

Audiovisual Climate Research

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OVERVIEW

In this course, you will collaborate with your peers to create a public-facing, digital exhibit that communicates research about a local problem posed by the climate crisis. First you will encounter theories for communicating climate research in sounds, images, and embodied practices. You will apply these theories to analyze exemplary audiovisual projects. Then you will connect with your university's digital scholarship librarian and visit a media lab to help you shift from theoretical to technical aspects of creating a digital exhibit and recording sounds and images.

After agreeing on a local climate problem that the exhibit will address, you will then form teams focused on creating different components of the overall exhibit: on the *sound* team, you might combine field recordings and recorded interviews into a short podcast episode; on the *image* team, you might create photo or video essays; on the *education* team, you might create public educational resources like DIY monitoring kits, reading lists, or create/improve relevant Wikipedia articles; on the *interface* team, you might link your skills in electrical engineering or environmental monitoring to build interfaces that connect bodies with real-time, local air quality measurements. Or you might devise an altogether different team in consultation with Andrew.

The course culminates in a public showcase of each team's contribution to the digital exhibit. You will share your projects with peers, faculty, project participants/interviewees, and other community members. For a visual overview of the course, see below.

RATIONALE

The climate crisis is an unwieldy phenomenon pervading life at many scales. One way to address this problem is to orient learning toward local manifestations of the crisis. By inviting students to actively contribute to public knowledge about local problems, this course empowers students to understand the social, ethical, and ecological dimensions of life on and beyond campus. Another way to address the climate crisis is to communicate climate research by appealing to the human senses through multiple audiovisual formats. By training students to assemble a suite of audiovisual projects into a digital exhibit, this course equips students with an audiovisual toolbox for reaching wider audiences and spurring action.

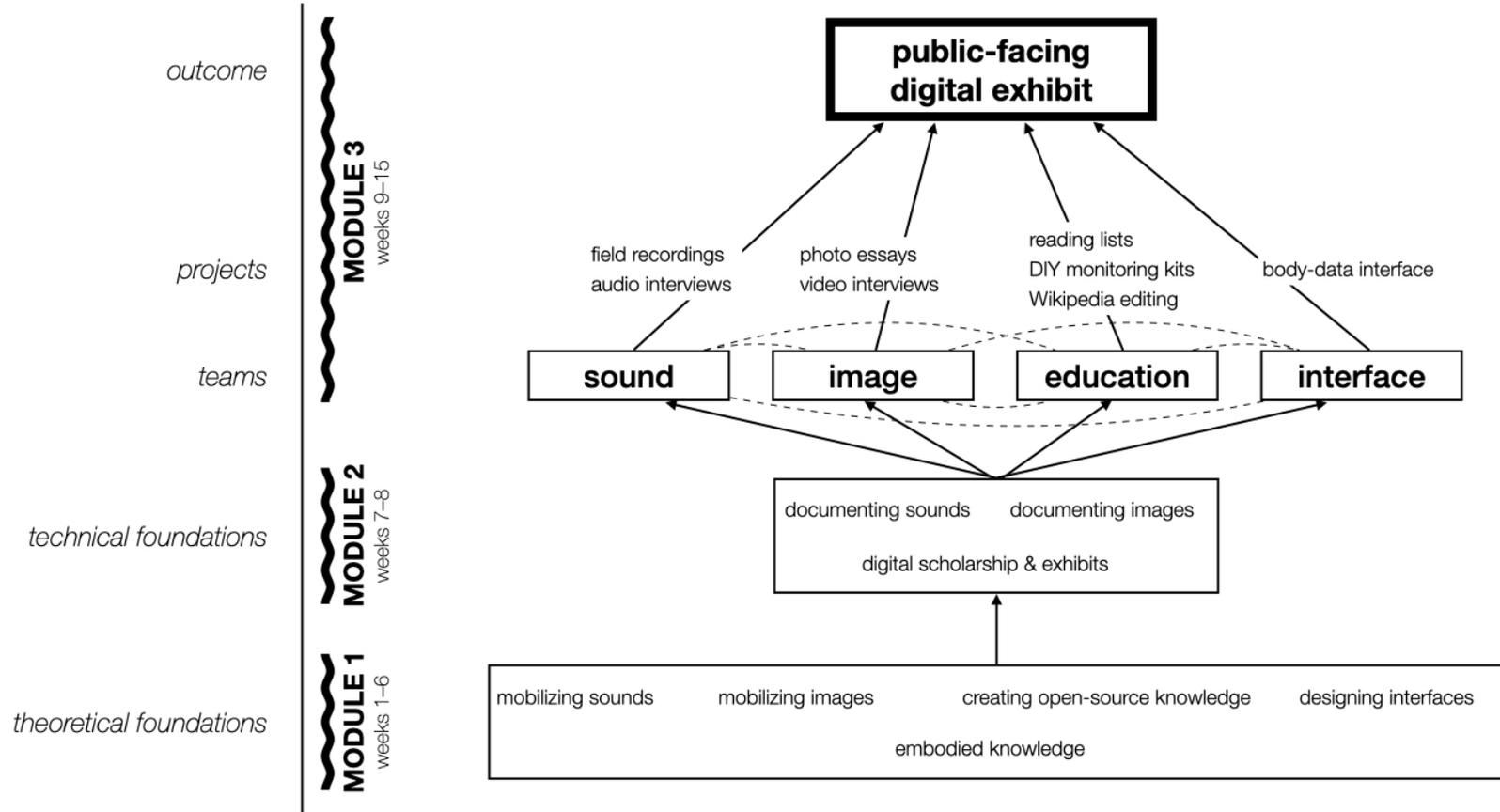
This course's focus on *implementing* a collaborative project is intended to complement Andrew's course on Ecological Design, which focuses on *proposing* a project using ecological and design thinking.

