



To: Vice Provost Randy Smith
From: Mat Coleman
Subject: GEOG 5193 and assessment
Date: November 4, 2025

Dear Provost Smith,

In Spring 2022, the Department of Geography launched a three-year pilot to develop a programmatic assessment tool using a portfolio-based approach to evaluate student learning in our undergraduate Social and Environmental Geography (SEG) B.A. This initiative was a shift away from prior assessment practices that evaluated student achievement on a course-by-course basis. Instead, the portfolio approach sought to provide a more holistic view of student learning across the entire major.

Under this model, each SEG major prepared a comprehensive oral reflection on their career in the department, drawing on graded assignments completed throughout their coursework. Each student cohort was paired with a faculty mentor who guided the process by setting expectations, meeting weekly, and helping students prepare for an end-of-semester presentation to a faculty panel. The mentor also coordinated rubric-based feedback from the panel, using the SEG program's Expected Learning Outcomes (ELOs) as the evaluative framework. This exercise was formally incorporated into students' advising sheets as a required, one-credit, individual studies course (GEOG 5193).

Over three academic years (2022–2023, 2023–2024, and 2024–2025), portfolio assessment exercises were led by my colleagues Nancy Ettlinger (retired), Madhumita Dutta, and Max Woodworth, respectively. Across all iterations, participating students demonstrated maturity, professionalism, and increasing self-awareness as geographers. The exercise clearly helped students articulate what they had learned and recognize their intellectual growth within the discipline. They were also a nice cohort-building exercise.

That said, based on extensive consultation with the faculty who have led these efforts, as well as with our Director of Undergraduate Studies, Jana Houser, I have concluded that the portfolio approach is not effective as a program-level assessment tool. While it succeeds as a broadly reflective exercise for students, it does not provide faculty with the diagnostic information needed to evaluate the curriculum itself.

The central problem lies in our ELO structure. During the pandemic, our faculty met remotely to redesign program-level learning outcomes for the majors in my unit. Instead of developing ELOs separately for each major, we attempted to create a single, unified framework that would cover all programs. The result was a spreadsheet with nearly ninety rows of evaluative criteria (see Appendix A). Although comprehensive, this framework has proven unworkable. Many criteria



overlap, are overly granular, or are written at such a high level of abstraction that they cannot be meaningfully measured. Indeed, over the past three years, faculty evaluators have struggled to apply these outcomes consistently or distinguish among them in practice. And even though these criteria were never intended for student consumption, participants in the portfolio pilot have found the ELOs inaccessible and disconnected from their actual coursework. In short, the current ELOs are too cumbersome to support reliable or meaningful program assessment.

Moving forward, our goal is to replace the existing ELOs with a simplified, SEG-specific framework that is both conceptually coherent and practically usable. We have already taken steps in this direction elsewhere in our unit: revisions to the GIS B.S. completed in 2024 and planned revisions to the Atmospheric Science B.S. reflect a move toward concise, measurable, and discipline-relevant ELOs. I am hoping for 3-5 measurable and actionable ELOs for the SEG degree.

A second issue concerns the portfolio method itself. While the reflection exercise offers a broad, qualitative snapshot of student comprehension, it does not allow us to easily identify where—within the curriculum—students are meeting or falling short of expected outcomes. In effect, it provides a retrospective summary of student experience but little in the way of actionable data for improving specific courses. For this reason, I believe a more effective approach would combine course-level ELOs with assessment of a capstone project that can serve as a focused and more tangible indicator of how well our program builds toward integrative learning.

