

- SYLLABUS -

Visual Environmental Communication

EV120

Colorado College, Block B, Summer 2017

Instructors:

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GOALS, EXPERIENCES, & ASSESSMENTS

Interdisciplinary Course Description:

Visual Environmental Communication is a one-block course with the goal of teaching the theory and best practices for communication of environmental issues through visual mediums. We will use place-based learning in the Colorado Rockies, visual spatial techniques (Geographic Information Systems or "GIS"), and multiple visual art mediums (drawing, photography, graphic design, book-making, etc.) to inspire and create visualizations that can inform or invoke emotion regarding issues affecting our coupled human-natural environment. This year's course focuses on the issue of climate change and its reflection locally in the Colorado Rockies. In addition to learning basic skills in GIS and visual art, we will also investigate interdisciplinary climate science and how the global phenomena translate into local issues and solutions. We will examine the science of how social-ecological systems function through time in a changing climate; focusing on which components and processes allow some to thrive and others to perish. To solidify understanding of complex environmental systems gained through on-campus learning and extended field excursions into the Colorado Rockies, students will collect primary scientific data, analyze existing datasets, and work towards the creation of environmental narratives that share the science and emotion of climate change with the public. The final project for the course will culminate in a visual communication project and public presentation. Overall, this course is designed to build skills in the scientific method, quantitative analysis, critical critique, and professional communication. Students will be evaluated on the basis of their ability to observe, analyze, interpret, and communicate environmental phenomena. The topics covered and skills gained through this interdisciplinary course will be useful for students pursuing degrees in any of the natural or social sciences, the arts, and those interested in environmental or regional studies. The course schedule includes one 5-day outdoor field trip to relevant scientific and artistic areas in the region, meaning camping and outdoor living will be a significant component of the course (camping essentials provided as part of the course). This course fulfills the Critical Perspectives designation: *Scientific Investigation of the Natural World*.

COURSE DETAILS

Grading

The grade for the course is based upon:

Discussion, Essays, and Class Participation (Active and Engaged!)	20%
GIS Practicums:	10%
Art Practicums:	10%
Interdisciplinary Projects (x2):	30%
Final Project:	30%

What is participation?

Obviously to get any participation points you must attend (**attendance on the field trip is necessary for a passing grade!**). However, mere attendance is not enough. We expect that you will come to class prepared and ready to actively participate (ask and answer questions). You need to be actively involved in idea development and critique, and be prepared to address discussion prompts posed to the class throughout the course.

Practicum

A practicum is a component of a college-level course designed to build practical skills in a technique or topic area. Theoretically this course is structured around the science controlling the interactions of our coupled human-natural environments and how to best communicate this science and related issues to the public. Practically the skills we will focus on will be the ability to create visual maps and portrayals of the environment using GIS and a variety of common mediums from the Fine Arts. Your success in the practicums will be assessed on both 1) your effort given and 2) growth in your practical abilities through meaningful application of the skills gained.

Field Trips

We will be outside for much of the course, and will be camping as a class for 1 of the 4 weeks of the 1-block course. We will be car camping for this time, and will provide all the group camping equipment needed for cooking and living. Tents, sleeping bags, and sleeping pads are available to all students from the Colorado College Outdoor Center. You can use your own, or, we can help you acquire them well before we leave on the field trips. Since part of our time in the field will be in somewhat remote locations, we will be asking detailed medical information from all students to ensure rapid support in case of injury or illness (Dr. Klos, though not a medical doctor, is a certified Wilderness First Responder with many years of wilderness leadership experience guiding and teaching around the western U.S. and Alaska). We will be using Colorado College vehicles to transport students. Because parking is limited at many of the planned field stops, **you will not be permitted to drive personal vehicles on the field trips.**

Supplies, clothing, and field expectations and concerns will be discussed in detail the first day of class. Below is a detailed packing list of required and suggested items for students. The better prepared you are the more comfortable you will be under the range of weather possible during the Rocky Mountain summer months.

For any conflicts related to meetings (i.e. family, religious holidays, or medical reasons)—see one of the instructors ASAP!

