Analysis and Visualization' are designed to provide students with training and mastery of skills in geographic information systems (GIS), cartography, and remote sensing. They build on the required courses of the major core (GEOG 111 and GEOG 211) that teach introductory methods and skills in GIS and data analytics.

## Landscape Stewardship

GEOG 417
GEOG 426 Sustainable Water Systems (3)
GEOG 445 Pyrogeography (3)
Rationale: The upper-division courses under 'Landscape Stewardship' offer students with opportunities to combine theoretical and methodological applications to address geographic problems associated with water resources, fire management, and land management.

## General Geography**

GEOG 301W Global Economic Geography (W) (3)
GEOG 303 Geography and World Affairs (3)
GEOG 304 Sustainability and Climate Change Issues (3)
GEOG 305 Mobile, Wired, and Tracked: Our Digital Planet (3)
GEOG $352 \quad$ The United States (3)
GEOG 357 Lands and Peoples of Latin America (3)
** Select from only courses that were not taken to satisfy core
The required courses (VI.-E.) provide solid foundation for students to endeavor further learning in the specific elective (application) courses of their choice. While limited to two courses from one of the four categories, students are encouraged to take additional courses, since the BA in Geography with this proposed option is a low-unit degree. These categories in the electives allow students to conduct further learning in different application areas (e.g., community planning, data analysis and visualization, or land stewardship) for increased knowledge and/or skillsets that they can utilize in their post-graduate lives (IV.-F.).

We recognize that there is a small group of students who want a rounded education in geography rather than specializing. Thus, we offer general geography category with which students develop a wider scope of the discipline. These students tend to want to be credentialed $K-12$ teachers.
G. For undergraduate options, explain provisions for articulation of the proposed option with community college courses.
The following lower division courses we teach are given credit when articulated to community college courses: GEOG 101, 102, 105, 106, 111 and 211. If a transfer student didn't earn credit for GEOG 102, but did earn credit for GEOG 105 or 106, substituted credit for GEOG 102 would be awarded. Based on community college articulation, a transfer student has the potential of clearing 12 units of the major core with transfer coursework
H. For undergraduate options, will the new option be matched to an existing associate degree, as specified in SB 1440 , and if so, is it certain that the new degree option will not require a student to repeat courses similar to those taken for the associate degree?
The existing BA in Geography is currently matched to the AA-T in Geography. The changes to the BA in Geography and addition of the two options won't affect the match. Both options will be matched and will not require students to repeat courses.
I. Writing Requirement

1. For an undergraduate option, list the number and title of the Graduation Writing Assessment (GWAR) course for the option. List the GWAR course for the degree program if it is different from the GWAR course for the option. GEOG 407W: Earth Systems Analysis of Global Change
2. For a graduate option, indicate how the graduate literacy requirement is met within the option and/or degree program. $N / A$
J. For a graduate option, indicate the culminating activity for the option and/or degree program.
$N / A$
K. Complete catalog copy, including full degree requirements (i.e., a catalog description of the full degree program, not just the option being proposed), and admission and completion requirements. See the current University Catalog for correct format; please follow it exactly. Before the proposal is submitted to Academic Affairs (for undergraduate options) or to the Office of Graduate Studies (for graduate program
options), it may be helpful to review catalog copy with Academic Publications.

## Geography BA

Total Units Required: 120

Department website: https://www.csuchico.edu/geop/
See Bachelor's Degree Requirements for complete details on general degree requirements. A minimum of 39 units, including those required for the major, must be upper division.

## Overview

The Bachelor of Arts in Geography is available to students through two options.

The option in Environmental Studies. This option provides students interdisciplinary perspectives on critical environmental issues. Drawing from the natural and social sciences, this option equips students to understand issues at a global scale. It also provides them opportunities to engage in problem-solving at the local level. This option is tailored for students interested in environmental policy, planning, stewardship, applied conservation, restoration, ecological sustainability, and global climate change. Students gain knowledge and skills to understand and intervene in urban, rural, and regional processes. Graduates will contribute to the creation of livable communities, regenerative economies, and sustainable places.

