

**Science, Technology, Race, Spring 2011.**  
**ANT 324L (31320); AFR 374D (30515)**

**Dr. John Hartigan**

Tues/Thurs 11:00-12:30

E-mail: [Hartigan@mail.utexas.edu](mailto:Hartigan@mail.utexas.edu); Tel.232-9201

Office Hours: Tues/Thur 1:00-2:00 and by apt. SAC 4.174

**Objectives:** Scientific research and technological innovations are developed in social contexts and respond to social interests and desires. Race fundamentally informs the social dynamics that influence the production of technology and the pursuit of science. This course examines the multiple intersection and linkages between race, science, and technology. We begin by reviewing the array of current anthropological and sociological studies of science, which regard science as an institutionalized set of cultural practices charged with generating objective knowledge of the world. But in addition to generating knowledge, the practice of science often has profound effects on social life. In particular, we will consider the ways beliefs about race are reproduced via science—as well as how the science of genetics fundamentally challenges long-reigning, mistaken beliefs about the biological basis of human diversity. We will also survey the numerous ways that scientific endeavors and technological creations are reconfiguring racial formations and identities in the United States and around the globe. Overall, this course examines how technology, science, and race inform our notions of personhood, self, and culture.

**Dynamics:** Class time will feature various combinations of lectures, discussions, and workshops. *Lectures* will explicate the key cultural dynamics shaping science, technology and race. *Discussions* will be directed toward understanding and assessing the readings. Combined, the lectures and readings will provide a framework for researching and analyzing some significant aspect of current developments linked to the core concerns of this course. We will also spend class-time in *workshop* mode, which allows you to share and exchange ideas and reflections linked to their particular research questions. The workshop framework will also allow us to discern and develop overlapping interests and topics that will provide the basis for forming research clusters. Sporadic *journaling* will be required; this entails simply recording instances of a certain topic that occur over a 24-hour period, then discussing these in class.

**Grading and Course Requirements:** Several kinds of writing will be required in this course. First, students will write one-page summaries of the daily assigned readings. These assignments will be recorded rather than graded. Then there will be three 4-page writing assignments: two memos and a book review. Finally, a substantive paper (10 pages) will be due at the end of the class. This paper will feature your engaged reflections on, or analysis of, a topic central to this course, drawing upon core analytic perspectives from lectures and readings. In addition to writing, class participation—attendance, daily writing assignments, and engaging in class discussions of the readings and films—will also be a critical component of your overall grade in this class. Summary writings are due in class the day each reading is assigned. *Summaries cannot be made up at the end of the course.*

**Attendance Policy:** Students are required to attend classes. Students with excessive unexcused absences (more than 3) will have their final graded reduced at least one letter grade and can be administratively dropped from this course.

**Texts:**

*On the Origin of the Species A Facsimile of the First Edition* (Harvard University Press), Charles Darwin.

*Why I am Not a Scientist: Anthropology and Modern Knowledge*, Jonathan Marks, University of California Press

*Bipolar Expeditions: Mania and Depression in American Culture*, Emily Martin, Princeton University Press,

*The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*, Nikolas Rose,

*Biomedical Ambiguity: Race, Asthma, and the Contested Meanings of Genetic Research in the Caribbean*, Ian Whitmarsh.

*Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*, Tom Boellstorff, Princeton University Press,

**Resources:**

RealScience: <http://www.realclearscience.com/>

Science Studies Resources on the Internet: <http://scistud.umkc.edu/wwg/scilinks.html>

*Science as Culture*: <http://www.tandf.co.uk/journals/CSAC>

*Social Studies of Science*: <http://sss.sagepub.com/>

*Issues in Science and Technology*: <http://search.nap.edu/issues/>

*Technoscience: Newsletter for the Society for the Social Study of Science*:

<http://www.4sonline.org/technoscience/index.htm>

ECHO Virtual Center on the history of science, technology, and medicine: <http://echo.gmu.edu/>

*New York Times* (Science and Technology sections): <http://www.nytimes.com/>

*Science Daily*: <http://www.sciencedaily.com/>

**Possible Research Topics:**

Impacts/interplay of tech and social relations (“networks”).

