AAD 199 -- Art Meets Science: Making Visible the Invisible
Winter 2016 - Course Schedule

Week 1: Introduction to the Visual Discourse of Scientific Images

Day 1, Tuesday, January 5 – Welcome and Let's Talk about 'Art Meets Science'!

Presentation/Discussion:
• Mini “TEDTalks” introductions to seminar instructors and course themes:
  What are scientific images? What is aesthetics? Why are they important?
  How do they intersect?
• Introduce general seminar schedule and term project.
• Possible guests: Previous seminar students who will discuss their experiences and what to expect.

Activities:
• Student Survey: Introduction to course expectations and what each student is bringing to the academic community of the seminar.
  o What are some specific examples or ways to think about these intersections?
• Drawing activity: Seeing and representing the world around us in different and individualized ways.

Assignments for Thursday:
1. Purchase course reading packet from the UO Duckstore.
2. Read Wilson’s chapter from Art + Science Now in the course packet (note: articles are printed alphabetically by author last name not by weekly order)
3. Acquire & bring a sketchbook/journal to all class sessions. You will submit many course assignments on your UO Blog site; however, it is important to have a hands-on journal available to you for sketching, note taking, and
reflective writing as you prepare to finalize posts for the blog site.

4. **Write/Record Reading Response** to *Art + Science Now* in your journal. Bring to class on Thursday, January 7th. This will be added to your student blog site later. *(Journal #1)* Note: We also suggest bringing a camera and/or video recorder for all class sessions as part of developing your journals.

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**Day 2, Thursday, January 7 – Describe, Analyze, Reflect, Connect: Analyzing the Visual World Around Us**

**NOTE:** Please bring a computer and/or tablet with you to class today! We will use this for conducting some library research.

**Presentation/Discussion:**
- Introduction to Describe, Analyze, Reflect, Connect (DARC) model critique.
- Field practice of DARC. This will be added to your student blog site later *(Report 1, which is due Tuesday, January 12th)*
- Research practice
- Reading Groups: Explore questions and responses to *Art + Science Now*.
- Large group discussion of chapter from *Art + Science Now* and journaling process.
- Discuss article questions, comments, and interpretations and possible artists to explore further during the term.
- Introduction to seminar ‘Achievements’ structure.

**Assignments:**

1. **Review, Write/Record, & Post about the artists** of interest to you from the list of sources found on our UO Blogs course site. Details of this activity are further outlined on our blog site. Look at a variety of possibilities. Narrow down your preferred artists to 2-3 selections to examine over the term. List the pros/cons of your interest in each artist within journal. Bring to class on January 12th *Journal #2*. **Report 2** (Due Jan. 19th) will build upon this journal entry *(Journal #2)* as you prepare your final artist selection for term project. A worksheet will be handed out as a guide to explore why you are selecting this artist.
Week 2: Visual & Scientific Literacy: What are science and visual literacy? Why are they important?

Day 3, Tuesday, January 12 -- Guests: Elly Vandegrift & Julie Mueller, UO Science Literacy Program

Presentation/Discussion:
- Introduction to the Science Literacy Group
- Introduction to multi-disciplinary, integrated approaches to the sciences. Potential questions here include: How are we taught to read & experiences images? What is visual literacy? How are we taught to learn & experience science through visual methods? How are images of science revised and represented in and for the public eye?

Activities:
- Science Pictionary!
- Introduction to UO Blogs and your personal journaling.

Assignments:
1. **Report 2: Finalize artist selection for term project.** Use worksheet handout as a guide to explore why you are selecting this artist. Write a proposal (Report 2) for what you will explore about this artist/scientific topic during the term. See details on assignment outline. **Due next week, Thursday, January 21st.**
3. **Write/Record & Post Reading Response** to Palmer (Journal #3). What interested you and makes you want to know about similar work at the UO? Post to your UO Blog no later than 10a.m., Thursday, January 14th.
Day 4, Thursday, January 14—Guest: Dean Walton, Science Librarian

Presentation/Discussion:
*Scientia Venustior/Charming Knowledge*, and the visual representations and art forms that UO scientists have been creating.

