Controversies in Biotechnology - Fall 2012  
Instructor: Lisa Nocks, PhD.

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Office Hours  
Mon: 1:15 – 2:15pm  Wed: 4:30-5:45pm  Thu: 4:30-5:45pm*  
* Additional hours by appointment only

NOTE: This is a senior capstone seminar with pre-requisites! Consult the course catalog and your advisor to be sure you meet the requirements, and that this course will be accepted toward your graduation.

COURSE OVERVIEW: We consider the meaning and development of biotechnology as it applies to humans, to other animals, and to the environment. We consider the role that traditional belief systems, pop culture, and news media play in controversies over their implementation. We discuss how the public perception of science can affect research and engineering trends (and therefore related job markets). Our subjects include but are not limited to the production of food additives, stem cell research and cloning, in vitro fertilization, genetic modification of food crops and livestock, vivisection, prenatal identification, synthetic biology, and the potential ecological impact of nano-technologies. Readings will come from our main course texts and from supplemental documents available on the WWW, on reserve in the Van Houten Library, or posted to Moodle. We will also view relevant films and videos. Students are encouraged to add to the discussions by posting relevant material on the Moodle forums.

COURSE OBJECTIVES: As a result of regularly participating in discussion of the course texts and supplemental materials and researching relevant historical and technical documents, students should be able to:  
-- identify and describe the socio-cultural and intellectual roots of controversies surrounding biotechnological activities.  
-- give coherent and articulate oral and written arguments about a particular relevant controversy.  
-- be able to distinguish legitimate argument from rumor in research documents.  

-- incorporate reviews of the existing literature on controversies in biotechnology into written work.  
-- improve personal research, writing, and editing skills.  
-- demonstrate an organized approach to making an argument and supporting a thesis.

COURSE REQUIREMENTS (DESIRED OUTCOMES)  
1. Contribute to class discussions through regular attendance and reading of the course texts.  
2. Develop a thesis about about a chosen controversial topic in the past or recent history of biotechnology or biomedicine.  
3. Submit a short response paper (approx. 3-5 pp) on selected supplemental material (TBA).  
4. Lead one group discussion of selected course texts (see below).  
5. Develop the thesis into an original paper with historical background and analysis of the controversy.  
6. Make an oral presentation summarizing the paper (see item 4 above).  
7. Correctly use Chicago style footnotes and bibliography.

NOTE: This is a 400 level course. To get the most out of this course, you must maintain an upper college level reading, writing and participation level. If you need extra help, please do not hesitate to contact me via email or to see me during office hours.

HOMEWORK: Forum and homework assignments are not optional. They are counted as part of your attendance/participation grade.
CALENDAR: See Moodle weekly meeting sections for readings and assignments.

REQUIRED TEXTS: All books were ordered and were in the bookstore and can also be ordered or rented. If the store has run out of copies, see the manager to order for you. They can usually get the books in a few days: Some are available as e-books.


GROUP READINGS: Your course section is divided into two reading groups for the purposes of reviewing the last two books. CHECK on Moodle to see which group you are in, either WILMUT or HARRIS. You will choose a partner from the group and will lead the discussion of specific chapters (to be assigned. Based on which group you are in, acquire that book . This means you only have to acquire three books for the course.

RECOMMENDED RESEARCH TEXTS: A bibliography of useful texts and websites have been posted on Moodle and will be continuously expanded.

ABOUT SEMINAR DISCUSSIONS: This course is designed as a seminar. Unlike a lecture course, students are expected to make regular contributions to the discussions. Lively discussions always make a course more interesting. You are encouraged to bring to class or post on Moodle Forums relevant articles or news to share with the class. Provided that you are respectful to your classmates and instructor, you are always welcome to contribute to class discussions. It is not necessary to agree with your teacher or classmates to contribute to discussions. Disagreeing does not lower your grade.

GRADING *Please note: Showing up, sitting quietly or texting your friends does not count. For full credit, you must attend regularly, stay for the whole session, and regularly participate in discussions and class exercises and Moodle forums.

AVAILABLE GRADES: A  B+  B  C+  C  D  F
GRADE DISTRIBUTION:
Attendance* -------------------------------10%
Class participation: *
(Includes discussion and writing activities------20%
Formal written Thesis ------------------------10%
Class presentation of controversy topic-------30%
Controversy analysis paper 7 pages----------30%
COURSE PROJECT

Each student must complete a research project related to some controversial aspect of biotechnology or biomedicine which includes: a thesis section with a discussion of relevant literature, a historical component, analysis of your research, a conclusion.

Graded components of this project include:

- Describing your chosen topic to the class.
- Submitting a formal written thesis section (not just a thesis statement!)
- Presenting your completed research to the class.
- Submitting a revised final paper on Moodle/Turnitin.