Given this context, **I request approval to remove GEOG 5193 from the SEG curriculum to ensure that students can graduate on schedule while we rework our ELOs and assessment framework.**

SEG faculty will be convening to settle on an alternate assessment practice for the major. Although we have some work to do, it looks likely that assessment will focus in on two classes that all SEG majors are required to complete—GEOG 4100 (Geographic Inquiry), taught by me, and GEOG 4101 (Research and Professionalization), taught by Kendra McSweeney. We will also be simplifying our ELOs. **I will have an additional memo to you by the end of this semester about a new assessment plan for SEG.**

Sincerely,

Mat Coleman

Mat Coleman

Professor and Chair, Department of Geography, College of Social and Behavioral Sciences
coleman.373@osu.edu



MORE THAN MAPS.

Appendix A. Current ELOs for the SEG major

Goal A: Human, Environmental, and Spatial Concepts	
Students understand various conceptual approaches and their context to interpret patterns, processes and their relation.	
1. Conceptualize human, environmental, or spatial problems	
a.	Describe the spatial and historical context of a problem (B)
b.	Identify the 'ecological fallacy' (the inappropriate homogenization or aggregation of differentiated phenomena within a unit of analysis, using scale as an analytical unit) (B)
c.	Examine dynamics within a place's or system's boundaries, and implications for real-world problems (I)
d.	Examine dynamics that connect places or systems across space, and implications for real-world problems (I)
e.	Evaluate processes that operate at different scales and their effects (A)
2. Critically evaluate different approaches to describe, explain, or predict real-world experience	
a.	Describe the strengths and weaknesses of various approaches for their utility in interpreting real-world experience (B, I)
b.	Explain the contexts in which various approaches were developed (A)
c.	Critically evaluate various approaches in their field of study (A)
3. Appraise the relation between concepts and real-world experience	
a.	Interpret patterns (B)
b.	Critique how knowledges in their fields are used in developing solutions to real-world problems (I)
c.	Relate research findings to debates about different approaches to research (A)
d.	Relate patterns to processes to assess causal relations (A)
Goal B: Research Strategies, Methods and Data	
Students are able to apply appropriate methods and data, to transform data into actionable knowledges to support ethical scholarship and decision making.	
1. Gather information regarding data and their context to draw conclusions	
a.	Identify relevant data sources and their quality (B)
b.	Collect data from relevant sources (I)
c.	Design feasible data-collection procedures (I)
d.	Explain how context shapes conclusions drawn from data (A)
2. Evaluate research strategies and methods to engage problems	
a.	Identify available research strategies and methods (B)
b.	Explain how strategies and methods may be used constructively and destructively in real-world applications (B, I)
c.	Provide empirical examples of constructive and destructive applications of methods (I)
d.	Assess the strengths and limitations of available research strategies and methods (I, A)
3. Apply strategies and methods	
a.	Visualize patterns through mapping, graphing, or using GIS techniques (B)
b.	Identify sources of uncertainty or partial knowledges (B, I)
c.	Analyze how errors propagate through data processing (I)
d.	Examine the impacts of sources of uncertainty or partial knowledges on the reliability of data (I)
e.	Apply interactive and dynamic visualization techniques (I, A)
f.	Analyze patterns using appropriate methods (I, A)
g.	Apply strategies to mitigate or constructively engage the effects of uncertainty or partial knowledges (A)
h.	Interpret data and results using appropriate methods (A)
Goal C: Communication and Engagement	
The successful student will be able to share and receive knowledge by engaging with diverse audiences, participants, and stakeholders.	
1. Disseminate knowledges	
a.	Identify modes by which knowledges can be disseminated (B)
b.	Recognize that different audiences will have different degrees of familiarity with subject being presented (B)
c.	Summarize an author's argument in their own words (B)
d.	Deliver oral presentations (B)
e.	Adjust the language and technical level of oral or written presentation relative to different audiences (B, I)
f.	Evaluate the standard modes of dissemination of knowledges for their strengths and weaknesses in a given context (I)
g.	Use visual methods to enhance oral or written presentation (B, I)
h.	Construct other output or products using diverse media, art, activism, or other strategies to convey messages from academic research (I)
i.	Synthesize material from several sources (I)
j.	Generate a document that develops an argument drawing from multiple sources (A)
2. Collaborate in learning and research	
a.	Demonstrate responsiveness to others (B)
b.	Demonstrate ability to work with a division of labor in a collaborative project (B, I)

