

ARTH 4852 – The Visual Culture of Science, 1800–Today
Fall 2026, 3 credits
Tuesdays & Thursdays, 12:45–2:05 PM, ART 288



Professor Contact Information

Carey Gibbons (she/her)

Assistant Professor, Art History

Office location: Art Building 206

Phone number: 940-565-4777 (Dept. of Art History number – not a direct line)

Email: Carey.Gibbons@unt.edu or Canvas inbox

I aim to respond to emails and Canvas messages within 24 hours on weekdays. On weekends and university holidays, responses will likely take longer.

Office hours: Wednesdays from 1:00–2:00 PM & Thursdays from 11:30 AM–12:30 PM

Also available to meet by appointment and on Zoom

Course description

This course investigates connections between science and fine art, illustration, graphic design, and other forms of popular imagery from 1800 to the present. A particular emphasis will be placed on the close relationship between science and visual culture during the nineteenth century. The course will demonstrate how art helps to produce science and science informs art, showing how they are not compartmentalized, separate fields but in continual dialogue with one another. A variety of topics will be explored, including but not limited to landscape painting, botanical and natural history illustration, medical illustration, science fiction illustration and typography, gardening video games, infographics, and astronomical drawings and photography.

Course objectives

- Students will investigate various forms of visual culture in connection with different scientific disciplines.
- Students will reach an understanding of the dynamic, fluid relationship between visual culture and science.
- Students will engage in and recognize the value of a cross-disciplinary analysis of art, design, and popular imagery since 1800.
- Students will apply the vocabulary and analytical skills needed to conduct research and present conclusions thoughtfully in verbal and written form.

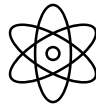
Course structure & content

This course meets in person. Readings are from a variety of sources and will be posted on

Canvas. Make sure you do your readings and required work before our class days. Readings will be supplemented by lectures, discussions (in-class and on Canvas discussion boards), assignments, and in-class activities throughout the semester. I encourage students to come and see me during office hours if they are having difficulty with the material or if they feel they are not expressing themselves adequately in class. I have included a course schedule of topics and readings in this syllabus, but be sure to check your email and Canvas regularly for announcements, adjustments to the schedule, and assignments.

Course disclaimer

Content in the arts and design can sometimes include works, situations, actions, and language that can be personally challenging or offensive to some students on the grounds, for example, of sexual explicitness, violence, or blasphemy. In this course, we will encounter examples of harmful stereotypes and expressions of cultural and racial superiority. As the College of Visual Arts and Design is devoted to the principle of freedom of expression, artistic and otherwise, it is not the college's practice to censor these works or ideas on any of these grounds. Students who might feel unduly distressed or made uncomfortable by such expressions should withdraw at the start of the term and seek another course. You can also contact me at any time to discuss any concerns that you have about the course material.



Course Requirements & Grade Distribution

Attendance & Participation: 15%
Canvas Discussion Board participation: 5%
2 Reading Responses: 10% (5% each)
Midterm Essay: 15%
Canvas Quiz: 15%
Final Group Presentation: 10%
Final Project topic & preliminary bibliography: 5%
Final Project: 25%

Attendance & Participation

Attendance will be taken at the beginning of each class, and students are expected to attend class meetings regularly. Although each student is allowed 2 unexcused absences without any penalty or questions asked, more than 2 unexcused absences will have a negative impact on a student's attendance grade (-5 points for each unexcused absence beyond the 2 allowed absences). Absences will be excused for illness or another urgent reason for being unable to attend class. Appropriate documentation is required (i.e. a doctor's note) unless I tell you otherwise. It is important that you communicate with me prior to being absent so we can discuss and mitigate the impact of the absence on your attainment of course learning goals. Excessive tardiness will count as an absence (3 late arrivals=1 unexcused absence).

Do not leave the class while it is in session unless you need a bathroom break or have an urgent reason.

In the case of any absences, you are still responsible for the material covered. This information can be obtained by asking classmates for notes, reviewing the PowerPoint slides and class links (posted on Canvas before each class), and/or meeting with me during office hours or by appointment.