LEARNING OUTCOMES

By the end of this course, you will be able to:

1. Analyze audiovisual climate research using frameworks studied
2. Create public-facing climate research using audiovisual techniques
3. Collaborate effectively in peer research teams

VISUAL OVERVIEW



ASSIGNMENTS & EVALUATION

You will be evaluated on the following assignments that are designed to guide you toward the above learning outcomes. For some assignments you will be evaluated as a team.

15 %	Theoretical Foundations Essay
	Goal: analyze an example of audiovisual climate research by applying one theoretical framework from weeks 2 to 6 in under 1,000 words.
	Due: week 7
10 %	Team Agreements
	Goal: create a document of the agreements and assumptions that will guide your team collaboration
	Due: week 10
10 %	Production Schedule
	Goal: clarify your team's production goal(s), outline a production schedule for completion, and assign tasks to team members
	Due: week 11
10 %	Team-signed Progress Report
	Goal: describe your own contributions to the team, challenges faced, and remaining work in under 500 words; to be shared with all team members for their review and signature
	Due: week 14
30 %	90-Percent Project Draft
	Goal: present your team's nearly finished project with entire class accompanied by description of each member's contribution using CLEAR's equitable authorship approach
	Due: week 15
25 %	Exhibit Showcase
	Goal: present your contribution to peers, faculty, and surrounding community; respond to questions during Q&A
	Due: during finals, date TBD