c. Demonstrate ability to work with people of varying cultures, backgrounds, abilities, ideas, ideals, and status (B, I)
d. Employ teamwork to achieve results (B, I, A)
Goal D: Critical Thinking and Ethical Engagement
The successful student is intellectually curious, interested in scrutinizing their assumptions, and is aware of the ethical dimensions of their professional activity regarding real-world problems to work towards justice.
1. Critically engage real-world problems
a. Identify multiple sides of a problem (B)
b. Explain multiple sides of a problem (I)
c. Explain the real-world consequences of different positions regarding a problem (A)
d. Develop a position based on an understanding of multiple sides of a problem (A)
e. Identify linkages among apparently discrete problems (A)
2. Appraise ethical issues in research
a. Explain how strategies and methods may be used constructively and destructively in real-world applications (B, I) [identical to b.2.b]
b. Perceive that everyone, including researchers, implicitly have biases and partial knowledges that can have negative effects on subjects under study (B, I)
c. Perceive that subjects under study and those encountered in the field, their values, and their privacy require respect (B, I)
d. Analyze their positionality regarding, for example, class, race/ethnicity, gender, age, citizenship, occupation, and the like relative those under study or encountered in the field (I, A)
e. Integrate ethical considerations into formulation of questions and applications of their knowledges (S)
Goal E: Professional Development
The successful student understands how to make use of the skills and knowledges developed in their undergraduate program towards securing a job and pursuing a career.
1. Make use of their values to guide their careers
a. Identify their value systems relative to career opportunities (B)
b. Describe tensions between their ideals and career realities (I)
c. Appraise the variety of options and trade-offs in career paths relative to their value systems (A)
2. Deploy their skills relative to a changing job market
a. Identify the range of their skills relative to a variety of career paths (B)
b. Identify the strengths and limitations of their range of skills relative to various professional opportunities (I)
c. Demonstrate the ability to learn new skills (A)
3. Creatively use skills to solve problems beyond those encountered in formal training
a. Apply knowledge from formal training to examine a problem (B)
b. Integrate diverse skills from formal training (I)
c. Integrate knowledges from formal training with those acquired independently (A)

Social and Environmental Geography (Bachelor of Arts)

Requires 121 Total Credit Hours; 34-36 Major Credit Hours; GE New Requirements (AU22 or after)

Major Requirements

CURRENT ADVISING SHEET

Required Courses: (3 courses/ 7 credit hours)

Course	Title	Hours	Required Prerequisite
GEOG 4101	Undergraduate Research & Professionalization Seminar <i>AU Only</i>	3	3 credit hours in Geography
GEOG 4100	Geographic Inquiry (<i>capstone course</i>) <i>SP Only</i>	3	Taken in final year of study
GEOG 5193	Individual Studies in Geography <i>SP Only</i>	1	Taken in final year of study

Elective Courses: (9 courses/ 27-29 credit hours) from:

Methods Courses (2 courses/ 6 credit hours)

Course	Title	Hours	Required Prerequisite
GEOG 4103	Introductory Spatial Data Analysis	3	Math 1116 or higher
GEOG 5210	Fundamentals of Geographic Information Systems	3	None

Introductory Courses (select 1 course/ 3 credit hours)

Course	Title	Hours	Required Prerequisite
GEOG 2400.01 OR GEOG 2400.02	Economic & Social Geography	3	None
		4	None
GEOG 2500	Cities & Their Global Spaces	3	None
GEOG 2800	Our Global Environment (AU Only)	3	None

Intermediate Courses (select 3 courses/ 9 credit hours)