The option in Landscape Studies. The focus is on cultural and physical landscapes and the natural processes and diverse cultures that have shaped them. Students will examine landscapes from the perspectives of physical and human geography at scales that range from the local to the global. Knowledge of climate patterns, vegetation and landforms combined with an understanding of societal trends such as urban expansion and migration will demonstrate how landscapes are a synthesis of human and natural environments of the past, present, and future. An emphasis on field-based learning will sharpen students' observational and interpretive skills and help them learn about real-world social and environmental issues while recognizing and drawing from the knowledge of diverse peoples and places to become more mindful citizens as they engage in environmental stewardship, policy, and land-use planning.

## General Education Requirements: 48 units

See General Education and the Class Schedule for the most current information on General Education Requirements and course offerings.

## General Education Courses Suggested for Geography Majors

The following General Education courses are recommended to support the student in either of the options for the geography major:

- Critical Thinking: ERTH 104 or PHIL 102
- Mathematics/Quantitative Reasoning: MATH 105, MATH 118, or MATH 120
- Life Science: BIOL 161, PSSC 101, or SCED 102


## Diversity Course Requirements: 6 units

You must complete a minimum of two courses that focus primarily on cultural diversity. At least one course must be in U.S. Diversity (USD) and at least one in Global Cultures (GC). See Diversity Requirements for a full list of courses. Most courses taken to satisfy these requirements may also apply to General Education.

## Upper-Division Writing Requirement

Writing Across the Curriculum (EM 17-009) is a graduation requirement and may be demonstrated through satisfactory completion of four Writing (W) courses, two of which are designated by the major department. See Mathematics/Quantitative Reasoning and Writing Requirements for more details on the four courses. The first of the major designated Writing (W) courses is listed below.

- ERTH 330W Environmental Science (W) (Environmental Studies option), or
- GEOG 439W American Cultural Landscapes (W) (Landscape Studies option)

The second major-designated Writing course is the Graduation Writing Assessment Requirement (GW) (EO 665). Students must earn a C- or higher to receive GW credit. The GE Written Communication (A2) requirement must be completed before a student is permitted to register for a GW course.

## Grading Requirement

All courses taken to fulfill program course requirements must be taken for a letter grade except those courses specified by the department as credit/no credit grading only.

## Course Requirements for the Major: 45 units

Completion of the following courses, or their approved transfer equivalents, is required of all candidates for this degree. Courses in this program may complete more than one graduation requirement.

| Course | Title | Units |
| :--- | :--- | ---: |
| Major Core |  |  |
| GEOG 101 | Earth Systems and Physical Geography | 3 |
| GEOG 102 | Peoples, Places, and Environments | 3 |
| GEOG 111 | Introduction to Geographic Methods | 3 |
| GEOG 211 | Introduction to Geographical Information Systems | 3 |
| GEOG 139 | Visualizing Local Landscapes | 3 |
| GEOG 407W | Earth Systems Analysis of Global Change (W) | 3 |
| Select two of the following: | 6 |  |
| GEOG 301W | Global Economic Geography (W) |  |
| GEOG 303 | Geography and World Affairs |  |
| GEOG 304 | Sustainability and Climate Change Issues |  |
| GEOG 305 | Mobile, Wired, and Tracked: Our Digital Planet |  |
| Major Option |  | 21 |
| Select one of the following options: |  |  |
| Environmental Studies | $\mathbf{4 5}$ |  |
| Landscape Studies |  |  |
| Total Units |  |  |

## Major Option Course Requirements

Students must select one of the following options for completion of the major course requirements.

