

NSC 110 Fall 2013  
Biotechnology and Society  
Unique # 48357

Monday 3–4 PM  
MBB 2.204  
Professor: Barrick

**Instructor:** Dr. Jeffrey Barrick <[jbarrick@cm.utexas.edu](mailto:jbarrick@cm.utexas.edu)>  
Office Hours: Mondays 4–5 PM, Fridays 3:30-4:30 PM  
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**Description:** Recent advances in biological technologies may be outpacing our ability to fully understand their ramifications for society. We will examine some of these developments by discussing scientific papers, talks, and news coverage. Content will be roughly half understanding the science and half discussing the relevant ethical issues.

**Format:** Each week some combination of scientific papers, related news stories, online videos, popular science articles, etc., will be assigned. Everyone in the class will fill out a short worksheet on the basis of these materials and bring it to class to turn in. Two to four students per week will also sign up to further guide discussion of each topic by playing the role of stakeholders in the development of the technology (e.g., farmers, biotech companies, the government, patients). In addition to being primarily responsible for explaining the scientific development, they will be asked to present arguments in favor or against the technology from their assigned point of view. The class will then formulate a plan for the limits and oversight that should be placed on the technology.

**Course web page:** The course web site on the SynBioCyc Wiki will host reading assignments and links to associated content (<http://synbiocyc.org>). Students are encouraged to email the instructor new links or to edit the pages themselves if they find additional material when reading about a topic that is particularly interesting or recent.

**Grading:** This course is graded **pass/fail**. You will be assigned a grade of **pass** if you: (1) attend and turn in a complete pre-discussion worksheet for at least ten of the thirteen course meetings, and (2) take on a stakeholder role at least twice during the course. If you anticipate being unable to meet these criteria, we can discuss alternative ways to make up missing credit. However, you must notify me by at least 2 weeks before the last day of classes (by Nov. 22) to make these alternative arrangements.

#	DATE	TOPIC
	Sept 2	<b>Labor Day:</b> No class.
1	Sept 9	Recombinant DNA technology
2	Sept 16	Do-It-Yourself (DIY) Biology / Bioterrorism
3	Sept 23	Bioprospecting
4	Sept 30	Genetically modified foods
5	Oct 7	Probiotics / Microbiome engineering
6	Oct 14	In vitro meat
7	Oct 21	Biofuels
8	Oct 28	Gene therapy
9	Nov 4	Cloning and stem cells
10	Nov 11	De-extinction
11	Nov 18	Synthesizing life
12	Nov 25	TBD
13	Dec 2	TBD

\*Schedule subject to change. See <http://synbiocyc.org> for a current schedule.