

Course Information

Course Number:	GEOG 380 (W)
Course Title:	Workshop in Environmental Studies
Section:	900
Time:	MWF 1:50-2:40pm
Location:	CSA 303
Credit Hours:	3

Instructor Details

Instructor:	Dr. Julie Loisel
Office:	OMB 803-C
Phone:	979-458-1272 (not recommended)
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Office Hours:	W 1:00-1:45pm or by appointment

Course Description

The goal of this course is to provide each student with the opportunity to apply their knowledge to work on real scientific research. This semester, ***we will apply a data-driven approach to study a number of eco-friendly green solutions.***

Here's the idea: When it comes to switching to an eco-friendly lifestyle, there is no shortage of propositions: replace gas-guzzlers with electric vehicles, use renewable energy, ditch single-use plastics, eat less meat, compost biodegradable waste, etc. While many of these lifestyle changes sound “green” and may appeal to one’s inner environmentalist, most of them are not anchored in data. Indeed, eco-friendly solutions often tend to be tied to social discourses or ideology rather than data, which leaves the consumer wondering which of these so-called green solutions truly support a more sustainable lifestyle. For example, what is the carbon footprint of a new electric car? What about a reusable grocery bag? The answers to these questions matter and should be more accessible to consumers.

This course will provide students with an opportunity to collaborate on a semester-long, interdisciplinary project aimed at gathering and synthesizing data to evaluate a number of eco-friendly “solutions” for sustainable living. The emphasis will be on carbon cycling literacy. Students who are enrolled in this course will gain valuable knowledge and critical thinking skills, learn how to recognize reputable sources of information, gather and analyze data, combine and fact-check material from across many disciplines, and present their findings in written and oral formats. This hands-on training will also allow students to disseminate their findings with a general audience in the form of blog posts. The vision for this blog is that it will grow into a reliable source of information for a lay audience over the years, as new student projects will be added every semester. In a few years, I would also like to turn those blog entries into a book on sustainable living.

Course components

This course is composed of traditional lectures, student presentations, as well as time slots allocated for team work on the final project. You will receive a weekly email detailing our weekly activities and reminding you of important dates.

Throughout the semester, students will work in groups composed of ~5 undergraduate students. Each group will choose an eco-friendly lifestyle “solution”, gather and analyze data associated with it, and document their findings. Deliverables will include a literature review, a data synthesis, a white paper containing key information presented as original tables, figures, and graphs, and a blog post accessible to a broad audience.

Course Prerequisites

None.

Special Course Designation

This version of GEOG380 is designated as a [Writing Intensive course](#) (W). Students are required to pass the writing component of the course; 40% of the final course grade relates to writing assignments.

Course Learning Outcomes

General learning outcomes: (1) apply and understand the fundamental concepts of Earth system science and Geography; (2) explain and rationalize how to find, and assess, scientifically credible information; (3) communicate about Earth in a meaningful way, both in written and oral forms, (4) demonstrate the appropriate use of the scientific method (repeatable observations, testable hypotheses, multiple analytical tools, and data interpretation) to explore, describe, and learn about Earth’s geosystems, and (5) solve problems through teamwork and data sharing.

Specific learning outcomes: (6) gain an in-depth understanding of the global carbon cycle; (7) acquire data management and analytical skills; (8) translate science, technology, and business concepts into practical information for decision making, in the form of oral and written communication, (9) analyze the carbon footprint of supply chains, from raw material extraction to manufacturing, transport, and utilization; (10) assess the sustainability of eco-friendly life choices; (11) articulate findings for two distinct audiences: a scientific one (in the classroom) and the general public (on the blog), and (12) combine and fact-check material from across many disciplines.

Writing Intensive outcomes: (13) write with proficiency upon graduation. Proficiency requires a solid knowledge of rhetorical precepts such as audience awareness and ability to suit the occasion or type of document being produced. A proficient communicator argues well, thinks critically, and solves problems. A proficient communicator can analyze, evaluate, synthesize information from various sources, document and cite properly, and organize text logically. Skill with grammar, mechanics, format, and usage is required; (14) master the forms of writing most commonly associated with and essential to their major field of study. Proficient communications skills cannot be learned once, in the isolation of a single, First-

Year English or speech course, but must be practiced over time, for many different audiences, in different situations, and in different genres. Because writing conventions and ways of communicating vary somewhat from discipline to discipline, novice communicators need the guidance of experienced writers in the disciplinary communities they aspire to join, and (15) understand that proficient writing requires practice and an investment of time and energy. Experienced writers produce multiple drafts, proofread and edit, and participate in reviews and critiques of their work. Good prose and fluent speaking require the investment of time and effort.

Textbook and/or Resource Materials

None.

Grading Policy

Grading: Exam and course grades are not negotiable. Your grade reflects your performance in this course. The grading scale follows the Texas A&M University grading system:

A = Excellent	90-100%
B = Good	80-89%
C = Satisfactory	70-79%
D = Passing	60-69%
F = Failing	00-59%

Evaluation:

Essays (2 at 5% each) (500 words each)	10%
Mini-talk ("talk 1")	05%
Project outline (250 words)	05%
Annotated bibliography (1000 words)	10%
Progress talks (3 at 5% each) ("talks 2-3-4")	15%
Mid-term Exam	15%
White paper draft	05%
Peer-reviews of a white paper draft (250 words)	05%
Final white paper (3500 words)	20%
Blog post (250 words)	10%
Final talk ("talk 5")	05%
	105 points possible

Feedback: You can expect feedback and grades on assignments and exams within about one week of the submission deadline of those said assignments and exams. Grades and feedbacks will be uploaded on Canvas and made available to you.