It is required that each student come to class having completed the required reading and any assignments that are due. Students are also expected to participate in class discussions and any in-class activities that are assigned. If you miss any in-class activities, make sure you speak with me about how you can make them up.

No cell phones shall be visible or audible in the classroom after class begins unless there is an emergency. If you are seen using a phone repeatedly during class without permission, it will have a negative impact on your class participation grade.

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Adherence to these rules will be factored into your participation grade. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.
- Treat your instructor and classmates with respect, even when their opinion differs from your own.
- Speak from personal experiences. Try not to speak on behalf of groups or another individual's experiences.
- Use your critical thinking skills to respectfully challenge other people's ideas, instead of attacking individuals.

Canvas Discussion Boards

There will be 10 discussion boards over the course of the semester, and you must post/comment on at least 5 of the boards. Each comment should be at least 3 sentences. The comment can be a new comment or a reply to someone else's comment. Failure to comment on at least 5 boards will result in your discussion board participation grade being lowered 10 points for each missing post.

If you have an issue with class attendance or are not contributing to class discussions, you are encouraged to go above the minimum requirement of 5 posts in order to improve your Attendance & Participation grade. Please don't hesitate to speak with me if you have concerns about your grade or need further guidance.

Reading Responses

You must complete 2 responses to 2 required readings of your own choosing. Each response

is worth 5% of your course grade. The responses are due on Canvas by 12:30 PM on the class date for which the reading is assigned. You should summarize the reading and offer your own perspective/opinion in at least 500 words (and no more than 800 words).

Midterm Essay

You will be provided with at least 2 questions to choose from for your Midterm Essay, which will be due on Canvas by **Friday, October 16 (by 11:59 PM)**. You will be provided with the questions 2 weeks in advance and are expected to write a response of at least 900 words and no more than 1,500 words. You will be allowed to consult notes, readings, and class slides, but you must complete the essay independently.

Canvas Quiz

You will have a multiple-choice quiz on Canvas during class time on **Thursday, October 22**. The exam will cover important topics from the readings, lectures, and class discussions. You will be allowed to consult notes, readings, and class slides, but you must complete the quiz independently.

Final Group Presentation

I will assign small groups, and your group will be expected to give a short presentation on a particular scientific image you found especially significant and/or meaningful this semester. It can be a work of art, design, or other form of visual culture (i.e. video game, film). Your topic must be submitted for approval by **Friday, November 13 (by 11:59 PM)**, and presentations will take place during the final week of the semester on **Tuesday, December 1 and Thursday, December 3**.

Final project

You will have 3 options for your final project: a research paper (8–10 pages), an art/design project, or a podcast episode. I will provide you with more detailed instructions on Canvas. Your project topic (1-2 paragraph description) and preliminary bibliography (at least 5 sources) must be submitted on Canvas for approval by **Friday, October 30 (by 11:59 PM)**. This will be worth 5% of your course grade. The project is due on **Tuesday, December 8 (by 11:59 PM)** and will be worth 25% of your course grade.

Late policy: 10 points will be deducted from all assignment grades for each day they are submitted past the deadline, unless you are sick or there are extenuating circumstances.

Overall Course Grading

- A: 90% course average or above. Excellent work produced throughout the semester.
- B: 80% course average or above. Good work produced throughout the semester.
- C: 70% course average or above. Fair work produced throughout the semester.
- D: 60% course average or above. Passing work produced throughout the semester.
- F: Failure

Individual Assignments Grading

97-100	A+
93-96	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
63-66	D
60-62	D-
0-59	F



Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at <https://studentaffairs.unt.edu/dean-of-students/conduct/index.html>

Academic Integrity Standards and Consequences

According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

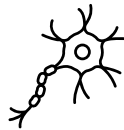
AI

Throughout the semester, you may use specific Generative AI (GenAI) tools such as ChatGPT for certain assignments, with limitations and guidance on responsible use. Examples of acceptable uses of these tools includes brainstorming potential topics of inquiry or initial searches for sources of information. Additionally, tools like Grammarly or spellcheck are acceptable for proofreading your work and improving grammar and spelling.

