

Reading with Scientists: How to Export Literature

English 148RS
Society, Culture, and Information
Fall 2018
M/W 9:30-10:45 am
Building 387, Room 1011

Dr. Abigail Droge
adroge@ucsb.edu
Office hrs: M/W 11-12
or by appt
Office TBA

This course considers an experiment: what would happen if we assigned literature in a science classroom? What questions, for instance, could a well-timed excerpt of *Frankenstein* help you to explore in an Artificial Intelligence course? We will discuss what is to be gained and lost by making literature more mobile. How would such a model of teaching ask us to rethink the lines that we draw between disciplines, or between general education requirements and specialized majors? For the final project, you'll work together to choose an audience you want to reach, an issue you want to address, and a text you want to "export" in order to address it. Our collective goal will be to compile an open-source collaborative portfolio of our ideas that can be shared with communities beyond our classroom.

Required Texts

Our main text is:

- ❖ Mary Shelley. *Frankenstein. Annotated for Scientists, Engineers, and Creators of All Kinds*. Edited by David H. Guston, Ed Finn, and Jason Scott Robert. MIT Press, 2017.

Please make sure that you have this edition; the annotations, prefaces, and backmatter will form an important part of our class discussion. The text is available in hardcopy at the bookstore and in electronic form on the library website.

All other course texts will be available online or posted on GauchoSpace.

Learning Goals

In this class, I hope you will learn:

- ❖ what it means to read a text while keeping a different reader (not you) in mind
- ❖ how the practices of literary and scientific study are and have been shaped by social and cultural values
- ❖ how to communicate your thoughts on literature to a wide audience, particularly in settings that are not primarily literary

Schedule

Our class time will follow a general pattern that alternates between analysis and application. On Mondays, “Reading Days,” we will concentrate on more traditional literary study, understanding and processing novels, short stories, and poems on their own terms. On Wednesdays, “Practicum Days,” we will explore pieces about contemporary scientific issues and spend time discussing how we might “translate” or “export” our literary texts for a scientific audience. A key focus for our scientific selections is textbooks, some of which are being assigned in science courses offered at UCSB this quarter.

Readings and assignments are listed on the day they are due.

Week 1

October 1 – Introductions

October 3 – Mary Shelley, *Frankenstein*: “Editor’s Preface,” “Introduction,” and p 1-16. (Make sure to read the footnotes!); Emma Pierson, “Hey, Computer Scientists! Stop Hating on the Humanities” (*Wired*); Center for Science and the Imagination website (ASU)

Week 2

October 8 – *Frankenstein*: p 16-69

October 10 – Radiolab podcast, “Update: CRISPR”; Stephen H. Tsang (ed), *Precision Medicine, CRISPR, and Genome Engineering* (selections)

Week 3

October 15 – *Frankenstein*: p 71-125
***Frankenstein* Review due**

October 17 – Stuart J. Russell and Peter Norvig, *Artificial Intelligence: A Modern Approach, Third Edition* (selections); Ibo Van De Poel and Lamber Royakkers, *Ethics, Technology, and Engineering: An Introduction* (selections); Rethinking Economics website

Week 4

October 22 – *Frankenstein*: p 127-187, the 1831 Intro (p 189-193), and any two essays from the back of our edition (starting p 201)

October 24 – Charu C. Aggarwal, *Data Mining: The Textbook* (selections); Facebook, “Data Policy”; Highlights from Zuckerberg’s Senate Hearing

Week 5

October 29 – Isaac Asimov, “Runaround”
Reverse Annotation due

October 31 – Radiolab podcast, “Driverless Dilemma”; Jason Millar, “Ethics Settings for Autonomous Vehicles” (from *Robot Ethics 2.0*)

Week 6

November 5 – Ursula Le Guin, “The Ones Who Walk Away from Omelas”; H. G. Wells, *The Time Machine*, Chapters I-VIII.

November 7 – Cathy O’Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (selections); Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* (selections); Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (selections); P. J. Ruder, “Teaching Economics with Short Stories”

Week 7

November 12 - No class (Veterans’ Day)

November 14 – *The Time Machine*, Chapters IX-Epilogue; Rachel Carson, *Silent Spring* (selections); Naomi Klein, *This Changes Everything* (selections); Frank R. Spellman and Nancy E. Whiting, *Environmental Science and Technology: Concepts and Applications* (selections); Environmental Humanities Initiative at UCSB website; Emmett Interdisciplinary Program in Environment and Resources at Stanford website

Week 8

November 19 – Ted Chiang, “Story of Your Life”; Elizabeth Bishop, “The Fish”