The Option in Environmental Studies: 21 units

| Course | Title | Units |
| :--- | :--- | ---: |
| Option Core | Conservation Ecology | 3 |
| BIOL 334 | Environmental Economics | 3 |
| ECON 365 | Environmental Science | 3 |
| ERTH 330W | Environmental Thought in Action | 3 |
| GEOG 440 | Environmental Politics and Policy | 3 |
| LEGL 461 |  |  |
| Applications |  |  |


| Select two courses from one of the following three categories: |  |  |
| :--- | :--- | :--- |
| Natural Resources | Energy in the Human Environment (W) |  |
| ERTH 370W | Water Resources Management |  |
| ERTH 460 (S2) | Climatology |  |
| GEOG 343 | Sustainable Water Systems |  |
| GEOG 426 | Pyrogeography |  |
| GEOG 445 | Food Forever: Comparisons of Sustainable Food <br> Production Systems |  |
| PSSC 390 | Nature, Culture, Environment |  |
| Nature, Society, and Human Values |  |  |
| ANTH 333 | Science and Human Values (W) |  |
| BIOL 322W | Geographies of Disaster |  |
| GEOG 306 (F1) | Conservation, Restoration, and Stewardship |  |
| GEOG 405 | American Environment (W) |  |
| HIST 341W | Methods and Materials for Environmental Education |  |
| RHPM 448 | Law, Policy, and the Environment |  |
| ECON 355 | The Economics of Government Regulations |  |
| GEOG 425 (F1) | Planning for Sustainable Communities and Regions |  |
| GEOG 436 (F2) | Sustainable Transportation Planning |  |
| GEOG 506 | Community Service Practice in Geography |  |
| PHHA 362 | Environmental Health | $\mathbf{2 1}$ |
| SOCI 420 | Environmental Sociology |  |
| Total Units |  |  |

The Option in Landscape Studies: 21 units

| Course | Title | Units |
| :--- | :--- | ---: |
| Option Core | Geographies of Disaster | 3 |
| GEOG 306 (F1) | Introduction to Land Use Planning | 3 |
| GEOG 320 | Climatology | 3 |
| GEOG 343 | Conservation, Restoration, and Stewardship | 3 |
| GEOG 405 | American Cultural Landscapes (W) | 3 |
| GEOG 439W |  |  |
| Applications | Select two courses from one of the following four categories: | 6 |
| Sustainable Planning |  |  |
| GEOG 425 (F1) | Planning for Sustainable Communities and Regions |  |
| GEOG 436 (F2) | Sustainable Transportation Planning |  |
| GEOG 438 | Urban Geography |  |
| GEOG 506 | Community Service Practice in Geography |  |
| Landscape Analysis and Visualization |  |  |
| GEOG 313 | Introductory Cartography |  |
| GEOG 315 | Applied Statistical Methods in Geography |  |


| GEOG 418 | Remote Sensing of Environment |  |
| :--- | :--- | :---: |
| Landscape Stewardship |  |  |
| GEOG 417 | Field Techniques |  |
| GEOG 426 | Sustainable Water Systems |  |
| GEOG 445 | Pyrogeography |  |
| General Geography select from courses that were not taken to satisfy the core <br> requirements. |  |  |
| GEOG 301W | Global Economic Geography (W) |  |
| GEOG 303 | Geography and World Affairs |  |
| GEOG 304 | Sustainability and Climate Change Issues |  |
| GEOG 305 | Mobile, Wired, and Tracked: Our Digital Planet |  |
| GEOG 352 | The United States |  |
| GEOG 357 | Lands and Peoples of Latin America |  |
| Total Units |  | $\mathbf{2 1}$ |

## Electives Requirement

To complete the total units required for the bachelor's degree, select additional elective courses from the total University offerings. You should consult with an advisor regarding the selection of courses which will provide breadth to your university experience and possibly apply to a supportive second major or minor.

## Honors in the Major

Honors in the Major is a program of independent work in your major. It requires 6 units of honors course work completed over two semesters.