However, I want you to engage deeply with the course materials and develop your own critical thinking and writing skills. While Generative AI (GenAI) tools can be helpful in some contexts, they do not align with our goal of fostering the development of your independent thinking. In line with the UNT Honor Code, all work you submit must be your own. Using GenAI tools without attribution or relying on them to complete assignments violates academic integrity and will be addressed according to UNT academic integrity policy. If you're unsure whether something is allowed, please seek clarification.

Privacy and Course Content

You may not record class lectures, discussions, or activities unless you have documented academic accommodations with the Office for Disability Access (ODA). Do not use any course materials (including recordings) for purposes not directly related to this course unless you have my permission.



ADA Accommodation Statement

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website at disability.unt.edu.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to the UNT Learning Management System (LMS) for contingency plans for covering course materials.

Survivor Advocacy

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship

violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565-2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at 940-565-2759.

Student Support Services

UNT provides resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- Dean of Students: <https://studentaffairs.unt.edu/dean-of-students/>
- Student Health and Wellness Center: <https://studentaffairs.unt.edu/student-health-and-wellness-center/index.html>
- Counseling and Testing Services: <https://studentaffairs.unt.edu/counseling-and-testing-services>
- UNT Care Team: <https://studentaffairs.unt.edu/care>

Technical assistance

You can contact the IT Help Desk for help with Canvas or other technology issues.

Email: helpdesk@unt.edu

Phone: 940-565-2324

In Person: Sage Hall, Room 330

Hours and Availability: Visit <https://aits.unt.edu/support/index.html> for up-to-date hours and availability.



COURSE SCHEDULE & READINGS (subject to revision)

Note: Recommended readings are entirely optional. They delve deeper into the themes and ideas explored in class and are provided to spark your curiosity and encourage further exploration of the topics we're covering. They might be useful sources for your group presentation, final project, and/or other assignments.

Tuesday, August 18: Syllabus Review + Introduction

Thursday, August 20: Art + Science Overview

Required readings:

- Bob Root-Bernstein, Todd Siler, Adam Brown, and Kenneth Snelson, “ArtScience: Integrative Collaboration to Create a Sustainable Future,” *LEONARDO* 44, no. 3 (2011): 192.
- Monica Gagliano, Ch. 2, “Seeing Green: The Re-discovery of Plants and Nature’s Wisdom,” in *The Green Thread: Dialogues with the Vegetal World*, eds. Patrícia Vieira, Monica Gagliano, and John Ryan (Lexington Books, 2016), 19–35.

Recommended readings:

- Nancy Rose Marshall, Introduction, *Victorian Science & Imagery: Representation & Knowledge in Nineteenth-Century Visual Culture*, ed. Marshall (Pittsburgh: University of Pittsburgh Press, 2021), 3–27.

Tuesday, August 25: Romanticism

Required viewing:

- Alison Hokanson, Joanna Sheers Seidenstein, and Max Hollein, “Exhibition Tour—Caspar David Friedrich: *The Soul of Nature*,” The Metropolitan Museum of Art, February 20, 2025:
<https://www.metmuseum.org/perspectives/exhibition-tour-caspar-david-friedrich-the-soul-of-nature>

Recommended readings:

- Nina Amstutz, Ch. 14, “The Sublime in Romantic Painting,” in *The Cambridge Companion to the Romantic Sublime*, ed. Cian Duffy. *Cambridge Companions to Literature* (Cambridge University Press, 2023), 178–92.
- Nina Amstutz, “Caspar David Friedrich and the Anatomy of Nature,” *Art History* 37, no. 3 (June 2014): 454–81.

Thursday, August 27: The Pre-Raphaelites

Required readings:

- John Holmes, Ch. 1, “The Search after Truth: Art on the Model of Science,” *The Pre-Raphaelites and Science* (Yale University Press), 18–43.

Recommended readings:

- Kate Flint, “Ruskin and Lichen,” in *Ruskin’s Ecologies: Figures of Relation from Modern Painters to The Storm-Cloud*, eds. Kelly Freeman and Thomas Hughes (Courtauld Books

Online, 2021), <https://courtauld.ac.uk/research/research-resources/publications/courtauld-books-online/ruskins-ecologies-figures-of-relation-from-modern-painters-to-the-storm-cloud/1-ruskin-and-lichen-kate-flint/>

• Tim Barringer, Ch. 2, “Truth to Nature,” *Reading the Pre-Raphaelites* (Yale University Press, 2012), 57–95.

