Course Description
This course examines the relationship between science and society, asking a series of questions about how scientific knowledge and emergent technologies affect our lives, identities, social relations, and material conditions. We start with the question of how anthropologists might study scientific practice and why such an endeavor is valuable—a methodological as well as theoretical query. After considering the social construction of scientific facts, we turn to ethnographic studies of science and especially biotechnology in contemporary society. Here, anthropologically informed concepts such as kinship, power, and subjectivity help us evaluate the sociocultural import of these technologies for people in their everyday lives—from biomedical reckonings of citizenship to PET (positron emission tomography) scans and post-9/11 biometrics. By exploring these emerging technologies, especially in the field of genetics, we seek to trace the sociopolitical context in which scientific knowledge is produced and, in turn, applied. Our analysis of these examples should encourage you to read and think critically and to explore your own interests about intersections of technology and society in today’s world, as well as in times past.
**Student Learning Outcomes**
Upon successful completion of this course, students should be able to:
1. Demonstrate a general understanding of the social contingencies of knowledge production, specifically the production of scientific knowledge.
2. Discern and analyze interrelationships between science, society, and politics.
3. Analyze and evaluate emerging biotechnologies and their socio-political import in the United States as in other countries.
4. Analyze and assess mainstream media representations of biotechnologies and concomitant debates concerning bioethics.
5. Exercise skills in critical reading, analytical reasoning, and oral communication of anthropological and social theory texts.
6. Communicate clearly and effectively, both orally and in writing, anthropological questions and concepts about the interface between biotechnology and society.

**Course Requirements and Grading Criteria**
Midterm exam (25%)
Final exam (35%)
Discussion questions (5%)
Oral presentations (25%)
Class participation (10%)

**Grading System:**
This course follows the university’s Grading System for Undergraduates (http://www.uncg.edu/reg/Catalog/current/AcaReg/Grading.html), which includes +/- grades (e.g., A-, C+). Your grade will be calculated according to the following range (same for all letter grades):

- **A+** 97-100
- **A**  94-96
- **A-**  90-93
- **B+** 87-89
- **B**  84-86
- **B-**  80-83
- **C+** 77-79
- **C**  74-76
- **C-**  70-73
- **D+** 67-69
- **D**  64-66
- **D-**  60-63
- **F**  0-59

**Exams:** The midterm will be an in-class written exam consisting of short answer and essay questions. The final will be a take-home, open-book exam. Please note that you cannot make up the midterm exam except in the case of an emergency, and extensions will not be granted for the final exam; excused absences require official documentation, e.g., a note from your physician.

**Discussion questions:** At the beginning of the semester you will select a class (and respective assigned reading) from the syllabus for which you will generate 3 discussion questions. Your questions should encourage critical analysis of the text (e.g., asking how or why rather than who or what); as with the response papers described below, you may wish to focus on close readings or broader thematic issues, or a combination of both.

These questions must be posted on Blackboard by **8 pm** the night before class, and you should be prepared to lead the discussion of these questions in class the following day.
Oral presentations: Each student will choose an example of an emergent biotechnology to research—from popular media representations about development, controversy, and activism to more academic analyses of its sociopolitical import. The research will culminate in a final oral report in the form of a 15-minute presentation using PowerPoint, Keynote, Prezi or similar software. The presentations will be organized thematically into panels for the semester-end in-class colloquium, and students will be given feedback by their classmates and instructor.

Participation: The class participation grade is based not only on participation in class discussions but also on attendance. After 3 missed classes, the participation grade will be lowered a full grade with each additional absence.

Active participation is vital for a lively and engaging seminar. It comes in different shapes and forms: some people tend to speak up more often, while others listen and reflect. Push yourself to contribute to the discussion in different ways, including at times by moving out of your comfort zone. Perhaps this means that rather than you yourself answering a question posed, you try to draw out a classmate; or, if speaking in class is harder for you, come prepared with a question or a passage from the text you’d like us to examine more closely. Above all, be engaged with and respectful of other people’s ideas.

Policies: As mentioned above, there will be no extensions for assignments or exams. Over the course of the term you have three free days for late work—with the exception of the in-class exams. Use them wisely (if at all). After they are used up, your grade will be lowered a half grade per day.