Activities:
- Hands-on practice observing and examining artistic images produced by scientists at the UO.
- Considering ways that you might rate, evaluate, and exhibit such works.
- Consider the importance of the UO Librarians involvement in such research and display opportunities related to research that supports the work of scientists on campus and beyond.
- Some aspects of library research important to course topics and your individual projects for this course.
- Further discuss term project (We will show you how to post your journals and reports developed so far in the class)

Assignments:
1. **Nine Dots Exercise** to be completed before Tuesday, January 19th’s meeting, which will be used in class.
2. **Finalize proposal** on artist selection ([Report 2](#)). Due Thursday, January 21st.
3. **Read article** by Marshall & D'Adamo’s “Art practice as research in the classroom”.
4. **Write/Record & Post Reading Response** to “Art practice as research in the classroom” ([Journal #4](#)). Include at least 1 aspect of each of the following from each article: something that:
   a) highly interested you;
   b) confused you;
   c) you want to further study, or
   d) you want to further discuss with others.

Post on your UO Blog no later than 10a.m. Tuesday, January 19th.
Week 3: A Holistic Picture: Creativity, Design, and the Contemplative Brain

Day 5, Tuesday, January 19 – Guest: Lisa Freinkel, Professor of English/Comparative Literature & UO Vice-Provost for Undergraduate Studies

Presentation/Discussion:
• Mindfulness and creativity; Perspective; The brain and creativity;
• Mindfulness and conducting research; visualizing in the mind

Activities:
• Presenter selected leading of engagement with ideas on contemplative pedagogy and research

Assignments:
1. **Write/Record & Post 3 things**: 1 that was new; 1 that will apply to your project, and 1 that you will apply in your life from today’s guest session (Journal #5). Due no later than 10a.m. Thursday, January 21st.
2. **Read** article by McClurg-Genevese, J.D. (2006). Designing for the web; Principles and elements of design. Go to http://64.13.255.16/types/design_in_theory_and_practice/
3. **Write/Record & Post** Reading Response to articles by McClurg-Genevese (Journal #6) Due no later than 10a.m., Thursday, January 21st.
4. **Continue working on research** of sources, ideas, etc. regarding your artist and the science involved in your project. Find at least 5 peer-reviewed articles about the artist. Find at least 5 peer-reviewed articles about the science involved.

Day 6, Thursday, January 21 – Design and Branding 101: Hands on Workshop

Presentation/Discussion:
Building on aspects of what we learned about visual and scientific literacy, this session will introduce basic aspects of storyboarding, displaying, and exhibiting. Considerations of architecture (physical flow), elements of design (visual flow),
Audience engagement. Choices within presentation for public display regarding concept, interaction, beauty, etc. Emphasis will be on student-selected artists.

Submit at class today: Report 2: Artist Proposal. You will also share this verbally with the rest of the class.

Activities:
- Practice ideas presented regarding complexity of design and information presentation process related to your artist selections and how their work can be applied for your storyboarding, personal creative display, and research through the term
- Address questions about research sources/artists to date.
- Discuss Creative Display 1 and presentation expectations (due week 5).

Assignments:
1. **Post questions, comments, ideas about your project and visual presentation of the** research, creativity, art, and science you have explored for your project to date. *(Journal #7)* Due no later than 10a.m., Tuesday, January 26th.
3. **Write/Record and Post Reading Response** to Richard Taylor’s article in your blog. Due by 10a.m., Tuesday, January 26th. What are two questions you have for Dr. Taylor from this reading? *(Journal #8)*
4. **Continue working on research** of sources, ideas, etc. regarding the artist for your project.
5. **Begin developing and creating ideas for display of research** *(Creative Display 1)*. Draft Due and Presented in Week 5.

**Week 4: Creativity Across the Arts & Sciences and Your Role as a Researcher**

*Day 7, Tuesday, January 26 – Guest: Richard Taylor, UO Professor of Physics, Psychology & Art*

Meet at CAMCOR for today’s class session in the basement of the Lewis Integrated Sciences Building (directions next page)
Directions to CAMCOR/Lokey Labs for class session: Enter Huestis Hall, proceed through two sets of double doors and go down stairs on left to the Lokey Labs. See interactive campus map to find directions to Huestis Hall: http://map.uoregon.edu/

Presentation/Discussion:
- Introduction to Dr. Taylor's work
- Thinking from science and art to solve problems
- How this approach helped to understand the work of Jackson Pollock
- Q&A with Dr. Taylor

Activities:
- Tour the CAMCOR labs

Assignments:
1. **Journal Entry**: What did you learn from Dr. Taylor? What did you learn from visiting the labs? How will you apply these ideas and experiences to your term project? (Journal #9) Due no later than 10a.m. Thursday, January 28th.
2. Continue developing and creating ideas for display of research (Creative Display 1). Draft Due and Presented in Week 5.