Tuesday, September 1: The Arctic & Geology

Required readings:

• Jennifer Raab, Ch. 4, “Uncertain Passages,” in *Frederic Church: The Art and Science of Detail* (Yale University Press, 2015), 87–121.

Recommended readings:

• Kate Flint, Ch. 5, “Under the Ice,” *The Victorians and the Visual Imagination* (Cambridge University Press, 2000), 117–38.

• Alison Syme, Ch. 2, “‘All That Is Solid Melts into Air’: Burne-Jones, Glaciation, and the Matter of History,” in *Victorian Science & Imagery: Representation and Knowledge in Nineteenth Century Visual Culture*, ed. Nancy Rose Marshall (University of Pittsburgh Press, 2021), 56–78.

• Chauncey C. Loomis, Ch. 5, “The Arctic Sublime,” in *Nature and the Victorian Imagination*, eds. U.C. Knoepfelmacher and G.B. Tennyson (University of California Press, 1977), 95–112.

• Caitlin Condell, “After Icebergs at Cooper Hewitt,” YouTube video, May 28, 2020: <https://www.youtube.com/watch?v=ZQdLf-Gbdto>

Thursday, September 3: *Frankenstein*

Required readings:

• Gillen D’Arcy Wood, “The Volcano That Spawned a Monster: *Frankenstein* and Climate Change,” *Huntington Library Quarterly* 83, no. 4 (Winter 2020): 691–703.

• Browse the site for the Morgan Library 2018–19 exhibition, *It’s Alive! Frankenstein at 200*: <https://www.themorgan.org/exhibitions/frankenstein>

Recommended readings:

• Grant F. Scott, “Victor’s Secret: Queer Gothic in Lynd Ward’s Illustrations to *Frankenstein* (1934),” *Word & Image* 28, no. 2 (2012): 206–32.

• Mary Fairclough, “Frankenstein and the ‘Spark of Being’: Electricity, Animation, and Adaptation,” *European Romantic Review* 29, no. 3 (2018): 399–407.

• Anne K. Mellor, “Possessing Nature. The Female in *Frankenstein*,” in Mellor, *Romanticism and Feminism* (Indiana University Press, 1988), 220–30.

• Mary Shelley, *Frankenstein, or, the Modern Prometheus* (H. Colburn and R. Bentley; Bell and Bradfute, 1831).

Tuesday, September 8: Visit to UNT Special Collections, Willis Library
Atkins–Koonce from 12:45–1:25 PM
Marquis–Ybarra from 1:25–2:05 PM

- Required viewing: Watch the film *Frankenstein* (1931)

Thursday, September 10: UNT Libraries Research Overview with Rebecca Barham (in ART 288)

Tuesday, September 15: Sci-Fi

Required readings:

- Essays from Dan Byrne-Smith, ed., *Science Fiction* (Whitechapel Gallery and MIT Press, 2020):
Donna Haraway, “A Cyborg Manifesto” (1991), 154
Darko Suvin, “Estrangement and Cognition” (1979), 36–39
Sherryll Vint, “Cognitive Estrangement” (2014), 40–42
• Dave Addey, “Eurostile,” “The Rules,” and “2001: A Space Odyssey,” *Typeset in the Future: Typography and Design in Science Fiction Movies* (Abrams, 2018), 10–13; 14–17; 18–45.

Recommended readings:

- Steve Holland, *Sci-Fi Art: A Graphic History* (Collins Design, 2009).
- Adam Rowe, *Worlds Beyond Time: Sci-fi Art of the 1970s* (Abrams, 2023).
- Katherine E. Bishop, David Higgins and Jerry Maatta, eds., *Plants in Science Fiction: Speculative Vegetation* (University of Wales Press, 2020).

