

## Ethics and Biological Sciences (Genet 539X) Spring 2013

**Instructors:** Clark Ford, FSHN, 2567 Food Sciences, [cfford@iastate.edu](mailto:cfford@iastate.edu), 4-0343  
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**Meeting:** Thursday 1-3 pm, Rm 1130 Morrill Hall

**Web Syllabus:** <http://www.public.iastate.edu/~jvcwolf/ClassSyllabi/Gen539SyllS13.pdf>

**Objectives:** This course uses a case-study method to introduce students to several central ethical issues related to the biosciences. Case studies will require preparation: students will need to read material and write up arguments before class. In all classes, students should arrive informed and ready to present and to discuss the assigned readings.

**Weekly Writing Assignment:** Students are required to submit weekly, informal writing assignments. These should be sent to both instructors in the body of an email, due at 9:00 AM on the day of class. When the class is preparing a case study, the assignment will be to write a few paragraphs defending an assigned position on some ethically controversial topic. For other classes, students should write a brief critical *response* to the assigned reading material.

Please submit your assignment in the **body** of your email, not as an attachment. The Subject Line of your email should read: Gen539 S2013 <Date> <Name>  
For example: Gen539 S2013 17Jan Wolf

If you do this correctly, it will make it easier for us, your instructors, to keep track of your class submissions.

**Case Study Development:** In groups, students will develop their own case studies, and are responsible to present them in class

**Missed Classes:** Students who have professional or medical reasons for missing class are asked to write an additional one-page review of the assigned reading materials for the missed session.

### Student Responsibilities:

- 1) Attendance required for Satisfactory (S) grade.
- 2) Weekly summary paragraph of either primary articles discussed or Case Study position, to be submitted to both instructors by email.
- 3) Participation in class discussions with ideas, questions, opinions, analysis.
- 4) Formal 50-minute group presentation of a Case Study to the class on an approved bioethics topic of your choice. This Case Study should engage the class, involving reading material distributed in advance, and involve case studies, role-playing and debate.
- 5) Revised Case Study (after presentation) for publication on Bioethics Program webpage.

### Instructor Responsibilities:

- 1) Advance copying of readings (or distribution of readings websites) and Case Studies.
- 2) Catalyze and stimulate discussion, clarifying and keeping it on topic when necessary.
- 3) Serve as resources for articles, information, and case studies.

- 4) Evaluate satisfactoriness of student attendance, homework, participation, and presentation.

### **Tentative Topics and Dates for Bioethics Seminar Discussion**

Jan 17 – Introduction to Bioethics, discussion of case studies  
Jan 24 – Ethics in Scientific Research: Movie: THE LAB! Discussion: Arsenate Bacterium  
Jan 31 – Animal Ethics, Moral Theory, Science Research and Teaching  
Feb 7 – Case Study: Animal Use in Scientific Research  
Feb 14 – Ethics and Human Biology  
Feb 21 – Case Study: Patenting Human Genes  
Feb 28 – Environmental Ethics  
Mar 7— Case Study: Honey Bees and Pesticide Regulation  
Mar 14 – Ethics and Plant Biotechnology

### **Spring Break: March 18-22**

Mar 28 – Case Study: Should we Require Labels for GM Food?  
April 4 – World Food and Population Issues  
April 11 – Case Study: Golden Rice  
Apr 18 – Student Case Study  
Apr 25 -- Student Case Study  
May 2 -- Student Case Study  
May 9 – Student Case Study  
Final Revised version of Group Case Study due in electronic format, May 11.  
We will meet during Finals Week. Revise and submit case study

### **FIRST ASSIGNMENT:**

1) In 2010, Felisa Wolfe-Simon led a NASA press conference announcing the discovery of a bacterium that used arsenic rather than phosphorus in the basic structure of its DNA. The press conference can be seen here: <https://www.youtube.com/watch?v=z1NHQKCryrI>  
The paper itself is available here, from Wolf-Simon's own site:  
[http://felisawolfesimon.com/papers/WolfeSimon\\_etal\\_Science2010.pdf](http://felisawolfesimon.com/papers/WolfeSimon_etal_Science2010.pdf)

Over time, questions arose concerning this discovery, and the fallout from the event has been disastrous for Wolfe-Simon. Your assignment is to do some web-research on the controversy surrounding Wofe-Simon's work. Come to class prepared to discuss the controversy, and prepared to explain your own views about it.

2) In the next class meeting, we will discuss *The Lab*, a video activity developed by the US Dept of Health and Human Services Office of Research Integrity. You are encouraged to explore the Video beforehand. We will be viewing segments of it in class. You can find it here:  
<http://ori.hhs.gov/thelab>

## **SECOND ASSIGNMENT:**

The second reading assignment for Ethics and Biology is a 12-page paper (easy to read) by Gary L. Francione entitled “Animal Welfare and the Moral Value of Nonhuman Animals” from *Law, Culture and the Humanities* 6(1) 24-36.

Please read the paper then write a page about the different positions/arguments presented and your response to them. We don't expect you to necessarily agree with this author, or with any of the other positions on animal ethics that are reviewed in the article!

<http://www.law.uvic.ca/demcon/2012%20readings/animal%20welfare.pdf>