Additional Course Information

Academic Integrity: Please be aware of UNCG’s Academic Integrity Policy, which is explained in full at http://academicintegrity.uncg.edu/. If you have any questions regarding the policy, please contact me.

Special Accommodations: There are specific types of disabilities recognized by the university that may require special adjustments and accommodations in the classroom and/or in the teaching support you receive. Disclosure is voluntary and requires supporting documents (http://ods.dept.uncg.edu/eligible/). Please notify me of any necessary adjustments that you will require at the beginning of the semester so that I can do everything possible to support your successful completion of the course.
Required Texts


These books are available for purchase at the university bookstore. All other assigned reading material is found on blackboard in weekly folders under “Course Documents.” Students are required to bring copies of the assigned reading to class — either the hard copy (book or printed out PDF) or their laptops with the reading downloaded and readily available.
Course Design

Part I: “Community, Identity, Stability” - Biotechnology’s promise and perils

Week 1
Tu (8/23) – Introduction: biotechnology and society

Th (8/25) – Science at the service of the state: utopia or dystopia?
Aldous Huxley, Brave New World, Ch. 1-7
In-class viewing of film, Gattaca

Week 2
Tu (8/30) – Utopia/dystopia cont.
Huxley, Brave New World, Ch. 8-18
In-class viewing of film, Gattaca

Th (9/1) – A brief introduction to the field of Science and Technology Studies (STS)

Part II: Studying the production of scientific knowledge

Week 3
Tu (9/6) – The social construction of facts

Th (9/8) - Unpacking the black box

Part III: Biopolitics, biopower, biocitizenship: A case study of catastrophe

Week 4
Tu (9/13) Biopower: theorizing technologies of the body

Th (9/15) Biopower cont.
Week 5
Tu (9/20) - Biological citizenship and the management of risk
📖 Petryna, *Life Exposed*, Ch 1-3

Th (9/22) - Biocitizenship cont.
🎥 In-class viewing of film, *Chernobyl Heart*

Week 6
Tu (9/27) - Biocitizenship cont.
📖 Petryna, *Life Exposed*, Ch 4-5

Th (9/29) - Biocitizenship cont.
📖 Petryna, *Life Exposed*, Ch 6-8

Week 7
Tu (10/4) - Chernobyl revisited? Analysis and media representations of the Fukushima reactor
🌍 Visit the following site: [https://sites.google.com/site/310biotechsocietyportfolio/fukushima](https://sites.google.com/site/310biotechsocietyportfolio/fukushima)

Th (10/6) - Midterm exam

Part IV: Kinship in the 21st century: social experiences of assisted reproductive technology

Week 8
Tu (10/11) – NO CLASS (Mid-fall break)

Th (10/13) Genetics and kinship

Week 9
Tu (10/18)

Th (10/20)
Part V: Biomedical technology and personhood

Week 10
Tu (10/25) – Biomedical identity: an ethnography of PET (positron emission tomography) scans
Picturing Personhood

Th (10/27) – Biomedical identity cont.
Picturing Personhood

Week 11
Tu (11/1) – Genetics and social identity: race/ancestry/subjectivity
Native American DNA

Th (11/3) – Genetics and social identity: race/ancestry/subjectivity
Native American DNA

Part VI: The politics and practice of documenting individual identity

Week 12
Tu (11/8) DNA Testing and the US criminal justice system

Th (11/10) - DNA Testing and the US Criminal Justice System cont.
Visit the Innocence Project website: http://www.innocenceproject.org/

Week 13
Tu (11/15) – Postmortem identification technology
The case of Michael J. Blassie - reading to be announced

Th (11/17) – Knowing who’s who: states and their citizens

Week 14
Tu (11/22) – Technologies of security and surveillance: biometrics in a post-9/11 world
Th (11/24) - NO CLASS (Thanksgiving)

Week 15
Tu (11/29) – Biometrics in a post-9/11 world cont.

Week 15 cont.
Browse the various resources on: https://sites.google.com/site/310biotechsocietyportfolio/biometrics-and-security

Th (12/1) – Wrap up and final reflections
Final exam handed out

Please note: Students will be required to turn in their final exam during the schedule exam period (TBA).