FYS 024 & 030: Science and Society

Drake University, Des Moines IA

FYS 024 meeting: MW 12:30-1:45pm, MERED 206
FYS 024 meeting: TTh 12:30-1:45pm, FAC 336

Instructor:
Dr. Patricia Storlie
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Office: 423 Olin Hall
Office Hours: MW 10:30-11:30am, TTh 9:30-11am; other times by appointment

I am best reached by email. I will respond to emails quickly on Monday-Thursday, and irregularly on Friday-Sunday. I am happy to have students stop by my office or look for me in the lab when I am on campus. My complete schedule is posted on my door.

Course Description:
Many Americans get their scientific ‘knowledge’ from popular news sources or non-expert sources. These outlets tend to oversimplify scientific topics that are nuanced and complex. Additionally, these topics are presented as a contentious battle that is filled with uncertainty and open to debate. This is not how the scientific method really plays out in academic disciplines, nor is it the way that scientists think about their research. So, how does an informed citizen learn to think like a scientist? How can a consumer of medicine, food, policy, and education approach data with understanding and skepticism? This class will encourage students to think critically and scientifically about seemingly controversial topics.

Here is a portion from a VERY recent commentary by NPR on this topic:

Are Science And Truth At Odds?

http://www.npr.org/sections/13.7/2015/09/02/436818078/are-science-and-truth-at-odds

Published September 2, 2015·4:10 AM ET
Updated September 2, 2015·4:57 AM ET
Commentary
Marcelo Gleiser

Last week, New York Times science writer George Johnson wrote a very disturbing piece concerning the apparent loss of credibility science is now facing with the public at large.

Creationism, the anti-vaccine movement, resistance to genetically modified crops, cellphone radio waves, fluoridation, the ongoing global climate change debate, the risk of certain high energy physics experiments (see my post from last week), all point to a curious "personalization" of science. It's as if scientific issues are simply matters of opinion — and not the product of a very thorough process of consensus-building among technically trained people.
The same way that you wouldn't trust a physicist to perform a root canal treatment on your molar, you shouldn't trust a dentist's opinion on the cataclysmic risks of high-energy proton collisions at the Large Hadron Collider.

But that's what's happening, a drive toward a subjective take on science — the polar opposite of what science stands for: A way of extracting universal truths about the natural world through a detailed process of observation and data analysis.

The Drake website lists the goal of FYS as: “First Year Seminars are student-centered learning experiences that involve critical thinking and both written and oral communication skills. Through a topical focus, they foster understanding of methods of analysis and creativity.” We will expand on this goal during Science and Society by learning various ways that science is talked about both inside and outside of academia. You will be introduced to the ‘language’ of the science discipline and how it is used among scientists and lay-persons. As a first year student, you will be guided on how to take this ‘language’ and begin to utilize it in your writings and speaking regarding scientific topics.

**Textbook:** There is no formal textbook for this class. You will be given readings on Blackboard that are selected from a variety of sources and genres of literature. It is your responsibility to listen during class in regards to what is assigned to read and what type of feedback you will be expected to give on each reading.

Additionally, we will be reading: *The Immortal Life of Henrietta Lacks*, by Rebecca Skloot. I have a few copies of this book and there are a few on reserve at Cowles Library if you do not wish to purchase a copy.

**Syllabus:**

This syllabus is designed to give you an overview of the course and provide the most pertinent information regarding what is expected of the student. Please be aware that this is a ‘working’ document and changes to it are likely to occur. This is especially true in regard to the schedule of assignments as we may have to adjust topics based on how quickly or slowly we cover them.

**Attendance:**

Attendance is essential for success in this course. New topics are presented daily and it is nearly impossible to keep up without attending all lectures. Absences will be excused for emergency medical and family issues if I am notified by email. Please make your education a priority so you will get the most out of your investment. **If you miss class it is your responsibility to ask another student for the class notes or missed announcements.**

**Blackboard:**

Blackboard will be used often in this class. On Blackboard you will find the most up-to-date announcements, grades, schedules, and handouts.
**Writing Workshop:**

Students seeking assistance with writing may schedule an appointment with a writing tutor through the Writing Workshop. The Writing Workshop is located in Howard 227. Appointments are available during both daytime and evening hours. Evening appointments meet in Cowles Library. Questions about the Writing Workshop can be answered by calling 271-2729. Students may also make appointments for the Writing Workshop.

Additionally, we will be participating in a writing course that requires students to attend TWO writing workshop sessions. The assignments that these appointments pertain to will be announced in class. Please, make your appointments early! They fill up quickly.

**Grading:**

Grading will be by the total points system. This class covers a lot of very diverse information and you will be expected to do A LOT of writing in various forms. There will often be a fairly quick turn-around time for readings and assignments. Earning your desired grade will likely require considerable out of class study time.

- Article in the News 10pts
- Paper on Joseph Banks 20pts
- E.O. Wilson ‘Letters to a Young Scientist’ 20pts
- Group activity comparing writing styles 15pts
- TB Sanatorium Journal Article 20pts
- The Immortal Life of Henrietta Lacks:
  - HeLa group discussion questions: 15pts
  - Outline from HeLa Documentary: 20pts
  - HeLa News Articles Notes 20pts
  - Notes from Skloot discussion 20pts
  - HeLa Paper – Hero Journey 100pts
- Contagion Movie
  - Notes 10pts
  - Contagion Paper 20pts
- Notes on Dawkins Reading 20pts
- Notes on Pinker Reading 20pts
- Notes on Braiding Sweetgrass 20pts
- Final Research Paper 150pts

Possible Points total: 500

The schedule for these and other discussions will be posted in an on-going manner. You will be given at least one week to complete all out-of-class reading and writing assignments. Please pay attention to deadlines that are announced in class and on Blackboard.

It is important to note for First-Year Students that earning an ‘A’ grade is not simply a matter of turning all assignments in at the college level. You are expected to participate in discussions fully, to show a marked improvement in your writing, speaking, and understanding skills. A ‘B’ grade is quite good and should be respected. This course is not an ‘easy-A’. It requires a lot of work and thought to produce many decent papers and responses.
**Academic Conduct:**
The First Year Seminar Program supports and enforces the ideal of honesty in all scholarship. Plagiarism is a serious offense to this ideal. It is expected that all writing and scholarship will be the student's own creation. Appropriate citation of others work or ideas is always expected. Copying another author's work will not be tolerated, will result in a zero grade for the work, and may conclude in the student having to retake the First Year Seminar requirement.

The following link connects you to the Office of Student Records, where a statement on academic integrity can be located on the Academic Regulations page of the Undergraduate Catalog.

Students are also asked to conduct themselves professionally during lectures and laboratories. While you are here, please give your full attention to the class for the benefit of everyone.

**Disability Accommodation:**
Individuals who have any disability, either permanent or temporary, which might affect their ability to perform in this class, are encouraged to inform the instructor at the start of the semester. Adaptation of methods, materials, or testing may be made as required for equitable participation. Please feel free to see me if you need more information. In addition, consult with the Student Disabilities Services (first floor Old Main), if you have not already. Contact the Director of Student Disability Services, Michelle Laughlin at 515-271-1835 or michelle.laughlin@drake.edu