November 21 – Anne Hunsaker Hawkins and Marilyn Chandler McEntyre (eds), *Teaching Literature and Medicine* (selections); Columbia University, Narrative Medicine Master of Science program website; *Harrison’s Principles of Internal Medicine* (selections)

Lesson Plans due

Week 9

November 26 – Arthur Conan Doyle, *The Lost World*, Chapters I-VIII

November 28 – Charles Darwin, *Journal of Researches* (selections); Potter, Binns, Elliott, and Smith, *Geographies of Development: An Introduction to Development Studies, Third Edition* (selections)

Week 10

December 3 – *The Lost World*, Chapters IX-XVI; Michael Crichton, *Jurassic Park* (selections)

December 5 – Pabulo H. Rampelotto and Antonio Trincone (eds), *Grand Challenges in Marine Biotechnology* (selections); To The Best of Our Knowledge podcast, “Lab Lit”

Final Curated Text assignments due Wed Dec 12 by 5 pm.

Affiliated Projects

This class is affiliated with WhatEvery1Says (WE1S), a Mellon-funded, collaborative project at UC Santa Barbara, CSU Northridge, and the University of Miami that uses digital tools to explore how the humanities have been portrayed in popular media since the 1980s. The project then uses this research to inform humanities advocacy work. Our course intersects with the goals of WE1S in that we are trying to figure out how the humanities might engage audiences that are not predominantly humanistic. I am working this year as a postdoctoral scholar for the project and will be posting regular public updates about our course to the WE1S research blog, in my role as the Director of the project’s Curriculum Lab. The blog is mainly meant to document my own planning process throughout the class and to maintain a steady dialogue between teaching practice and the project’s research goals. My posts are **NOT** meant to report on the performance of individual students.

This course is also the first in a series of courses that will form a new project of my own, called “Reading With.” The idea behind this project is that we might fill in the blank with any number of audiences: reading with scientists, reading with economists, reading with lawyers, reading with inner-city communities, etc, etc, etc. I hope that this course can begin a much longer thought process about how books might build bridges between specialized communities otherwise isolated from each other. To this end, I’ll be asking for volunteers willing to post some of their finished class assignments to a fledgling website I’ve created: readingwith.com. (Volunteering or not in no way affects your grade.)

Key links:

<http://we1s.ucsb.edu/>

<http://we1s.ucsb.edu/curriculum-lab/>

<https://www.readingwith.com/>

This course also counts towards the Literature and Culture of Information (LCI) specialization in the English major.

Assignments

There will be four major assignments for this course, two done individually and two done in teams. The goal of each assignment is to consider different ways in which literature might be

most effectively communicated to scientific audiences. More detailed assignment sheets will be handed out in advance of each due date.

❖ ***Frankenstein* Review, Due Mon Oct 15 by 9:30 am (Individual assignment)**

Pick three footnotes from our *Frankenstein* edition and, in about 500 words, discuss whether you find them effective, whether you would make any changes to them, and what the assumptions and motivations behind such footnotes seem to be. How do the footnotes alter the text? What relationship do they establish between the novel and the reader?

❖ **Reverse Annotation, due Mon Oct 29 by 9:30 am (Individual assignment)**

Choose an excerpt from a scientific text (it can be one we have read in class or one of your own choosing) and annotate it with reference to *Frankenstein*. The idea here is that we are reversing the footnote process of our *Frankenstein* edition: instead of annotating a literary text with science, we are annotating a scientific text with literature. You must include at least five substantive footnotes and give a brief (~500 word) synopsis of your strategy. What new understanding do you hope that your audience (either literary or scientific) comes away with?

❖ **Lesson Plan, due Wed November 21 by 9:30 am (Team assignment)**

In teams, come up with a lesson plan for teaching literature in a non-literary setting. You should pick a text (it doesn't have to be one we have read in class) and design a 30-minute activity around it (or a key excerpt from it) that can engage a scientific audience at any level of your choosing, whether it be a college Chemistry lab, a Google employee meeting, or a group of advanced-career doctors. In a 500-word preface to the lesson plan, your team should define a specific issue that you want to address with your activity and describe the motivations, goals, and teaching strategies behind your decisions. You should be ready to explain your ideas briefly to the class.