The Honors in the Major program allows you to work closely with a faculty mentor in your area of interest on an original performance or research project. This year-long collaboration allows you to work in your field at a professional level and culminates in a public presentation of your work. Students sometimes take their projects beyond the University for submission in professional journals, presentation at conferences, or academic competition. Such experience is valuable for graduate school and professional life. Your honors work will be recognized at your graduation, on your permanent transcripts, and on your diploma. It is often accompanied by letters of commendation from your mentor in the department or the department chair.

Some common features of Honors in the Major program are:

- You must take 6 units of Honors in the Major course work. All 6 units are honors classes (marked by a suffix of H), and at least 3 of these units are independent study ( $399 \mathrm{H}, 499 \mathrm{H}, 599 \mathrm{H}$ ) as specified by your department. You must complete each class with a minimum grade of $B$.
- You must have completed 9 units of upper-division course work or 21 overall units in your major before you can be admitted to Honors in the Major. Check the requirements for your major carefully, as there may be specific courses that must be included in these units.
- Your cumulative GPA should be at least 3.5 or within the top $5 \%$ of majors in your department.
- Your GPA in your major should be at least 3.5 or within the top $5 \%$ of majors in your department.
- Most students apply for or are invited to participate in Honors in the Major during the second semester of their junior year. Then they complete the 6 units of course work over the two semesters of their senior year.
- Your honors work culminates with a public presentation of your honors project.

While Honors in the Major is part of the Honors Program, each department administers its own program. Please contact your major department or major advisor to apply.

## Geography and Economics Double Major

Students may take two geography and two economics courses from the following list. All 12 units will count toward both majors (geography courses will count toward 100-level electives in the economics major).

| Course | Title | Units |
| :--- | :--- | ---: |
| ECON 365 | Environmental Economics | 3 |
| ECON 375 | The Developing Countries | 3 |
| ECON 466W | Environmental and Natural Resource Economics (W) | 3 |
| GEOG 301W | Global Economic Geography (W) | 3 |
| GEOG 304 | Sustainability and Climate Change Issues | 3 |
| GEOG 320 | Introduction to Land Use Planning | 3 |
| GEOG 425 (F1) | Planning for Sustainable Communities and Regions | 3 |
| GEOG 436 (F2) | Sustainable Transportation Planning | 3 |
| GEOG 438 | Urban Geography | 3 |

## Geography and History Double Major

Students may elect a geography and history double major. Up to 9 units of appropriate upper-division history courses (HIST) may be applied to the geography major. Prior approval by a department advisor and the chair is required.

## Geography and Environmental Studies

See Course Description Symbols and Terms for an explanation of course description terminology and symbols, the course numbering system, and course credit units.