**Day 8, Thursday, January 28 – Using Library Resources: A Dynamic Research Workshop**

**Please bring your laptops/tablets** for online searching using UO Library databases and search engines during this session.

Presentation topics/activities:
Learn how to conduct further research about artists, their work, and critiques of their work. Learn about types of sources, such as databases, available from the UO Libraries and how to find and apply them.

Activities:
- Address questions about research sources/artists/imagery to date.
- Practice conducting research about your selected artist through library tools and resources.
- Take notes and keep track of searches in your personal journal for later reference and support in developing your reports for the class. (Journal
Assignments:
1. **Finalize draft display/process** of research visualization (Creative Display 1). This shows your brainstorming, sketching, planning, and developing ideas for display of research about your selected artist for the term. Bring to class for presentation and review by colleagues. **Due Thursday, February 4th.**

2. Begin developing **Report 3** to present to course colleagues and instructors. This requires continuing research of sources, ideas, etc. regarding the science and artist included in your project. **Due Thursday, February 11th.**

**Week 5: Narrating Science, Visual, and Cultural Literacy**

**Day 9, Tuesday, February 2 – Framing the Story: Thinking About Visual Narratives according to Cultural and Historical Contexts**

**Presentation/Discussion/Activities:**
- Explore storytelling/narrative within the frames of visual, scientific, cultural literacy. Include examples of sources, stories, exhibits, etc. such as *Body of Light* exhibit
- What stories are the artists you have interest in telling?

**Activities:**
- In-class discussion and practice of storytelling about the work your selected artists explore.
- Hands-on building of the important cultural narratives your artists tell, how they tell it – and most importantly, how you tell it.

**Assignments:**
1. **For Thursday:** Midterm drafts (Creative Display 1) of projects presented; you will also provide peer feedback.


**Day 10, Thursday, February 4 – Midterm Creative Display 1 Visualization Presentations**

**Presentation/Discussion/Activities:**

**Midterm presentations (Creative Display 1)** – Style of presentation will be determined by week three of the term and discussed in class. Feedback provided by colleagues.

**Assignments:**

1. **Journal entry:** What did you learn about your project through the midterm review? What are your projects strengths? Weaknesses? What are opportunities you can build on? What may be threatening to or risking the best outcomes for the project? *(Journal #11).* Due no later than 10a.m. Tuesday, February 9th.
2. **Read** chapters and articles by Sturken & Cartwright; Werbel.
3. **Write/Record Reading Response** to Sturken & Cartwright; Werbel *(Journal #12).* Due no later than 10a.m. Tuesday, February 9th.
4. **Finalize Report 3** for Thursday, February 11th.

**Week 6: Bodily Portraits**

**Day 11, Tuesday, February 9 –**

**Presentation/Discussion/Activities:**

Possible topics: Theatres of Science; Cataloguing and Displaying the Body *(BodyWorlds)*; Visible “Truths” in Portraits of the Body

**Assignments:**

1. **Finalize Report 3** for Thursday, February 11

**Day 12, Thursday, February 11 – Guest: Sierra Dawson, Human Physiology**

**Due today:** **Report 3** – Bring a printed copy of your report to share in class.

**Presentation/Discussion/Activities:**

- Challenges of learning physiology from cartoon-like images
• Differences between "real" anatomy and “cartoon” anatomy
• Gendered inaccuracies of “real” and “cartoon” anatomy

Assignments:
1. Journal entry (Journal #13): What did you learn from Dr. Dawson? What did you learn from the stories and examples she shared? How will you apply these ideas to your term project? Due no later than 10a.m. Tuesday, February 16th.

2. Read: article by Rau in course packet

3. Write/Record & Post your reading response for article by Rau (Journal #14) Due no later than 10a.m. Tuesday, February 16th.

4. Last Days to Propose your “Name Your Own Achievement,” which is due by 10:00pm Friday, February 12th.

Week 7: Creative Data Visualizations and Studying Impacts on our Environment

Day 13, Tuesday, February 16 – Data Visualization and Representations of ‘Reality’ and Impacts on Cultural Narratives

Presentation/Discussion/Activities:
Discuss Report 4 and Creative Display 2

Data visualization; Aesthetically successful data visualization and generating visual aesthetic objects.

This session will build on aspects of storyboarding, displaying, and exhibiting. Considerations of architecture (physical flow), elements of design (visual flow), audience engagement introduced earlier in the term. Choices within presentation for public display regarding concept, interaction, beauty, etc.