Detailed Packing List:

- Sun protection
 - Lightweight long pants and long sleeved shirt
 - Hat with a brim (perhaps a tie down for wind)
 - Sunscreen and SPF chapstick
- Rain gear (short but intense afternoon rains are likely)
- Hiking shoes/boots (plan for rough, steep terrain)
- Non-field footwear; all-terrain sandals or running shoes, etc.
- Many pairs of socks
- T-shirts
- Field pants (for tramping through brushy spots)
- Shorts (again, some be brushy)
- Complete set of warm layers: (snow is possible year round at high altitudes)
 - Pair of long johns
 - Pullover (wool or pile)
 - Wind or rain jacket
 - Warm hat
 - Light gloves
 - Insulated jacket
- Headlamp or flashlight, batteries if you read at night (rechargeable would be a good idea)
- Gloves (on here twice to make sure you bring a pair for cold mornings)
- Towel
- Swimwear (women: a sports bra and lightweight shorts can be good daily under-attire, to be ready to take advantage of water opportunities!)
- Personal first aid kit (allergy stuff, ibuprofen, etc.)
- Shampoo-soap-toothbrush-toothpaste, etc.
- Bandana
- Camping Gear (available from CC if needed)
 - Tent
 - Sleeping bag
 - Pad
 - Ground cloth or tarp
- Optional Items
 - Foldable chair (think Crazy Creek)
 - Gaiters (protects your lower legs so you can tromp through wet and cold terrain at record speeds!)
 - Vibrant and loud neon clothing/flare (so you can be easily spotted in the field!)

Office Hours and Requesting Additional Help

Instructors will be available to answer questions and provide support. On campus, feel free to call or e-mail during the day or evening to arrange a time to meet. We will try to be available at any reasonable hour to assist with projects and class work and we are happy to meet you or your group where you are working on-campus. Please direct GIS questions first to Jessica, art related questions first to Lucy, and climate, natural science, and communication theory questions to Zion. Zion can also help with overall questions or concerns about course logistics.

Late Work

Work will be accepted late, but a deduction in the assignment or project grade will occur. This can be waived in special cases where the student had pre-approval from the professor or when dealing with circumstances beyond their control (assuming the student made an effort to contact the professor as soon as they could).

Responsible Conduct

As members of the Colorado College community, all school policies regarding drug and alcohol use must be followed at all times. ALCOHOL, in any form, is NOT permitted in this course. Any breach of policy will result in referral to Student Life.

Colorado College Honor Code

Students are expected to uphold and adhere to the Colorado College Honor Code, in every respect, as is the case for all courses at CC. Your responsibilities include, but are not limited to, doing all of your own work on quizzes, exams, lab exercises, and papers, unless the instructions state otherwise for group activities and projects. In addition you must take care to acknowledge all sources of information you use in reports and write-ups (print literature; internet; and other). You can acquaint yourself with the Constitution of the Honor Code at <http://www2.coloradocollege.edu/academics/honorcouncil/Constitution.pdf>. It is the responsibility of the student to understand the terms of the Honor Code and to clarify ambiguous situations if they arise; so if you aren't sure, ask us.

Guidelines for Acknowledgement of Literature and Internet Sources

Use of online sources for research and reading is encouraged—however students must take extreme care not to plagiarize and to scrupulously credit all internet sources with clear and obvious citations for diagrams and textual materials. To avoid plagiarism, present material learned from electronic sources in your own words, and cite the source of the material (guidelines for citation are below).

Presentations and documents should cite all sources on the page where the information appears, with the URL in small font at bottom of page. Complete list of website titles, URL, and date accessed should be provided in a list at end.

Written papers should include in-text citations, with full reference list provided at end of paper. **Citation of online and print resources should be in MLA format.**

Many spatial datasets have a DOI (a unique identifier) and can be cited appropriately; **dataset sources need to always be cited in a way that the provisioning source of the data can be identified by the viewer.**

How to cite an image in a bibliography using MLA style:

Photograph from publication:

Last Name, First Name. *Photograph Title*. Year Created. Museum/Collection Name, City. Publication Information.

Photograph found online:

Last Name, First Name. *Photograph Title*. Year Created. Museum/Collection Name, City. *Website Title*. Medium. Date Accessed.

Personally taken photograph:

Last Name, First Name. "Photograph Title/Description." Year Created. Digital File Type.