| GEOG 101 | Earth Systems and Physical Geography | - 3.0 | SMF | GE |
| :---: | :---: | :---: | :---: | :---: |
| GEOG 102 | Peoples, Places, and Environments | 3.0 | FS | GE GC |
| GEOG 105 | California Cultural Landscapes | - 3.0 | FS | GE USD |
| GEOG 106 | American West Decolonized | 3.0 | FS | GE USD |
| GEOG 111 | Introduction to Geographic Methods | 3.0 | FA |  |
| GEOG 119A | Introductory ArcGIS | 1.0 | FS |  |
| GEOG 139 | Visualizing Local Landscapes | 3.0 | FS | GE |
| GEOG 198 | Special Topics | 1.0-3.0 | FS |  |
| GEOG 199 | Special Problems | 1.0-3.0 | FS |  |
| GEOG 211 | Introduction to Geographical Information Systems | 3.0 | FS |  |
| GEOG 301W | Global Economic Geography (W) | 3.0 | FS | GE GC W |
| GEOG 303 | Geography and World Affairs | 3.0 | SMF | GE GC |
| GEOG 304 | Sustainability and Climate Change Issues | * 3.0 | FS | GE |
| GEOG 305 | Mobile, Wired, and Tracked: Our Digital Planet | 3.0 | FS | GE |
| GEOG 306 | Geographies of Disaster | - 3.0 | F1 |  |
| GEOG 313 | Introductory Cartography | 3.0 | FA |  |
| GEOG 315 | Applied Statistical Methods in Geography | 3.0 | FA |  |
| GEOG 320 | Introduction to Land Use Planning | - 3.0 | FA |  |
| GEOG 342 | Geomorphology | 3.0 | FA |  |
| GEOG 343 | Climatology | 3.0 | FA |  |
| GEOG 352 | The United States | 3.0 | FS | GE USD |
| GEOG 357 | Lands and Peoples of Latin America | 3.0 | FS | GE GC |
| GEOG 389 | Geography Internship | 1.0-3.0 | FS |  |
| GEOG 398 | Special Topics | 1.0-3.0 | FS |  |
| GEOG 398H | Special Topics - Honors | 3.0 | INQ |  |
| GEOG 399 | Special Problems | 1.0-3.0 | FS |  |
| GEOG 405 | Conservation, Restoration, and Stewardship | * 3.0 | FA |  |
| GEOG 407W | Earth Systems Analysis of Global Change (W) | - 3.0 | SP | GW W |
| GEOG 411 | Geospatial Analysis and Modeling in GIS | 3.0 | SP |  |
| GEOG 417 | Field Techniques | 3.0 | FA |  |
| GEOG 418 | Remote Sensing of Environment | 3.0 | SP |  |
| GEOG 425 | Planning for Sustainable Communities and Regions | * 3.0 | F1 |  |
| GEOG 426 | Sustainable Water Systems | - 3.0 | SP |  |
| GEOG 427 | Environmental Impact Analysis | - 3.0 | SP |  |
| GEOG 428 | Land Use Planning Studio | - 3.0 | S2 |  |
| GEOG 429 | Environmental and Conservation Planning | - 3.0 | S1 |  |
| GEOG 436 | Sustainable Transportation Planning | 3.0 | F2 |  |
| GEOG 438 | Urban Geography | 3.0 | SP |  |
| GEOG 439W | American Cultural Landscapes (W) | 3.0 | FA | W |
| GEOG 440 | Environmental Thought in Action | - 3.0 | SP |  |
| GEOG 445 | Pyrogeography | * 3.0 | SP |  |
| GEOG 489 | Geography Internship | 1.0-3.0 | FS |  |
| GEOG 498 | Special Topics | 1.0-3.0 | FS |  |
| GEOG 499 | Special Problems | 1.0-3.0 | FS |  |
| GEOG 499H | Honors Research in Geography | 3.0 | FS |  |
| GEOG 506 | Community Service Practice in Sustainability | 3.0 | FA |  |


| GEOG 598 | Special Topics | $1.0-3.0$ | FS |
| :--- | :--- | :--- | :--- |
| GEOG 599 | Special Problems | $1.0-3.0$ | FS |
| GEOG 689 | Geography Internship | $1.0-3.0$ | FS |
| GEOG 689T | Supervised College Teaching | 2.0 | FS |
| GEOG 697 | Independent Study | $1.0-3.0$ | FS |
| GEOG 699P | Master's Project | $1.0-6.0$ | FS |
| GEOG 699T | Master's Thesis | $1.0-6.0$ | FS |

L. For undergraduate programs, include a Major Academic Plan (MAP) with the proposal. If you have questions or need help, contact Academic Advising Programs.

## California State University Chico <br> Major: Geog: Landscape Studies (BA)

*This student is remediated in Math and English
*This student took 4 years of high school language

| Catalog Year: 2024-25 |
| :--- |
| Degree Units: 120 | other than English


| Degree Units: 120 |  |
| :--- | ---: |
| Semester 1 |  |
| GE Area A1 | 3 |
| GE Area A2 | 3 |
| Lower Division GE Course | 3 |
| HIST 130 or POLS 155 | 3 |
| Lower Division GE Course | 3 |
|  |  |
| Total Units | $\mathbf{1 5}$ |