Course	Title	Hours	Required Prerequisites
GEOG 3300	Geography of Transportation <i>SP Only</i>	3	None
GEOG 3597.01	World Urbanization <i>AU Only</i>	3	None
GEOG 3600	Space, Power & Political Geography	3	None
GEOG 3701	The Making of the Modern World	3	None
GEOG 3702	Life and Death Geographies	3	None
GEOG 3750	Geography of North America	3	None
GEOG 3800	Geographical Perspectives on Environment & Society <i>SP Only</i>	3	None
GEOG 3801	Political Ecology <i>AU Only</i>	3	None
GEOG 3900.01 OR GEOG 3900.02	Global Climate Change: Causes & Consequences	3	None
		4	None
GEOG 3980	Biogeography: An Introduction to Life on Earth <i>SP Only</i>	3	None

Advanced Courses (select 3 courses/ 9-11 credit hours)

Course	Title	Hours	Required Prerequisites
GEOG 4191	Internship in Geography	3-5	None
GEOG 5300	Geography of Transportation	3	None
GEOG 5301	Sustainable Transportation	3	None
GEOG 5401	Economies, Space and Society	3	None
GEOG 5402	Land Use Geography	3	None

GEOG 5501	Urban Spaces in the Global Economy	3	None
GEOG 5502	Data Justice & the Right to the Smart City	3	None
GEOG 5503	Urban China: Space, Place and Urban Transportation	3	None
GEOG 5700	Geography of Development	3	None
GEOG 5802	Globalization and Environment	3	None
GEOG 5803	Sustainable Energy Geographies	3	None

General Education (New) Requirements

Requirement	Course Options	Hours
GE Launch Seminar (<i>First Year</i>)	GENED 1201	1
Foundations: Writing and Information Literacy	Student Choice	3
Foundations: Mathematical & Qualitative Reasoning/ Data Analysis	MATH 1116 or higher	3-5
Foundations: Literacy, Visual, and Performing Arts	Student Choice	3
Foundations: Historical and Cultural Studies	Student Choice	3
Foundations: Natural Sciences	Student Choice	4-5
Foundations: Social & Behavioral Sciences	Student Choice	3
Foundations: Race, Ethnicity, and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse and Just World* (<i>required</i>)	Student Choice	4-6
Theme: Second Theme* (<i>student chooses one additional theme</i>)	Student Choice	4-6
GE Reflection Seminar (<i>Fourth Year</i>)	GENED 4001	1

* See General Education Requirements notes on page 3 for specifications. General education requirements and course options can be found at <https://artsandsciences.osu.edu/advising/general-education-requirements/new-ge-requirements>

College of Arts and Sciences Requirements

Requirement	Course Options	Hours
College Survey (<i>First Semester</i>)	ASC 1100.xx (H)	1
World Language Proficiency**	1101-1103 in any language or equivalent proficiency	0-12

** See College Requirement notes on page 3 for specifications.

Major Requirement Notations

The following requirements for the major apply to all Arts and Sciences degrees.

Major requirements comprise at least 30 semester hours and can be substantially higher. Major courses must be at the 2000 level or above. At least 20 hours of the major must be in courses offered by the department of the major. Note: Some interdisciplinary majors are excluded from the 20-hour rule.

Students must earn at least a C- in a course for the course to apply to the major. However, students must receive a 2.0 cumulative grade point average (GPA) for all major course work. If a D+, D, or an E is earned in a course needed for the major, the course cannot be counted on the major. The major advisor will decide if the course should be repeated or if another course should be substituted. Courses taken on a pass/non-pass basis cannot be used on the major.

The department must approve all courses in the major. Some departments require a "major program form," a document that must be signed by the academic advisor and submitted with the graduation application. Some departments do not require such a form because the academic advisors use an automated version on the degree audit report. Some departments require both. In any case, students should meet with the academic advisor early to plan the major; during your meeting, it can be determined whether the department requires a paper major program form. Any changes or adjustments to the major should be made in consultation with the academic advisor.