Thursday, September 17 – Tuesday, September 22: Darwin in Visual Culture

Required readings:

- Jonathan Smith, Ch. 10, “Evolutionary Aesthetics and Victorian Visual Culture,” and Jane Munro, Ch. 11, “‘More Like a Work of Art than of Nature’: Darwin, Beauty, and Sexual Selection” in *Endless Forms: Charles Darwin, Natural Science and the Visual Arts*, eds. Diana Donald and Jane Munro (Yale University Press, 2009), 237–51; 253–91.

Recommended readings:

- Janet Browne, Ch. 1, “Darwin in Caricature: A Study in the Popularization and Dissemination of Evolutionary Theory,” in *Art of Evolution: Darwin, Darwinisms, and Visual Culture*, eds. Barbara Larson and Fae Brauer (Dartmouth College Press, 2009), 18–39.
- Caitlin Silberman, Ch. 8, “Darwinian Aesthetics and Aestheticism in James McNeill Whistler’s Peacock Room,” in *Victorian Science & Imagery: Representation & Knowledge in Nineteenth-Century Visual Culture*, ed. Nancy Rose Marshall (University of Pittsburgh Press, 2021), 206–26.

- Julia Voss, Ch. 2, “Darwin’s Diagrams: Images of the Discovery of Disorder,” *Darwin’s Pictures: Views of Evolutionary Theory, 1837–1874* (Yale University Press, 2010), 61–126.
- Phillip Prodger, *Darwin’s Camera: Art and Photography in the Theory of Evolution* (Oxford University Press, 2009).
- Diana Donald and Jane Munro, eds., *Endless Forms: Charles Darwin, Natural Science and the Visual Arts* (Yale University Press, 2009). (rest of book)

Thursday, September 24: Animals

Required readings:

- Ann Shelby Blum, Ch. 3, “From Naturalist-Illustrator to Artist-Naturalist,” *Picturing Nature: American Nineteenth-Century Zoological Illustration* (Princeton University Press, 1993), 88–118.

Recommended readings:

- Diana Donald, “‘A Mind and Conscience Akin to Our Own’: Darwin’s Theory of Expression and the Depiction of Animals in Nineteenth-Century Britain,” in *Endless Forms: Charles Darwin, Natural Science and the Visual Arts*, eds. Diana Donald and Jane Munro (Yale University Press, 2009), 195–213.
- James A. Serpell, Chapter 6, “People in Disguise: Anthropomorphism and the Human-Pet Relationship,” in *Thinking with Animals: New Perspectives on Anthropomorphism*, eds. Lorraine Daston and Gregg Mitman (Columbia University Press, 2005), 121–36.
- Jacques Derrida, “The Animal That Therefore I Am” (1997), in Jeffrey Kastner, *Nature* (Whitechapel Gallery, 2012), 148–51.

Tuesday, September 29 – Tuesday, October 6: Botanical Illustration; Flowers; Plant Agency

Required readings:

- Emma Steinkraus, with Carey Gibbons and Allan McLeod, “Impossible Garden: A Contemporary Artist’s Digital Engagement with Women Artist-Naturalists of the Long Nineteenth Century and Beyond,” *Nineteenth-Century Art Worldwide* 20, no. 3 (Autumn 2021), <https://www.19thc-artworldwide.org/autumn21/steinkraus-impossible-garden-on-women-artist-naturalists>

(Read the interview and browse the rest of the project.)

- Alison Syme, Ch. 1, “La Vie en Rose,” *A Touch of Blossom: John Singer Sargent and the Queer Flora of Fin-de-Siecle Art* (Pennsylvania State University Press, 2010), 23–69.
- Elizabeth Chang, Ch. 13, “Plant Agency,” in *The Cambridge Companion to Victorian Literature and the Environment*, ed. Dennis Denisoff (Cambridge University Press, 2026), 169–80.
- Emma Merkling and Thomas Hughes, “Queer Darwin, Plant-Human Entanglements, and Aestheticist Art,” *Antennae: The Journal of Nature in Visual Culture* no. 63 (Spring 2024): 104–15.

- Teresa Castro, Ch. 31, “The 1970s Plant Craze,” in *Vegetal Entwinements in Philosophy and Art: A Reader*, eds. Giovanni Aloï and Michael Marder (MIT Press, 2023), 461–77.
- Jane Bennett, “Vibrant Matter: A Political Ecology of Things” (2010), in Jeffrey Kastner, *Nature* (Whitechapel Gallery, 2012), 57–60.

