

# FYS 012PZ Science in the Public Imagination

Syllabus Fall 2014

## Instructor Information

Instructor	Phone	Email	Office Location & Hours
Sarah Gilman	909.607.0715	sgilman@kecksci.claremont.edu	Keck Science Rm. 13, Tu 1:30-3:30, Fri 1-3pm, or by appt.

## General Information

### Class Meeting Time

Tu, Th 11:00-12:15, Bernard 101

### Class Website & Email

<http://sakai.claremont.edu>

(please post a question about this syllabus to Sakai/Forums before our next class)

fys12\_f14@sakai.claremont.edu

## Description

From “Frankenfood” to “Intelligent Design,” we are bombarded in our daily lives with scientific (and pseudoscientific) information. The goal of this seminar is to explore how science is presented, discussed, and critiqued in the public sphere. We will focus on three central questions: How do people assess and assimilate scientific information in the context of daily decision-making? How accurately are scientific controversies presented in the media? How do the portrayals of science and scientists in fiction and film affect public understanding of science? No prior science experience necessary.

## Learning Outcomes

Required of all first-year students, the First Year Seminars are writing-intensive courses that fulfill Pitzer's Written Expression educational objective. During the course of the semester, students are expected to write upwards of 25 pages, including formal assignments and polished essays, in-class writing, and informal writing exercises outside of class. Drafting, peer review, and revising are central to the process-oriented view of writing that the seminars seek to foster. In response to feedback from the professor and/or their peers in the class, students will have the opportunity to revise at least 10 pages of their written work. Students are also encouraged to visit the Writing Center for additional feedback.

First-year seminars challenge students to achieve the following aspirations:

1. Regard learning to write well as a life-long pursuit, not the accomplishment of a single semester or even an entire undergraduate career.
2. Appreciate and experience the creativity, independent thinking, and intellectual risk-taking involved in effective academic writing.
3. Grapple with the ambiguity and complexity found within texts; respond to texts critically and thoughtfully.
4. Rethink and deepen ideas through a recursive process of drafting, receiving and giving feedback, and revising at any and every point along the way.
5. Engage in an ongoing process of intellectual inquiry and scholarly “conversation”:
  - Craft thoughtful and insightful questions worthy of investigation; raise significant problems.
  - Identify research needs.
  - Locate appropriate scholarly and popular sources.

- Engage with, evaluate, and draw inferences from sources.
  - Craft a clear, arguable, and compelling thesis.
  - Recognize and contend with alternative viewpoints/counter-arguments.
  - Begin to see yourselves as creators of knowledge within a broader community of scholars/ writers.
6. Experience writing as a complex social interaction between writer and reader:
- Gain awareness of audience and of voice.
  - Effectively and clearly communicate ideas to others.
  - Participate in an intellectual community of peers where writing and ideas are exchanged and critiqued.
7. Practice writing as a form of critical thinking, rather than merely the achievement of sentence-level correctness.

## Evaluation

Class Participation (including short writing assignments)	20%
Mock Newspaper Article	8%
Media Evaluation Exercise	5%
Evolution Essay (including drafts)	20%
Library Research Quiz	2%
Research Paper (including intermediate assignments)	40%
Film Synopsis	5%

## Course Materials

### Required Materials

- Cioffi, Frank L. 2005 The Imaginative Argument: A Practical Manifesto for Writers. Princeton University Press
- Course Reader, Honnold Bookstore

## Other Resources

### Writing Center:

Located in Mead 131, the Writing Center is one of Pitzer's most popular academic resources. Each year the Writing Center offers over 1,000 free one-to-one conferences with student writers working on projects across the disciplines. Writing Center Fellows are Pitzer students trained to consult with writers at all stages of the writing process, from brainstorming ideas to developing an effective revision strategy. Students may bring any writing project to the center, including academic essays, grant proposals, lab reports, creative projects, and senior theses.