If a student transferred from another institution, no more than half of the credit hours on the major program may consist of transfer credit. The academic advisor, the chairperson of the department, and the appropriate assistant dean must approve any request for a variation in this policy.

For Honors students, the GE curriculum and major must be approved by the assigned Honors advisor. Information about the honors curriculum and requirements and how to schedule an appointment with an honors advisor is available on the College of Arts and Sciences Honors Program website: <http://aschonors.osu.edu/advising>. Students will also be assigned a faculty advisor in the department of study to help the student choose courses and co-curricular opportunities that align with academic and professional goals.

General Education and ASC College Requirement Notations

***Students complete either one 4-credit course or two 3-credit courses in each of two General Education Theme areas:** Citizenship for a Diverse & Just World (required) and from a second theme of the student's choice from available GE Themes.

****Students must demonstrate proficiency in a language other than English at a level equivalent to 3 semesters of university coursework.** Proficiency may be demonstrated by satisfactory completion of coursework (1101-1103), appropriate testing, or world language validation. Please see <https://cllc.osu.edu/validation-foreign-language-0> and your Academic Advisor for details.

For more information about internship and career opportunities, visit the College of Arts and Sciences Career Services Office. Their website is <http://asccareerservices.osu.edu/>.

Social and Environmental Geography (Bachelor of Arts)

Requires 121 Total Credit Hours; 33-35 Major Credit Hours; GE New Requirements (AU22 or after)

Major Requirements

REVISED ADVISING SHEET

Required Courses: (3 courses/ 6 credit hours)

Course	Title	Hours	Required Prerequisite
GEOG 4101	Undergraduate Research & Professionalization Seminar AU Only	3	3 credit hours in Geography
GEOG 4100	Geographic Inquiry (<i>capstone course</i>) SP Only	3	Taken in final year of study

Elective Courses: (9 courses/ 27-29 credit hours) from:

Methods Courses (2 courses/ 6 credit hours)

Course	Title	Hours	Required Prerequisite
GEOG 4103	Introductory Spatial Data Analysis	3	Math 1116 or higher
GEOG 5210	Fundamentals of Geographic Information Systems	3	None

Introductory Courses (select 1 course/ 3 credit hours)

Course	Title	Hours	Required Prerequisite
GEOG 2400.01 OR GEOG 2400.02	Economic & Social Geography	3	None
		4	None
GEOG 2500	Cities & Their Global Spaces	3	None
GEOG 2800	Our Global Environment (AU Only)	3	None

Intermediate Courses (select 3 courses/ 9 credit hours)

Course	Title	Hours	Required Prerequisites
GEOG 3300	Geography of Transportation SP Only	3	None
GEOG 3597.01	World Urbanization AU Only	3	None
GEOG 3600	Space, Power & Political Geography	3	None
GEOG 3701	The Making of the Modern World	3	None
GEOG 3702	Life and Death Geographies	3	None
GEOG 3750	Geography of North America	3	None
GEOG 3800	Geographical Perspectives on Environment & Society SP Only	3	None
GEOG 3801	Political Ecology AU Only	3	None
GEOG 3900.01 OR GEOG 3900.02	Global Climate Change: Causes & Consequences	3	None
		4	None
GEOG 3980	Biogeography: An Introduction to Life on Earth SP Only	3	None

Advanced Courses (select 3 courses/ 9-11 credit hours)

Course	Title	Hours	Required Prerequisites
GEOG 4191	Internship in Geography	3-5	None
GEOG 5300	Geography of Transportation	3	None
GEOG 5301	Sustainable Transportation	3	None
GEOG 5401	Economies, Space and Society	3	None
GEOG 5402	Land Use Geography	3	None