Writing intensive feedback: Your draft white paper will be reviewed by your peers (double blind review) and the instructor. Your final white paper will solely be reviewed by the instructor.

Late Work Policy

Students seeking an **excused absence for an exam** must notify me in writing at least one week ahead of time. In cases where advance notification is not feasible, you must provide notification as soon as possible, and by the end of the second working day after the absence at the latest. If the absence is considered excused by the university (<http://student-rules.tamu.edu/rule07>), you will be able to make up the missed exam. At my discretion, the make-up exam might be in a different format than the original exam.

Students who submit **late assignments** will be penalized at a rate of 10% per day. For each assignment submitted through Canvas, **students are to save proof of submission**; this will ensure a fair grading of their assignment, should technological issues arise.

Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to [Student Rule 7](#) in its entirety for information about excused absences, including definitions, and related documentation and timelines.

Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to [Student Rule 7](#) in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" ([Student Rule 7, Section 7.4.1](#)).

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" ([Student Rule 7, Section 7.4.2](#)).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See [Student Rule 24](#).)

Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

“Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one’s work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case” ([Section 20.1.2.3, Student Rule 20](#)).

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at aggiehonor.tamu.edu.

Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact the Disability Resources office on your campus (resources listed below) Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

Disability Resources is located in the Student Services Building or at (979) 845-1637 or visit disability.tamu.edu.

Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see [University Rule 08.01.01.M1](#)):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, a person who is subjected to the alleged conduct will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University’s goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with [Counseling and Psychological Services](#) (CAPS).

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's [Title IX webpage](#).

Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in healthy self-care by utilizing available resources and services on your campus.

Students who need someone to talk to can contact Counseling & Psychological Services (CAPS) or call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at suicidepreventionlifeline.org.

Tentative Schedule (subject to change):

Dates	Topics	DUE:
08/30 M	Course introduction + Class project description + Eco-solution brainstorm	
09/01 W	What's a carbon footprint?, 1 of 2 (lecture)	
09/03 F	Is your bicycle ride fueled by cheeseburgers? (at-home essay #1)	Essay 1
09/03 F	LAST DAY FOR ADDING/DROPPING A CLASS (until 5pm)	
09/06 M	What's a carbon footprint?, 2 of 2 (lecture)	
09/08 W	The global carbon cycle, 1 of 2 (lecture)	
09/10 F	Your favorite eco-friendly "problem" is... (at-home essay #2)	Essay 2
09/13 M	The global carbon cycle, 2 of 2 (lecture)	
09/15 W	Mini-talks (2 mins per student)	Talk 1
09/17 F	Topic selection (in person)	
09/20 M	Writing intensive 1: Creating a practical scope of work + paper outline (lecture)	
09/22 W	Writing intensive 2: Producing a useful annotated bibliography (lecture)	
09/24 F	work on scope of work and paper outline (no class)	
09/27 M	Progress talks (20 mins per group, including discussion)	Talk 2
09/29 W	Progress talks (20 mins per group, including discussion)	Talk 2
10/01 F	work on scope of work and paper outline (no class)	Outline
10/04 M	The carbon footprint of a car, 1 of 2 (lecture)	

10/06 W	The carbon footprint of a car, 2 of 2 (lecture)	
10/08 F	work on annotated bibliography (no class)	
10/11 M	Progress talks (10 mins per group, including discussion)	Talk 3
10/13 W	Addressing road blocks in data synthesis (lecture)	
10/15 F	work on annotated bibliography (no class)	Bibliog
10/18 M	EXAM	Exam
10/20 W	Writing intensive 3: Writing a compelling white paper (lecture)	
10/22 F	Writing intensive 4: Providing insightful reviews to your peers (lecture)	
10/25 M	work on project (in-class)	
10/27 W	work on project (in-class)	
10/29 F	work on white paper draft (no class)	
11/01 M	work on project (in-class)	
11/03 W	Progress talks (10 mins per group, including discussion)	Talk 4
11/05 F	work on white paper draft (no class)	Draft
11/08 M	Writing intensive 5: Making intuitive figures (lecture)	
11/10 W	work on project (in-class)	
11/12 F	work on your peer-review (no class)	Review
11/15 M	Writing intensive 6: Writing for a broad audience (lecture)	
11/17 W	work on project (in-class)	
11/19 F	work on project (in-class)	
11/19 F	LAST DAY FOR ADDING/DROPPING A CLASS (until 5pm)	
11/22 M	work on project (no class)	
11/24 W	NO CLASSES – READING DAY	
11/26 F	NO CLASSES – THANKSGIVING BREAK	
11/29 M	work on project (in-class)	
12/01 W	Final talks	Talk 5
12/03 F	Final talks	Talk 5
12/06 M	Final talks	Talk 5
12/08 W	Final talks	Talk 5 Paper Blog