Impacts/interplay of science and social relations (“biosociality”).

Media coverage of science & scientific literacy (“biocommunicability”)

Gender and science.

The human/post-human: transformations of identity linked to science/tech

Disease/health.

New economy & globalization.

Scientific practice.

Debates: global warming.

Genomics.

Patents & intellectual property.

Virtual life.

Addiction.

## **Class Schedule:**

**Jan 18:** Introduction and overview.

**Jan 20:** Nature/Culture.

Readings: “Spheres of Life,” Franklin et al

Assignment: journal on “nature”

**Jan 25:** Science.

Readings: Marks, *Scientist*, chps 1-3.

Assignment: journal on “science”

**Jan 27:** Technology.

Readings: Rose, *Life Itself*, Intro & chp 1

Assignment: journal on “technology”

**Feb 1:** Race.

Readings: Marks, *Scientist*, chp 4 & 8.

Assignment: journal on “race.”

**Feb 3:** Race.

Readings: Marks, *Scientist*, chp 9.

Assignment: identify overlapping themes.

**Feb 8:** New Economy

Readings: Rose, *Life Itself*, chp 2.

Workshop: Identify research topics.

**Feb 10:**

Readings: Martin, *Bipolar*, Intro & chps 1-3.

**Feb 15:**

Readings: Martin, *Bipolar*, chps 4-6.

Assignment: journal on “personhood.”

**Memo #1 due in class.**

**Feb 17:**

Readings: Martin, *Bipolar*, chps 7-9 & Conc.

Workshop: Establish research clusters.

**Feb 22:** Species

Readings: Darwin, *Origin*, chp 1-3

Assignment: TBA

**Feb 24:** Species

Readings: Darwin, *Origin*, chp 4-7

Assignment: TBA

**Mar 1:** Species

Readings: Darwin, *Origin*, 8-9; Marks, *Scientist*, chp 5.

Assignment: TBA

**Mar 3:** Biopower

Readings: Rose, *Life Itself*, chp 3.

Assignment: journal on “emergent forms.”

**Mar 8:** Biopower

Readings: Rose, *Life Itself*, chp 4; Whimmarsh, *Biomedical Ambiguity*, chps Intro & chps 1-2.

Assignment: TBA

**Mar 10:** Biopower

Readings: Rose, *Life Itself*, chp 5; Whimmarsh, *Biomedical Ambiguity*, chps 3-5 and epilogue.

**Memo # 2 on biological citizenship.**

**Spring Break!!**

**Mar 22:** Race and biopower

Readings: Rose, *Life Itself*, chp 6.

Assignment: journal on race and “nature.”

**Mar 24:** Race and biopower

Readings: Rose, *Life Itself*, chp 7-8; revisit Martin chp 8 & conclusion.

Assignment: TBA

**Mar 29:** Race and technologies of identity and social justice.

Readings: revisit Marks, *Scientist*, 8-9.

Assignment: TBA

**Mar 31:** Virtual social life.

Readings: Boellstorff, *Second Life*, chp 1-3.

Assignment: TBA

**Apr 5:** Virtual social life.

Readings: Boellstorff, *Second Life*, chp 4-7.

Assignment: TBA

**Apr 7:** Virtual social life.

Readings: Boellstorff, *Second Life*, chp 8-9.

Assignment: TBA

**Apr 12:** Race and the movies: *Avatar* and *District 9*.

Readings: TBA

**Book Review Due.**

**Apr 14:** Writing and thinking in the new technologies.

Readings: (Power Point and Google)

*Assignment:* TBA

**Apr 19:** Scientific practice,

Readings: Marks, chps 6-7.