COURSE SCHEDULE

Date		Topics	Assigned Readings, Deadlines, & Notes
Block B, Week 1			
Mon, June 26 th	a.m.	Introductions, goals, expectations, teaching philosophies, certification options, and course framework (interdisciplinary overview)	
	p.m.	Discussion: Look through ClimateOdyssey.org over lunch, come with questions to ask & individual student goals; Introductions cont'd	Pre-reading: (over lunch) - www.climateodyssey.org
Tue, June 27 th	a.m.	Discussion: Discuss art modules, process, sketchbooks, digital sketchbook; 2D non-photo environmental art; Assign Project 1 - Zine Discussion: Introduction to communication theory in context of environmental challenges	Pre-reading: - Zaria Forman TED talk - Thorne, 2008, <i>Rough guide to Environmental Art</i> - Malcom, 2014, <i>Eco-Aesthetics Introduction</i>
	p.m.	Visit CC Special Collections Art Practicum: Introduction to Adobe Illustrator	
Wed, June 28 th	a.m.	Discussion: Global climate change and visual communication	Pre-reading: - Center for Research on Environmental Decisions, 2009, <i>Communication primer</i>
	p.m.	Art Practicum: Scanning, tracing, and collage Zine Project: structured work and support	
Thu, June 29 th	a.m.	Discussion: Regional climate change and interdisciplinary challenges; fieldtrip introduction	Pre-reading: - Klos et al., 2015, <i>Indicators of Climate Change in Idaho</i>
	p.m.	Art Practicum: Composition and type Zine Project: structured work and support	
Fri, June 30 th	a.m.	Zine Project: work time	Check Sketchbooks
	p.m.	Zine Project: Climate Change Zine due	Zines due at 5 p.m.

Block B, Week 2, Central Rockies Field Trip

<i>Mon, July 3rd</i>	a.m.	Depart at 9:00am , head to land library	Meet at 8:45am in classroom
	p.m.	Discussion: Land Library introduction with Jeff, director Systems Transition Project: Introduction	
<i>Tue, July 4th</i>	a.m.	GIS Practicum: Spatial awareness and relative navigation in the field, introduction to spatial data collection, ridge hike; Celebration of Spatial Independence!!!	
	p.m.	Art Practicum: Sense of place drawing activity	
<i>Wed, July 5th</i>	a.m.	Art Practicum: Bristlecones at Windy Ridge, trail hike above treeline Systems Transition Project: data collection	Drive to Windy Ridge
	p.m.	Discussion: Visiting artist, Erika Osbourne (joins us in the field)	Pack up camp, drive towards Independence Pass
<i>Thu, July 6th</i>	a.m.	Systems Transition Project: Hike and data collection	Check Sketchbooks
	p.m.	Discussion: Visiting speaker, Liza Mitchell, CO water systems	
<i>Fri, July 7th</i>	a.m.	Systems Transition Project: Data collection and synthesis	Return to CC by 3pm

Block B, Week 3			
Mon, July 10 th	a.m.	Systems Transition Project: Presentations Discussion: 3D environmental art	Presentations due: 9am
	p.m.	GIS Practicum: Introduction to GIS and cartography	Pre-reading: - O'Neill & Smith, 2014, Climate Change and Visual Imagery
Tue, July 11 th	a.m.	Discussion: Funding and grant writing Final Project: Introduction and brainstorming	
	p.m.	GIS Practicum: Introduction to spatial databases and analysis	Pre-reading: - Klos et al., 2014, <i>Extent of the Rain-Snow Transition Zone in the Western U.S. under Historic and Projected Climate</i>
Wed, July 12 th	a.m.	Final Project: proposal writing (open work time)	
	p.m.	Final Project: individual meetings (proposal review)	
Thu, July 13 th	all-day	Final Project: work time, day and overnight field options	Proposals due: 9am Check Sketchbooks
Fri, July 14 th	all-day	Final Project: work time, field options	

Block B, Week 4, On Campus			
Mon, July 17 th	a.m.	Final Project: structured GIS work time	
	p.m.	Final Project: open work time	
Tue, July 18 th	a.m.	Final Project: structured GIS check-ins and open work time	
	p.m.	Final Project: open work time	
Wed, July 19 th	a.m.	Final Project: Install final projects Final Project: Present to class	Projects due: 9am
	p.m.	Final Project: Lunchtime exhibition	
Thu, July 20 th	a.m.	Final Project: Online installation	