Recommended readings:

- Annette Stott, “Floral Femininity: A Pictorial Definition,” *American Art* 6, no. 2 (Spring 1992): 60–77.
- Christina Bradstreet, *Scented Visions: Smell in Art, 1850–1914* (University Park: Pennsylvania State University Press, 2022).
- Debra N. Mancoff, *Flora Symbolica: Flowers in Pre-Raphaelite Art* (Prestel, 2003).
- Jessica Roux, *Floriography: An Illustrated Guide to the Victorian Language of Flowers* (Andrew McMeel Publishing, 2020).
- Stacy Alaimo, “Introduction. Feminist Theory’s Flight from Nature,” in *Undomesticated Ground: Recasting Nature as Feminist Space* (Cornell University Press), 1–23.
- Lindsay Wells, Ch. 7, “Empire, Environment, and Botanical Art in British India,” in *The Cambridge Companion to Victorian Literature and the Environment*, ed. Dennis Denisoff (Cambridge University Press, 2026), 89–101.
- Emma Merklings, Ch. 7, “Plant Subjects, Plant Erotics: Julia Margaret Cameron’s Creeping Idyll,” in *The Victorian Idyll in Art and Literature: Subject, Ecology, Form* (Routledge, 2024), 145–66.
- Richard Karban, Ch. 1, “The Language of Plant Communication (and How It Compares to Animal Communication),” and Luce Irigaray, Ch. 6, “What the Vegetal World Says to Us,” in *The Language of Plants: Science, Philosophy, Literature*, eds. Monica Gagliano, John C. Ryan, and Patrícia Vieira (University of Minnesota Press, 2017), 3–26; 126–35.
- Peter Tompkins and Christopher Bird, *The Secret Life of Plants* (Allen Lane, 1974; orig. published in 1973).

Thursday, October 8: Visit to UNT Media Library: Meet in 250H, Willis Library

Required readings:

- Lewis Gordon, “Gardening games are blossoming in turbulent times,” *The Verge*, July 16, 2019:
<https://www.theverge.com/2019/7/16/20696253/gardening-games-harvest-moon-animal-crossing-ooblets-cultivation>

Recommended readings:

- Alenda Y. Chang, *Playing Nature: Ecology in Video Games* (University of Minnesota Press, 2019).

Tuesday, October 13: Medical Illustration

Required readings:

• Keren Rosa Hammerschlag, Ch. 6, “Drawing Racial Comparisons in Nineteenth-Century British and American Anatomical Atlases,” in *Victorian Science & Imagery: Representation and Knowledge in Nineteenth Century Visual Culture*, ed. Nancy Rose Marshall (University of Pittsburgh Press, 2021), 167–88.

Recommended readings:

- David M. Mazierski, Ch. 28, “Medical Illustration after Gray’s Anatomy: 1859–Early 2000s,” in *History of Illustration*, eds. Susan Doyle, Jaleen Grove, and Whitney Sherman (Bloomsbury, 2019), 1126–69.
- Shelley Wall, Ch. 10, “Visualizing Bodies: Anatomical and Medical Illustration from the Renaissance to the Nineteenth Century, 1420–1860,” in *History of Illustration*, eds. Susan Doyle, Jaleen Grove, and Whitney Sherman (Bloomsbury, 2019), 434–70.
- Jonathan P. Massie, Daniel Y. Cho, Cameron J. Kneib, Janelle D. Sousa, Shane D. Morrison, Jeffrey B. Friedrich, “A Picture of Modern Medicine: Race and Visual Representation in Medical Literature,” *Journal of the National Medical Association* 113, no. 1 (2021): 88–94.
- Shelley Wall, “Mid-twentieth-Century Anatomical Transparencies and the Depiction of Three-dimensional Form,” *Clinical Anatomy* 23, no. 8 (2010): 915–21.
- Richard Barnett, *The Sick Rose: Disease and the Art of Medical Illustration* (New York: D.A.P., 2004).

Thursday, October 15: Work on Final Group Presentations during class
ESSAYS DUE FRIDAY, OCTOBER 16 by 11:59 PM!