*Assignment:* TBA

**Apr 21:** Group presentations.

**Apr 26:** Group presentations.

**Apr 28:** Group presentations.

**May 4:** Class debate # 1 (Global Warming?)

**May 6:** Class debate # 2 (Multitasking?)

**Final paper due on May 10<sup>th</sup>.**

**ANT 324L**

**Length: 4 pages**

**Due Date: February 15<sup>th</sup>**

**Memo Instructions:** *In responding to the following scenario/assignment, be sure to follow closely the standard format for memo writing, as summarized in the “Memo Writing” rubric posted on Blackboard.*

You are a research associate in a \_\_\_\_\_ company [fill in the blank: e.g., a biotech startup, a software firm, etc.]. At a recent industry convention, the company’s CEO heard part of a presentation that was organized around Nicolas Rose’s theories about the new “politics of life.” Being a busy, important figure, the CEO didn’t catch much of the presentation, but he did pick up on Rose’s thesis that a profound “reshaping of medical and political perception and practice” is underway. He wants to know more about Rose’s theory, so he’s sent an email asking for you to prepare a memo on the subject. This memo needs, first, to cover the “five pathways” or “mutations” through which these changes are emerging; then, second, to explain how these five developments are interrelated. What links them together and in what ways are they mutually informing? Then he wants some examples. Identify some current events, products, or trends that illustrate or confirm Rose’s schema. Explain how they reveal the operation of at least some of these mutations. In the “Conclusion” segment, be sure to offer your own reflections on the relevance or import of this idea.

**ANT 324L: Memo #2: Biological Citizenship.**

**Length: 4 pages**

**Due Date: March 10<sup>th</sup>**

**Memo Instructions:** *In responding to the following scenario/assignment, be sure to follow closely the standard format for memo writing, as summarized in the “Memo Writing” rubric posted on Blackboard.*

You are a hard-working aide for a U.S. Congresswoman who is up for re-election. Amidst all the recent debates over healthcare, she has become acutely aware that “different ideas about the biological responsibilities of the citizen are embodied in contemporary norms of health and practices health education” (Rose, 133). That is, she’s heard about this concept of biological citizenship from Rose and is unsure whether it is a good or bad thing; she’s also not sure about what social and popular cultural trend-lines it references or includes. So she has charged you with the task of explaining what biological citizenship entails. Start with Rose’s effort “to map the new territory of biological citizenship and to develop some conceptual tools for its analysis” (137). Define the concept and illustrate its relevance to contemporary aspects of “emergent forms of life.” Point to some examples in the news or from readings in this course. Specifically, reference Karen-Sue Taussig’s argument (in *Ordinary Genomes*) that, “as relations between citizen and state become refracted through the prism of genetics, this new biological knowledge suffuses the genomic futures both of individuals and of the nation” (12). Offer your own summation of thoughts and conclusions about the meaning of this concept, “biological citizen.” Make sure to write this in a memo format!

**Book Review on *Second Life*.**

**Due:** April 12<sup>th</sup>.

**Length:** 4 pages.

As with the previous memo assignments, the goal here is two-fold: 1) characterize and evaluate the author's arguments and discussions; 2) try your hand with a distinct genre of writing. In this assignment you will aim for two objectives: 1) honing your writing and analytical skills; 2) evaluating the intellectual, methodological, political, and/or ethnical contributions of this ethnographic work. I intend for these writing projects to be a useful means by which you can both articulate and craft your position in relation to ethnographic research and anthropological issues generally. Hence, I am not stipulating a particular style or delineate a list of items that you must follow. However, there are a number of considerations that you will need to weigh as you compose your reviews. These reflect the key concerns that reviewers grapple with as they present their evaluation of a particular work to an audience of professionals and colleagues. Let these concerns inform your writing. The tone, focus, and style of discussion for these reviews are up to you.

Organizational matters: Do you want to employ the "shotgun" approach, elaborating on "every" major point, or be selective, delineating only the "critical" issues for discussion?