| Semester 3 |  |
| :--- | ---: |
| Lower Division GE Course | 3 |
| Lower Division GE Course | 3 |
| Lower Division GE Course | 3 |
| GEOG 111 | 3 |
| GEOG 139 |  |
|  | $\mathbf{1 5}$ |
| Total Units |  |


| Semester 4 |  |
| :--- | ---: |
| GEOG 211 | 3 |
| HIST 130 or POLS 155 | 3 |
| Elective or Minor | 3 |
| Elective or Minor | 3 |
| Elective or Minor | 3 |
|  | $\mathbf{1 5}$ |
| Total Units |  |


| Semester 5 |  |
| :--- | ---: |
| GEOG 313 or 315 or 436 | 3 |
| GEOG 343 | 3 |
| GEOG 301W or 303 or 304 or 305 | 3 |
| GE UD Pathway | 3 |
| GEOG 320 |  |
|  | $\mathbf{1 5}$ |
| Total Units |  |


| Semester 6 |  |
| :--- | ---: |
| GEOG 301W or 303 or 304 or 305 | 3 |
| GEOG 418 or 438 | 3 |
| GEOG 352 or 357 | 3 |
| GE UD Pathway | 3 |
| Elective or Minor | 3 |
|  |  |
| Total Units | $\mathbf{1 5}$ |


| Comments |
| :--- |
| It is recommended that you meet with your major |
| advisor early in your academic career and every |
| semester. |
| Manipulate and create your own semester by |
| semester plan using your Smart Planner in your |
| Portal. |
| Review your Degree Progress Report (DPR) in your |
| Student Center, meet with your Major Department |
| Advisor for major coursework, and meet with an |
| Academic Advisor in SSC 220 to review General |
| Education and Graduation requirements. |
| Consider meeting the United States Diversity and |
| Global Cultures requirements within GE courses. |
| University Writing Requirement: You must complete |
| a GE Written Communication (A2) course with a |
| grade of C- or higher, and a Graduation Writing |
| Assessment Requirement (GW) course in your major |
| with a grade of C- or higher. In addition you must |
| complete 2 additional Writing (W) courses, see your |
| DPR for specific writing course options. |
| Apply to graduate one year before anticipated |
| graduation date. Priority registration is guaranteed |
| your final semester if you applied for graduation by |
| the stated deadline. |
| a |


| Semester 7 | Semester 8 |  |
| :--- | ---: | :--- | ---: |
| GEOG 306 | 3 |  |
| GEOG 405 | 3 |  |
| GEOG 439W | 3 |  |
| GEOG 313 or GEOG 417 |  |  |
| GEOG 425 or GEOG 506 407W - GWAR | 3 |  |
|  | 3 |  |
| GEOG 426 or 445 | 3 |  |
| GEOG 418 or 438 | 3 |  |
| GE UD Pathway | 3 |  |
|  | Elective or Minor | 3 |
|  | $\mathbf{1 5}$ |  |

Attach the Undergraduate Program Signature form or the Graduate Program Signature form to the front of the proposal and submit to Curriculum Services or the Office of Graduate Studies after all department and college reviews are complete.

# Meriam Library <br> California State University, Chico 

## MEMORANDUM

## To:

## From: William Cuthbertson

## Date: March 22, 2023

Subject: Library support for the new Options in Landscape Studies and in Environmental Studies.

The Meriam Library currently supports the existing Environmental Studies option and current library resources would be adequate to support the new Environmental Studies and Landscape Studies options. Both options are based on existing courses, taught with same frequency as at present; the classes within the options have already been supported by library resources.

Databases which support this major, the students, and faculty include GeoRef, GEOBASE, Science Direct, EBSCO Academic Search, and JSTOR.

Student support for information literacy and library research is provided by one full-time Associate Librarian (W. Cuthbertson).

Students will have access to Interlibrary Services that will provide services and resources to distance learners as well as obtain materials not owned by the library.

Finally, money allocated to departments can be used to purchase any additional books the program may require.