Tuesday, October 20: Waves

Required readings:

- Emma Merkling, “The Sensate Body: Consciousness in Albert Moore’s Art,” *Immediations* 4, no. 3 (2018): <https://courtauld.ac.uk/research/research-resources/publications/immediations-postgraduate-journal/immediations-online/2018-2/emma-merkling-the-sensate-body-consciousness-in-albert-moores-art/>

Recommended readings:

- Carey Gibbons, Ch. 3, “Grasping the Elusive: Victorian Weather Forecasting and Arthur Hughes’s Illustrations for George MacDonald’s *At the Back of the North Wind*,” in *Victorian Science & Imagery: Representation & Knowledge in Nineteenth-Century Visual Culture*, ed. Nancy Rose Marshall (Pittsburgh: University of Pittsburgh Press, 2021), 79–109.
- Gillian Beer, Ch. 13, “Wave Theory and the Rise of Literary Modernism,” *Open Fields: Science in Cultural Encounter* (Oxford: Clarendon Press, 1996), 295–318.
- Anne-Marie Melster, *Ocean: Exploring the Marine World* (Berlin: Phaidon, 2022).

Thursday, October 22: CANVAS QUIZ!

Tuesday, October 27: Astronomy

Required readings:

- Mia Fineman, “Daydreams by Moonlight,” in *Apollo’s Muse: The Moon in the Age of Photography*, eds. Mia Fineman and Beth Saunders (The Metropolitan Museum of Art, 2019), 71–103.

Recommended readings:

- Jennifer Tucker, Ch. 5, “Photographic Evidence and Mass Culture,” *Nature Exposed: Photography as Eyewitness in Victorian Science* (Johns Hopkins University Press, 2005), 194–233.
- Simon Schaffer, “On Astronomical Drawing,” in *Picturing Science Producing Art*, eds. Caroline A. Jones and Peter Galison (Routledge, 1998), 441–74.
- Omar Nasim, *Observing by Hand: Sketching the Nebulae in the Nineteenth Century* (University of Chicago Press, 2013).
- Robert Gendler, R. Jay GaBany, *Breakthrough! 100 Astronomical Images That Changed the World* (Springer International Publishing, 2015).

Thursday, October 29 – Thursday, November 5: Air, The Invisible, & The Indeterminate

FINAL PROJECT TOPIC & PRELIMINARY BIBLIOGRAPHY DUE FRIDAY, OCTOBER 30 (by 11:59 PM)!

Visit to UNT Special Collections, Willis Library on Tuesday, November 3:

Atkins–Koonce from 12:45–1:25 PM

Marquis–Ybarra from 1:25–2:05 PM

Required readings:

- Corey Keller, “Sight Unseen: Picturing the Invisible,” *Brought to Light: Photography and the Invisible 1840–1900* (Yale University Press, 2008), 18–35.
- Melinda McCurdy and Karla Nielsen, “Seeing through the Storm Cloud,” and Rebeca Méndez, “The Storm Cloud of the Twenty-First Century,” in *Storm Cloud: Picturing the Origins of Our Climate Crisis* (Yale University Press, 2024), 1–27; 148–51.

Recommended readings:

- Jennifer Tucker, Ch. 4, “Photography of the Invisible,” *Nature Exposed: Photography as Eyewitness in Victorian Science* (Johns Hopkins University Press, 2005), 159–93.
- Isobel Armstrong, Ch. 12, “Microscopic Space,” *Victorian Glassworlds: Glass Culture and the Imagination 1830–1880* (Oxford University Press, 2008), 317–28.
- Steven Connor, Ch. 5, “Transported Shiver of Bodies: Weighing Ether,” and Ch. 6, “Haze,” *The Matter of Air: Science and Art of the Ethereal* (Reaktion Books, 2010), 148–72; 175–94.
- Sylvia Pamboukian, “‘Looking Radiant’: Science, Photography and the X-Ray Craze of 1896,” *Victorian Review* 27, no. 2 (2001): 56–74.

- Monica Bravo, “Mercury is a Messenger: Photography’s Dependence on Quicksilver and Mining Labor,” *American Art* 39, no. 1 (Spring 2025): 16–25.