CALENDAR

MODULE 1: THEORETICAL FOUNDATIONS

1	Introduction
	Review syllabus
	Identify values and behaviors to foster ideal classroom climate
2	Embodied Knowledge
	Tom Corby, "Systemness: Towards a Data Aesthetics of Climate Change," in <i>Far Field: Digital Culture, Climate Change, and the Poles</i> , ed. Jane D. Marsching and Andrea Polli (Bristol, UK: Intellect, 2012), 244–49 (excerpt).
	Francisco J. Varela, <i>Ethical Know-How: Action, Wisdom, and Cognition</i> (Stanford: Stanford University Press, 1999), 3–19.
	Aristotle, "Science, Art, and Practical Wisdom," in <i>The Design Philosophy Reader</i> , ed. Anne-Marie Willis (London: Bloomsbury Visual Arts, 2019), 36–38.
3	Mobilizing Sounds
	Bernie Krause and Jonathan Skinner, "THE GREAT ANIMAL ORCHESTRA: A Performance & Dialogue in Soundscape and Poetry" Harvard University, November 26, 2012, https://www.youtube.com/watch?v=tsEgbo1o70g (selected excerpts).
	Andrea Polli, "Soundscape, Sonification, and Sound Activism," <i>AI & Society</i> 27, no. 2 (2012): 257–68, https://doi.org/10.1007/s00146-011-0345-3 .
4	Mobilizing Images
	<i>GUTS</i> , directed by Taylor Hess and Noah Hutton, 2019, video, 12:51, https://www.youtube.com/watch?v=ETnPiGNXw34 .
	Jacob Bricca, "Analyses of Two Short Documentaries," in <i>Documentary Editing: Principles and Practice</i> (New York: Routledge, 2018), 215–24.
5	Designing Interfaces
	Andrew Niess, "three breathing places," 2021, https://vimeo.com/524000029 .
	Michael May, "Beyond Affordances," in <i>The Design Philosophy Reader</i> , ed. Anne-Marie Willis (London: Bloomsbury Visual Arts, 2019), 162–64.
6	Creating Open-source Knowledge
	Civic Laboratory for Environmental Action Research (CLEAR), "Ethics and Principles of Open Source Science Tools," https://civiclaboratory.nl/methodological-projects/open-science-hardware-and-wetware-for-plastic-pollution-monitoring/ .
	Maja van der Velden, "Design for a Common World: On Ethical Agency and Cognitive Justice," <i>Ethics and Information Technology</i> 11, no. 1 (2009): 37–47, https://doi.org/10.1007/s10676-008-9178-2 .

MODULE 2: TECHNICAL FOUNDATIONS

7 Digital Scholarship and How to Share It



Early Caribbean Digital Archive, <https://ecda.northeastern.edu/>.

Guest Digital scholarship librarian

Due Theoretical Foundations Essay

8 Documenting Sounds and Images

Visit Media lab

Guests Director of media studies, media lab

MODULE 3: TEAM LABS

9 Team Lab 1: Choose Problem, Form Teams, and Agreements

Goals Choose which local ecological problem the exhibit will address; form teams (sound, image, education, interface, etc.); devise written agreements for effective collaboration and file sharing using readings as models.



Randy Stoecker, "Roles for Scholars in Participatory Research," *American Behavioral Scientist* 42, no. 5 (1999): 840–54, <https://doi.org/10.1177/00027649921954561>.



Northeast Sustainable Agriculture Working Group, "Community Agreements," <https://hesawg.org/conference/community-agreements>.

10 Team Lab 2: Planning

Goals Clarify what your team will contribute to the digital exhibit, devise completion schedule, and assign tasks to team members.

Due Team Agreements

11 Team Lab 3: Making and Documenting

Goal Begin making, recording, gathering, interviewing, etc., according to completion schedule.

Note *For teams conducting recorded interviews, we will formally discuss informed consent, release forms, and interview best practices; see short text below. Other teams need not read this.*



Oral History Association, "Principles and Best Practices," 2009, <https://www.oralhistory.org/about/principles-and-practices-revised-2009/>.

Due Production Schedule

12 Team Lab 4: Making and Documenting

Goal Continue making, recording, gathering, interviewing, etc., according to completion schedule.

13	Team Lab 5: Making and Documenting
Goal	Continue making, recording, gathering, interviewing, etc., according to completion schedule.
14	Team Lab 6: Regroup and Final Touches
Goals	Regroup as entire class to clarify next actions regarding cross-team collaboration, solicit feedback on progress, troubleshoot; then Andrew will meet with one team at a time while other teams continue their work.
Due	Team-Signed Progress Report
15	Team Lab 7: Share and Debrief
Goal	Meet first as teams to debrief what worked and what didn't work during your collaboration; then each team will share with the class its 90-percent project draft; finalize presentation plans for showcase.
	Max Liboiron et al., "Equity in Author Order: A Feminist Laboratory's Approach," <i>Catalyst: Feminism, Theory, Technoscience</i> 3, no. 2 (2017): 1–17, https://doi.org/10.28968/cftt.v3i2.28850 .
Due	90-Percent Project Draft
Finals	Digital Exhibit Showcase
Goal	Share and celebrate your work with peers, faculty, project participants, and surrounding community.