What do you do with your opinion? Highlight it, bury it, substantiate it, re-evaluate it? That's up to you. But you should consider how to contend with the way your opinion shapes your written evaluation of the book.

Do you provide a synopsis (of the argument, the fieldwork, the theoretical orientation, etc.) or a lengthy summary? Is this summary oriented towards an evaluation of the state of knowledge in the discipline [the basis for the selective criteria you employ], or is it a summary of methods and ethnographic issues? Do you identify the standpoint (biases) of the author and then delineate how this perspective influences the organization and descriptive aspects of the book?

Questions to consider and answer: would you use this in a course (what's the audience for this book); what are the appropriate terms by which to evaluate this book as an ethnography?

**Final Paper.**  
**Length: 10 pages**

**Due Date: May 9<sup>th</sup>**

The purpose of the final paper is to examine in depth either a subject that we touched upon in the course or one that extends a line of inquiry from one of the topics we have covered. Taking any of the wide range of issues we have discussed, develop a more detailed investigation of a topic concerning *science, technology, race* and their intersections. Primarily, your analytical approach should be informed by and reflect perspectives from the course that consider or emphasize the role of social and cultural dynamics. In each of the subjects covered, we have drawn a principal and sustained attention either to the influence of culture or to potential impacts on social relation in regards to science, technology, and race. Aim to do the same in this paper.

The research process for this paper involves exploring in detail some facet of contemporary developments in our society. For a model, consider closely Emily Martin's approach to following and reading trends in American culture. You can use a variety of sources, from journal articles, course readings, and online materials to delineate lines of debate and terms of discussion. Additionally, point to cultural artifacts that illustrate the trends or developments that interest you. *Strive to cite about 8-10 sources or items related to your research.* Your conclusion should feature some overarching reflections on the relevance of the three central themes of the course to current interests and concerns in our society.

Be sure to provide a bibliography of cited sources. No particular style is required, but there should be sufficient information provided so that I can find the source myself. In looking for reference material, make use of the many source on science and technology studies I provide in the syllabus for the course.

## **Grading Criteria for Papers.**

Research papers involve scholarly investigation, but they also are an exercise in thinking and an expression of intellectual engagement with a topic or issue. Through writing you discover your relationship to a subject—not simply what you think and feel about it, but your investment or disinterest in this matter. I use the following evaluative registers for assessing the quality of a paper. While they overlap and interrelate, these foci are a means of specifying the elements of a paper.

**A. Contextualize:** How well has the subject been introduced? Is the context both clear and developed? Can I immediately recognize the issues that both have generated the discussion and that the paper will address? Are conclusions drawn in clear correspondence with the body of the paper?

**B. Summarize:** Is the topic well-thought out and clearly expressed? Are the scope and character of the issue cogently rendered? What is the tenor of the discussion and what form of evidence or data is being deployed?

**C. Elaboration:** How is the argument shaped and embellished? Is it effectively supported through a range of sources? Are examples well marshaled; do they enhance or disorient the discussion? Does the paper evidence developed thinking about the subject? Under this section, I often ask myself whether I have learned something.

**D. Writing:** Is it good? Remember: emphasis, unity, and coherence make a sentence effective and make its meaning clear; for paragraphs, be sure they correspond to the development of a complete thought, with all its qualifiers and correctives set forth in full. Rhythm and internal strength are fundamental for each of these critical elements of composition.

**E. Thoroughness:** Is the work complete? Obviously, this answer is relative to the stated length requirements, but the question always keys upon whether a subject is adequately (and energetically) developed. Are ideas given multiple inflections? Is there complexity to the thought process? Am I offered competing views that resolve in a final, clear position or, perhaps, remain suspended in an engaged uncertainty?

I rely on these last registers to assess the overall capacity of a paper.

**1.** Strength of argument or exposition; is there sophistication to the way connections have been drawn, detailed, and commented upon?

**2.** Relevance to the course or assigned subject.

**3.** Innovation in choice of topic or mode of argument.