Tuesday, November 10: Information Graphics & Graphic Design

Required readings:

- Christoph Asendorf, Ch. 9, “Bodies in Force Fields: Design Between the Wars,” in *From Energy to Information: Representation in Science and Technology, Art, and Literature*, eds. Bruce Clarke and Linda Dalrymple Henderson (Stanford University Press, 2002), 195–212.
- Peter Hall, “Critical Visualization” and “Portfolio 4,” in Paola Antonelli, *Design and the Elastic Mind* (The Museum of Modern Art, 2008), 120–31; 132–49.

Recommended readings:

- Ellen Lupton, *Herbert Bayer: Inspiration and Process in Design* (Cooper Hewitt and Moleskine Books, 2020).
- Sandra Rendgen, ed. Julius Wiedemann, *History of Information Graphics* (Taschen, 2019).
- Manuel Lima, *The Book of Circles: Visualizing Spheres of Knowledge* (Princeton Architectural Press, 2017).
- Manuel Lima, *The Book of Trees: Visualizing Branches of Knowledge* (Princeton Architectural Press, 2014).
- Manuel Lima, *Visual Complexity: Mapping Patterns of Information* (Princeton Architectural Press, 2011).

**Thursday, November 12: Work on Final Group Presentations during class
FINAL GROUP PRESENTATION TOPIC DUE FRIDAY, NOVEMBER 13 (by 11:59 PM)!**

Tuesday, November 17: Science and Modern Art & Design

Required readings:

- Alan C. Braddock, “Vital Forms: Modernist Biocentrism,” in *Nature’s Nation: American Art and the Environment*, eds. Braddock and Karl Kusserow (Princeton University Art Museum, 2018), 322–55.
- Kathleen Merrill Campagnolo, “Spiral Jetty through the Camera’s Eye,” *Archives of American Art Journal* 47, No. 1/2 (2008): 16–23.

Recommended readings:

- Charles Sirato, “Dimensionist Manifesto” (Paris, 1936)
- Linda Dalrymple Henderson, Ch. 2, “The Dimensionist Manifesto and Multivalent Fourth Dimension in 1936: Sirato, Delaunay, Duchamp, Kandinsky, and Prampolini,” in *Dimensionism: Modern Art in the Age of Einstein*, ed. Vanja V. Malloy (Mead Art Museum and MIT Press, 2018), 49–69.

- Rosalind Krauss, “Sculpture in the Expanded Field” (1979), in Jeffrey Kastner and Brian Wallis, *Land and Environmental Art* (Phaidon, 1998), 233–34.

Thursday, November 19: Science and Contemporary Art & Design

Required readings:

- Alan C. Braddock and Karl Kusserow, “An Interview with Mark Dion,” in *Nature’s Nation: American Art and the Environment*, eds. Braddock and Kusserow (Princeton University Art Museum, 2018), 188–95.

Recommended readings:

- Isobel Elstob, “The Artist–Historian: Victorian Natural History in the Work of Mark Dion,” *Journal of Victorian Culture* 23, no. 1 (January 2018): 86–102.
- Stephen Wilson, *Art + Science Now: How Scientific Research and Technological Innovation are Becoming Key to 21st Century Aesthetics* (Thames and Hudson, 2012).
- Giovanni Aloï, *Why Look at Plants? The Botanical Emergence in Contemporary Art* (Brill Rodopi, 2019).
- Suzanne Ramljak; with Mark Dion and Alexis Rockman, *Natural Wonders: The Sublime in Contemporary Art: Thirteen Artists Explore Nature’s Limits* (Brandywine River Museum of Art, 2018).
- Andrea Lipps, Matilda McQuaid, Caitlin Condell, and Gene Bertrand, *Nature: Collaborations in Design* (Cooper Hewitt, Smithsonian Design Museum, 2019).

Tuesday, November 24 & Thursday, November 26: THANKSGIVING BREAK!

Tuesday, December 1 & Thursday, December 3: GROUP PRESENTATIONS!

FINAL PROJECTS DUE TUESDAY, DECEMBER 8 (by 11:59 PM)!