❖ **Curated Text, due Wed December 12 by 5 pm (Team assignment)**

As a team, annotate a text (or a group of shorter texts) in a way that bridges science and literature. You can decide which direction you want your annotations to go – you may annotate a literary text with reference to science, or you may annotate a scientific text with reference to literature. You may use a course text or pick one of your own; it can also be the same text as that used in your lesson plan, but it need not be. (If using a text not on the syllabus, please provide a brief summary.) The final curated text should consist of three elements: 1) EACH team member should pick out ten passages from the text and provide substantive footnotes for them. You should coordinate among your team members to make sure you have the same overarching goals, but each person should mark their own footnotes with their names. 2) Collectively, you should write a 1000-word preface to the text, speaking to your imagined audience, introducing them to the text, and explaining the decisions that you have made. 3) EACH team member should write up a 1000-word reflection on the process of “translating” a text for a specific audience. What was difficult? What was rewarding? How did you make decisions? Did the experience prompt you to read the text in a new way?

With your permission, elements of these assignments may be posted publicly on the Reading With website. You may decline with no negative effect to your grade.

Policies

Contacting me: The best way to speak with me is to attend my office hours, M/W, 11am-12pm. I welcome any and all conversations, questions, thoughts, etc, and I much prefer to speak to you in person. **If you are unable to attend office hours**, I can be reached by email at adroge@ucsb.edu. If you have a question about an assignment, please ask well in advance (at least 48 hours). I will not answer email on the weekends.

Attendance and preparation: Since this is a discussion-based class, it is very important that you come to class prepared, having done the readings and assignments. I expect you to be engaged in class, whether through speaking or active listening. A lot of our work will be collaborative, meaning that your absence will negatively affect peers who are depending on you. Each person's perspective is valuable, especially since I hope the class can inspire conversations between students with experience from different academic disciplines.

If you must be absent, due to illness, religious observance, or an emergency, please do your best to inform me at least 24 hours in advance. Attendance will be taken at each class session.

Electronics: Since many of our texts will be online this quarter, I will trust you to use laptops in class. This is a privilege that, if abused, may be revoked at any time. No cell phones, texting, emailing, Facebook, Instagram, etc.

Discussion and inclusivity: My primary goal in this class is to create a welcoming environment where big ideas can be discussed creatively and openly. It is crucial that we all behave with the utmost respect towards our fellow classmates. **However, this does not mean that we will avoid controversial subjects.** I expect all discussions to be handled with maturity and generosity.

Grading

Your grade will be broken down as follows:

Frankenstein Review: 15%

Reverse Annotation: 20%

Lesson Plan: 20%

Curated Text: 30%

Class Participation: 15%

Late assignments will lose 1/3 of a letter grade per day (A- to B+, eg).

Accessibility

If you need special academic accommodations, please use the UCSB Disabled Students Program (<https://dsp.sa.ucsb.edu/>).

Honor Code

Academic Integrity: Be honest and forthright in your dealings as a student. Students are expected to abide by UCSB policy on academic integrity and dishonesty (<http://judicialaffairs.sa.ucsb.edu/academicintegrity.aspx>). Academic dishonesty such as cheating or plagiarism may lead to failing, probation or expulsion.

Course Statement on Plagiarism: Plagiarism includes the failure to acknowledge all secondary sources in your work, passing off another person's work as your own, or re-submitting your own work from another class. Plagiarism can be obvious or subtle, intentional or due to negligence. Be diligent in taking notes on your sources as you read; while writing, cite the source of each quote or paraphrase you use. When in doubt about how to acknowledge a source, please consult me or a CLAS tutor (<http://clas.sa.ucsb.edu/>). Plagiarism will result in a failing grade for the course, and may result in disciplinary action, including probation or expulsion.

Studying: Students are encouraged to support one another in discussion groups, note-taking, review sessions, and other collective learning. However, students are forbidden from selling study guides, or from redistributing copyright course material to any person or organization. See UC Policy 102.23: <http://policy.ucop.edu/doc/2710530/PACAOS-100>

Sexual Violence Prevention and Response

If you are dealing with a difficult situation, please feel welcome to use me as a resource. However, you should be aware up front that I am a "Responsible Employee," meaning that if you disclose information to me regarding any acts of sexual misconduct affiliated with anyone from UCSB, **I must report it** to the Title IX office. Alternatively, there are many confidential resources on campus that you can use as well, such as:

Campus Advocacy Resources and Education (CARE): <http://wgse.sa.ucsb.edu/Care/>

Counseling and Psychological Services (CAPS): <http://caps.sa.ucsb.edu/>

Office of the Ombuds: <https://ombuds.ucsb.edu/>

24-hour confidential advocate: (805) 893-4613

More information about support and reporting options, including confidential resources, can be found here: <http://sexualviolence.ucsb.edu/get.help/>

You can also find further information on the UC Sexual Violence Prevention and Response website: <http://sexualviolence.universityofcalifornia.edu/index.html>