GEOG 5501	Urban Spaces in the Global Economy	3	None
GEOG 5502	Data Justice & the Right to the Smart City	3	None
GEOG 5503	Urban China: Space, Place and Urban Transportation	3	None
GEOG 5700	Geography of Development	3	None
GEOG 5802	Globalization and Environment	3	None
GEOG 5803	Sustainable Energy Geographies	3	None

General Education (New) Requirements

Requirement	Course Options	Hours
GE Launch Seminar (<i>First Year</i>)	GENED 1201	1
Foundations: Writing and Information Literacy	Student Choice	3
Foundations: Mathematical & Qualitative Reasoning/ Data Analysis	MATH 1116 or higher	3-5
Foundations: Literacy, Visual, and Performing Arts	Student Choice	3
Foundations: Historical and Cultural Studies	Student Choice	3
Foundations: Natural Sciences	Student Choice	4-5
Foundations: Social & Behavioral Sciences	Student Choice	3
Foundations: Race, Ethnicity, and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse and Just World* (<i>required</i>)	Student Choice	4-6
Theme: Second Theme* (<i>student chooses one additional theme</i>)	Student Choice	4-6
GE Reflection Seminar (<i>Fourth Year</i>)	GENED 4001	1

* See General Education Requirements notes on page 3 for specifications. General education requirements and course options can be found at <https://artsandsciences.osu.edu/advising/general-education-requirements/new-ge-requirements>

College of Arts and Sciences Requirements

Requirement	Course Options	Hours
College Survey (<i>First Semester</i>)	ASC 1100.xx (H)	1
World Language Proficiency**	1101-1103 in any language or equivalent proficiency	0-12

** See College Requirement notes on page 3 for specifications.

Major Requirement Notations

The following requirements for the major apply to all Arts and Sciences degrees.

Major requirements comprise at least 30 semester hours and can be substantially higher. Major courses must be at the 2000 level or above. At least 20 hours of the major must be in courses offered by the department of the major. Note: Some interdisciplinary majors are excluded from the 20-hour rule.

Students must earn at least a C- in a course for the course to apply to the major. However, students must receive a 2.0 cumulative grade point average (GPA) for all major course work. If a D+, D, or an E is earned in a course needed for the major, the course cannot be counted on the major. The major advisor will decide if the course should be repeated or if another course should be substituted. Courses taken on a pass/non-pass basis cannot be used on the major.

The department must approve all courses in the major. Some departments require a "major program form," a document that must be signed by the academic advisor and submitted with the graduation application. Some departments do not require such a form because the academic advisors use an automated version on the degree audit report. Some departments require both. In any case, students should meet with the academic advisor early to plan the major; during your meeting, it can be determined whether the department requires a paper major program form. Any changes or adjustments to the major should be made in consultation with the academic advisor.

If a student transferred from another institution, no more than half of the credit hours on the major program may consist of transfer credit. The academic advisor, the chairperson of the department, and the appropriate assistant dean must approve any request for a variation in this policy.

For Honors students, the GE curriculum and major must be approved by the assigned Honors advisor. Information about the honors curriculum and requirements and how to schedule an appointment with an honors advisor is available on the College of Arts and Sciences Honors Program website: <http://aschonors.osu.edu/advising>. Students will also be assigned a faculty advisor in the department of study to help the student choose courses and co-curricular opportunities that align with academic and professional goals.

General Education and ASC College Requirement Notations

***Students complete either one 4-credit course or two 3-credit courses in each of two General Education Theme areas:** Citizenship for a Diverse & Just World (required) and from a second theme of the student's choice from available GE Themes.

****Students must demonstrate proficiency in a language other than English at a level equivalent to 3 semesters of university coursework.** Proficiency may be demonstrated by satisfactory completion of coursework (1101-1103), appropriate testing, or world language validation. Please see <https://cllc.osu.edu/validation-foreign-language-0> and your Academic Advisor for details.

For more information about internship and career opportunities, visit the College of Arts and Sciences Career Services Office. Their website is <http://asccareerservices.osu.edu/>.