For more information, visit the Writing Center's website at <http://pitweb.pitzer.edu/writing-center/>

### Claremont Colleges Library: [libraries.claremont.edu](http://libraries.claremont.edu)

The library is an invaluable resource for research and study in FYS and the rest of your academic career. Cynthia Cohen is the librarian working with this course who is available to assist you with research. Please

don't hesitate to contact her ([cynthia\\_cohen@cuc.claremont.edu](mailto:cynthia_cohen@cuc.claremont.edu)) or drop by the library reference desk, call or chat with any questions: <http://libraries.claremont.edu/help/askus/> .The library also provides Love Your Library Workshops on a variety of topics ranging from basic library orientation to Google Glass: <http://claremont.libcal.com/>.

## Course Policies

### Use of Student Writing

Student writing may be used for the purposes of college, program, or course assessment. All work used for assessment purposes will not include any individual student identification. If you do not wish your work to be used in this manner, please notify the director of the First-Year Seminar Program, Bill Anthes ([bill\\_anthes@pitzer.edu](mailto:bill_anthes@pitzer.edu)). Your instructor will not know whether you have opted in or out of this assessment process. Your participation, or lack of participation, in this assessment will not have any bearing on the evaluation of your performance in this course.

### Classroom Etiquette:

Please arrive on time. Cell phones must be silent and put away in a pocket or bag. No texting, web surfing, or emailing during class. Laptops are discouraged because of their potential to distract both you and those around you.

### Attendance

Attendance is mandatory. If you miss more than two classes without prior approval, your grade may be affected.

### Readings:

The reading assignments are a major focus of class discussion time, thus it is essential that you read them before coming to class. I am not above using "pop quizzes" to determine if you are coming to class prepared.

### Students with disabilities:

To request academic accommodations due to a disability, please contact Pitzer's disability officer, Jill Hawthorne, [jill\\_hawthorne@pitzer.edu](mailto:jill_hawthorne@pitzer.edu).

### Class Participation:

Participation in discussion and class exercises is a critical element of this course. The best way to learn, and to contribute to overall student learning, is to participate actively in class discussions in a way that reflects you and your concerns, insights, experiences, and questions. Specifically, you should:

1. Come to class having completed a *critical reading* of the assigned texts. Bring notes or ideas that examine the following questions:
  - What is the key question or problem addressed in this reading?
  - What are the key concepts? What background or context does a reader need in order to understand the author's reasoning?
  - What is the author's point of view? How does it affect the arguments made by the author? Are other viewpoints considered?
  - What is the most important information or evidence presented? Is the author's information/evidence persuasive?
  - How does the author's argument relate to other works that we've read?
2. Participate in the discussion: share your thoughts, ask questions, offer clarifying evidence or counter examples.

**Writing Assignments:**

Writing assignments in this class will vary from short, in class activities, which count towards your class participation grade, to a final research paper that is 40% of your class grade. Because writing is the central focus of this course, you should take all writing assignments seriously. The five major writing assignments are:

- a 1-3 page mock newspaper article summarizing the results of a published scientific paper
- a 1-2 page evaluation of the accuracy of a newspaper or magazine article's coverage of a scientific finding
- a 4-5 page essay on the controversy over teaching evolution in public schools, which examines the reasons that many in the public discount the scientific evidence for evolution
- an 8-10 page research paper that explores a public controversy about science and makes an argument about why the science is not generally accepted by the public.
- a 1-2 page synopsis of your research paper as a major motion picture

**Late Assignments and Make-ups:**

When possible, notify me ahead of time if you are unable to submit work on time or need to reschedule an assignment due to illness, sports activity, family emergency, or other reasons. Late assignments will be docked 5% for each weekday late. Note that there are no make-ups for in-class activities. In the case of a family or personal emergency please notify your Dean of Students, and I will accommodate your needs.

**Grade change policy:**

Requests for grade changes must be made in writing within one week of receiving the grade.