In particular, we will begin examining online displays, exhibits, and ways of
communicating information to help you understand how to further develop your own term project.

Assignments:
1. **Journal entry**: In what ways will you apply data visualization thinking and display tools to your final professional project? *(Journal #15) Due Thursday, February 18th.*

**Day 14, Thursday, February 18 – Guest: Julie Haack, Chemistry and Biochemistry**

Presentation/Discussion/Activities as prepared by our guest speaker.

Assignments:
1. **Journal Entry**: Write about 1 idea that was new; 1 idea that will apply to your project, and 1 idea that you will apply in your life from today's guest session *(Journal #16)*. Due no later than 10a.m. Tuesday.
2. **Work on Report 4** (draft of final paper) and **Creative Display 2** (draft of final creative project). Due Week 9.

**Week 8: The Art of Performing Science (and Open Lab!)

**Day 15, Tuesday, February 23 – Open Work Session**

Presentation/Discussion/Activities: Open time to meet with instructors about your work to date.

Assignments:
1. **Continue work on Report 4** (draft of final paper) and **Creative Display 2** (draft of final creative project). Due Week 9.
**Day 16, Thursday, February 25 – Field Trip: Oregon Contemporary Theatre’s production of *Silent Sky***

**Presentation/Discussion:**
Thinking like an artist; Engaging with current issues of scientific and sociocultural concern

**Activities:**
Field trip/Backstage tour/Talk with producers of *Silent Sky*, a play that helps us think about sociocultural concerns in the sciences.

**Assignments:**
1. **ATTEND the production of *Silent Sky*** (date for us to attend together TBD) this weekend, Feb. 25-28)
2. **Journal Entry:** How are you thinking like an artist (actor, designer, director) in new ways after seeing *Silent Sky* and talking with the producers? In what ways does this production assist your thinking about your own project? In what ways does this performance change your views about scientific discovery? (*Journal #17*). Post by 10a.m., Tuesday, March 1st.
3. **Read article by** Neri from *Insect and the Image*
4. **Finalize Report 4** (draft of final paper). Due Tuesday, March 3rd. See assignment outline for details.
5. **Finalize Creative Display, Version 2.** Due Thursday, March 5th.

**Week 9: Bringing Art & Science Together**

**Day 17, Tuesday, March 1 – Guest Artist: Kris Kirkeby, Scientific Illustrator**

Presentation/Discussion/Activities as prepared by guest, this will be a workshop session so materials to bring will be announced as we get closer to the session meeting time.

Due: **Report 4**

**Assignments:**
1. **Journal Entry:** In what ways will you apply aspects of ideas and experiences from our guest today to your final professional project? (*Journal #18*). Due no later than 10a.m. Thursday, March 3rd.
2. Continue work on **Report 4** (draft of final paper) and **Creative Display 2** (draft of final creative project). Due Thursday.

3. **Finalize all aspects of term project** (online creative display, final paper, etc.) due next week.

4. **Finalize** any journal entries, assignments, and achievements not yet completed.

**Day 18, Thursday, March 3 – Creative Display 2 Visualization Presentations**

**Presentation/Discussion/Activities:**

- Due: **Creative Display 2, Final Drafts presented**
- Colleague feedback provided
- Self-Assessment conducted

**Assignments:**

1. **Journal entry:** What did you learn about your project through this review and self-assessment? What are your project’s strengths? Weaknesses? What are opportunities you can build on? What may be threatening to or risking the best outcomes for the project? *(Journal #19).* Due no later than 10a.m. Tuesday, March 8th.

2. **Finalize all aspects of term project** (online creative display, final paper, etc.) due next week.

3. **Finalize** any journal entries, assignments, and achievements not yet completed.

**Week 10: Exhibition Final Showcase, Future Discourse of Artistic Exhibition of Scientific Images**

**Day 19, Tuesday, March 8 –**

**Presentation/Discussion/Activities:**

- Active Work Session to finalize final projects.
- Discussion and review of term.

**Assignments:**

- **Finalize final project** (final report and final display)
Day 20, Thursday, March 10 –

Presentation/Discussion/Activities:
Final projects on display for public view. (Style and format of presentation TBD by Week 7.)

Assignments:
1. Final Journal entry: What did you learn about your project through the final display? What are your project’s strengths at this point? Weaknesses? What are opportunities you can build on if you would continue with this project? What may be threatening to or risking the best outcomes for the project? (Journal #20). Due no later than 10a.m. Tuesday of Finals Week (March 15th).

Finals Week

No course meeting.