A note on the term project: You may construe “controversy” broadly. For example, you may write on obstacles to access of a biomedical device, or concerns over the long-term effect of some area of nano-technology; controversies involving genetic research funding or lab experiments; you may write on the long-term effects of genetically altered organisms on the environment or on livestock or on humans. You may also want to focus on the transmission of information through various media and its effect on public perception. Bring possible topics to class meeting 2.

DIRECTIONS FOR FINAL PROJECTS will be detailed in the document, “FINAL PROJECT DIRECTIONS” posted on Moodle. Lessons on developing a thesis and citing sources will be given in class; and support materials will be available on Moodle.

CLASS PRESENTATIONS: during the last weeks of the course, students will present their projects in a mock scholarly conference composed of multiple panels. By mid-term, we will set panels roughly according to topics, and then a lottery will be held for panel presentation dates. (It is not necessary to choose a topic to fit a panel; panels will be formed around chosen topics.) NOTE: You have the option of video or audio recording your presentation; you may also invite guests to your panel. We will discuss the possibility of a student showcase.

HONORS COLLEGE STUDENT ENHANCEMENT REQUIREMENT

Honors College students are required to produce two additional projects for honors credit.

1. An annotated bibliography of the relevant research sources used in your final project.
2. An essay based on some item discovered during your research that is interesting to you but beyond the scope of your main project. (Directions/examples will be posted on Moodle.)

EXCUSED ABSENCES: To receive an excused absence, you must provide appropriate documentation when you return from your absence; otherwise your absence is not excused. 2 unexcused absences results in the loss of a grade (e.g. Final grade earned: A/Posted Grade: B) Leaving the area early for Thanksgiving or other holiday breaks is not excused.)

Examples of Documentation:

A doctor’s note (prescriptions and appointment cards do not count.)
A copy of an employer’s memo to you noting the day/time of event requiring you to miss class.
An email to me directly from another instructor or advisor explaining why it is necessary to miss my class and noting the day/time of class to be missed.
A document that authenticates your required absence to attend a funeral.
Proof of military deployment.

UNEXCUSED LATE ASSIGNMENT SUBMISSIONS: Grade reduced ½ step for each 48 hours after due date.
NJIT HONOR CODE: A significant element in your professional and personal development is honesty and integrity. Following the guidelines of the Academic Honor Code of NJIT is good practice. Turning in a paper that includes plagiarism, or that is written by someone else and represented to be yours, or cheating on an examination will result in an F grade for the assignment and possibly for the semester, as well as your incurring administrative sanctions. You are required to turn in a signed academic integrity pledge for this course by the end of the add/drop period. (See handout on Moodle.)

HOUSEKEEPING:

- Please turn cell phone ringers off or to vibrate. Turn off any other electronic equipment that makes noise before entering class. If you get an emergency call, please quietly leave the room.
- Please be considerate of others who use the classroom after us, and remove all papers and food/beverage containers you brought in when you leave.
- If I must cancel class, I will let you know ahead of time, or will contact the History department secretary and post a message. Check Moodle and email before class for emergency cancellations.
- If I am not present at class time, WAIT a FULL 15 minutes, then take attendance; leave after 20 minutes. Leave attendance sheet in my mailbox in the history department office in Cullimore Hall, 3rd floor.
- Please be attentive and do not text or do outside work during lectures and discussions or viewings. (I may sometimes ask you to use your laptop in class for relevant exercises.)

Have a productive and fun semester!

* I reserve the right to alter assignments and exam dates to accommodate the progress of the class. Updates/changes will be announced in class and will be posted on Moodle.

More about History at NJIT:

The history department at NJIT has eight full-time faculty members, and is part of the Federated History Department at NJIT-Rutgers University, Newark. Because the department is Federated, NJIT and Rutgers students can take history courses offered at either institution.

The NJIT History Department also offers a minor in history. On the graduate level, the Federated Department of History also administers a joint Rutgers/NJIT masters program in history, which offers two joint degrees:
- Master of Arts (MA)
- Master of Arts in Teaching (MAT).


Application is made to the program at Rutgers-Newark.

Pre-Law at NJIT:

The NJIT History Department also administers a new BA program in Law, Technology and Culture that represents the new focal point for pre-law education at NJIT. The new program is specially focused on preparing students at a technological university for careers in law and law-related areas of business and government, as well as providing
students with a broadly comparative perspective on the nature of legal thought and practice. Special features of the NJIT program include:
An interdisciplinary curriculum focused on law in relation to technology, media, environment, health, and culture.
Opportunities for exceptionally well-qualified students to matriculate in an accelerated BA/JD program with the Seton Hall School of Law.
Hands-on internships in law.
A patent law option available to students pursuing careers as patent attorneys or patent examiners.
Because this is a highly competitive program, applicants should have records of strong academic performance and SAT composite scores in mathematics and critical reading of at least 1200.

The NJIT history department also administers a new minor in Legal Studies.