**Plagiarism & Cheating:**

You are expected to be familiar with the definitions of plagiarism and cheating in the Pitzer College Student Handbook. I will indicate if an assignment is meant to be done cooperatively, otherwise you are expected to do your own work and cite work that is not your own. **Cheating, plagiarism, and collusion will not be tolerated!** If I suspect you of cheating, I will report you to the appropriate authority.

**Syllabus modification:**

I reserve the right to modify this syllabus (including course schedule) during the semester as considered necessary to improve the quality of this course. Any changes to the syllabus or schedule will be clearly announced. **You are responsible for being aware of any changes.**

## Course Schedule

	Week	Topic	Reading	Assignments
0	Fri, Aug 29	Introductions		
1	Tue, Sep 02	What is "good writing"	Handout, Cioffi Ch 1	Website handout
	Thu, Sep 04	Scientific Method	Karleskint pp 7-10 (reader) Angiers pp 18-46 (reader)	
2	Tue, Sep 09	How to read a scientific paper	Gardner et al. (reader), Handout (sakai), Fahnestock (reader)	
	Thu, Sep 11	Explaining scientific results to a general audience	Levitsky (reader) Cioffi, ch 2	
3	Tue, Sep 16	Mock Article Drafts	Cioffi, ch 3	Mock Article (Draft)
	Thu, Sep 18	Library workshop - tracing scientific sources	handouts on sakai	
4	Tue, Sep 23	Fake science	Willingham (sakai link) Cioffi, pp 141-148, 119-121	
	Thu, Sep 25	Beliefs	Shermer (reader)	Mock Article (Final)
5	Tue, Sep 30	Evolution	Karleskint pp 96-103 (reader) National Acad. Sci. pp 1-12 (sakai link)	Newspaper Evaluation (Final)
	Thu, Oct 02	Film, <i>Flock of Dodos</i>		
6	Tue, Oct 07	Film, <i>Flock of Dodos</i>		
	Thu, Oct 09	Framing Science	Nisbet & Mooney (reader) Nisbet (reader)	
7	Tue, Oct 14	Evolution Drafts	Cioffi Ch 4 (Thesis)	Evolution essay (Draft #1)
	Thu, Oct 16	Evolution Drafts	Cioffi, ch 7 (Argument)	Evolution essay (Draft #2)
8	Tue, Oct 21	Fall Break (no class)		
	Thu, Oct 23	Science and Public Trust	Wynne (reader)	Evolution essay (Final)
9	Tue, Oct 28	Communicating Uncertainty	Zehr (reader) Cioffi, ch 9	Library Tutorial & Quiz (sakai)
	Thu, Oct 30	Refining Research Topic	Cioffi, Ch 4	Research Paper topic & 2 references

	Week	Topic	Reading	Assignments
10	Tue, Nov 04	Library workshop - finding references		
	Thu, Nov 06	Ebola	on Sakai	
11	Tue, Nov 11	Journalists and Scientific Uncertainty	Stocking (reader)	
	Thu, Nov 13	Media Case Study: Dioxin	Friedman (Sakai)	Annotated Bibliography (Fri)
12	Tue, Nov 18	Scientists in Film & Literature	Haste (sakai) Dudo et al. (Sakai)	
	Thu, Nov 20	Scientists and Filmmaking	Kirby (Sakai)	(optional Evolution paper rewrite)
13	Tue, Nov 25	Research Paper Structure	Cioffi Ch 6 (Paragraphs)	partial draft of research paper
	Thu, Nov 27	Thanksgiving (no class)		
14	Tue, Dec 02	Film, <i>The Day After Tomorrow</i>		
	Thu, Dec 04	Film, <i>The Day After Tomorrow</i>	von Burg (reader)	Full draft of research paper
15	Tue, Dec 09	Research Paper Drafts: Peer Review		Completed Peer Review
	Thu, Dec 11	Movie Synopses		Movie Synopsis
16	Mon, Dec 15, 7pm	No final exam, but Research Paper is due in my office by 7pm		