

**Sociology 496: Sociological Analysis of Race Issues in Science
Spring 2018
Ingraham 122**

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Office Hours: **Tuesday 1:30-2:45pm, Wednesday 2-2:45pm, and after class**

Course Description

This class is for undergraduates with at least junior standing and for graduate students. Students do NOT need a science background to succeed in this course. For science students, this class will provide a sociological perspective on how race has been configured (or not) in the life sciences, and especially by different eras of genetic sciences. For students who do not fulfill the requirements, consent of instructor is required.

This class uses sociological theories and methods to examine historical and contemporary studies of race and science. Some of the current issues include: (1) The recent claim by some sociologists, some geneticists, and a science writer that recent biomedical sciences new genomic research demonstrates that races are biological categories. (2) The efforts by some pharmaceutical companies to sell products they claim are effective only for some racial groups and not for others. (3) The claim by DNA ancestry companies that they can specify the historical (qua “geographic”) roots of any individual based on their DNA. In contrast, social scientists studying the same data argue that most racial differences in health in US studies are actually outcomes of living with the experiences of racism in this country, not genetics. (Although there are a few single-gene diseases that occur at higher frequency in some groups than in others, these single-gene diseases are rare and they appear in all groups.) Social scientists emphasize that U.S. race categories do not map onto genetic categories, and that race categories are socially constructed.

These claims and counter-arguments about race and genetics are generating complex consequences that touch many topics of concern to social scientists, biomedical researchers and physicians, policy makers, and the public. This class will examine some people’s efforts to use new genomics research to raise (again) the specter of races as biological categories. We will examine this argument and compare their claims with what sociological studies of race teach us. We will read contemporary socio-cultural studies that show how racial and ethnic classification practices and categories differ by country and locale. We will read recent socio-cultural, political, and ethical studies that demonstrate what the new genomics says and does not say about race, ancestry, and medicine. We will discuss key concepts in the debate, such as “populations,” “races,” and “geographic groups.”

We will also contextualize the current scene by reading past histories of the intersection of race, science, and medicine. We will read about how biologists and social scientists viewed race during different historical moments and how those views have changed. The historical studies

examine the ways race and racism have been created, justified, or contested in scientific practice and discourse in different eras.

In order to contextualize the current scene, we begin the course with discussions on the history of the intersection of race, science, and medicine. The historical studies examine the ways race and racism have been created, justified, or contested in scientific practice and discourse, including in 19th and early 20th century eugenics in Europe and the U.S.. But we will also read about how some biologists argued against eugenic and racist views. We will also read about differences in race/ethnic classification and categories in different times and places.

In our examination of the production of scientific knowledge about race, we include the biomedical, genetic, forensic anthropological, and physical anthropological sciences. We will examine analyses of this research by sociologists, anthropologists, philosophers, legal scholars, historians, and other biologists. We will examine with care what is known about the patterns of human biodiversity, and where some claims go far beyond what is known.

Course Readings:

The required readings will include articles and chapters of books. The required **articles and chapters** will be available online in the Social Science Reference Library's online reserves. Here is the link: [ADD](#)

Recommended Books for further reading NOT REQUIRED. I have more recommendations, if you are interested:

Harding, Sandra, ed. *The "Racial" Economy of Science: Toward a Democratic Future*. Bloomington: Indiana University Press, 1993. ISBN: 0253326931.

Kevles, Daniel J. *The Name of Eugenics: Genetics and the Uses of Human Heredity*. Cambridge: Harvard University Press, 1995. ISBN: 0520057635.

Duster, Troy. *Backdoor to Eugenics*, 2nd edition. New York: Routledge, 2003.

Reardon, Jennifer. 2005 *Race to the Finish: Identity and Governance in an Age of Genomics*. Princeton: Princeton University Press.

Wailoo, Keith, and Stephen Pemberton. *The Troubled Dream of Genetic Medicine Ethnicity and Innovation in Tay-Sachs, Cystic Fibrosis, and Sickle Cell Disease*. Baltimore: Johns Hopkins University Press, 2006. ISBN 0-8018-8326-1.

Montoya, Michael 2011. *Making the Mexican Diabetic: Race, Science, and the Genetics of Inequality*. Berkeley: University of California Press.

Morning, Ann 2011 *The Nature of Race: How Scientists Think and Teach about Human Difference*, Berkeley: University of California Press.

Abu El-Haj, Nadia 2012 *The Genealogical Science: The Search for Jewish Origins and the Politics of Epistemology*. University of Chicago Press.

Kahn, Jonathan. 2012. *Race in a Bottle: The Story of BiDil and Racialized Medicine in a Post-Genomic Age*. Columbia University Press.

Roberts, Dorothy. 2012. *Fatal Invention: How Science, Politics, and Big Business Recreate Race in the Twenty-First Century*. The New Press.

Braun, Lundy 2014. *Breathing Race into the Machine: The Surprising Career of the Spirometer from Plantation to Genetics*, University of Minnesota Press.

Panofsky, Aaron 2014. *Misbehaving Science: Controversy and the Development of Behavior Genetics*. University of Chicago Press.

Yudell, Michael 2014 *Biology and Race in the Twentieth Century Race Unmasked*. Columbia University Press.

Hatch, Anthony 2016 *Blood Sugar: Racial Pharmacology and Food Justice in Black America*. University of Minnesota Press.

Nelson, Alondra 2016 *The Social Life of DNA: Race, Reparations, and After the Genome*. Boston: Beacon Press.

I will add further recommended books as the semester continues and as your interests develop.

Course Requirements:

This class is organized as a seminar. I will lecture during part of our weekly meetings, but I expect students to have read the readings and to raise questions from and about the readings. Students will be fully engaged in the class discussion. I will explain and expand on any socio-cultural and scientific concepts and historical contextualization for our discussions.

This course covers difficult and critical concepts and studies and requires that you read and think carefully about them throughout the semester. Each set of readings builds upon the earlier set. I specifically chose to lower the quantity of articles and chapters to give you enough time to consider carefully their content.

Students are expected to complete the readings by the date indicated on the syllabus and to fully engage themselves in class discussions. *My aim is to push you to read the material critically, analytically, and creatively.*

Grading:

1. 35% of your grade will be based on your participation in class discussions, including the written report, your facilitation of a class discussion, and your participation in discussions led by other students.
2. There will be a mid-term examination and a final examination. 65% of your grade will be based on these examinations, 30% for the midterm, and 35% for the final.
3. Graduate students will have the option to write a research paper in place of the exams. You will also be responsible for leading class discussions and writing reading summaries.

More detail on requirements:

1. In-class discussion: Students are responsible for coming to class having read and reflected on the material and prepared to discuss the readings.
2. Discussion leader: Class meetings will include a discussion led by students. Each of you will also be responsible for organizing and leading discussion of the readings for part of one class meeting. I will be available to assist in your preparations. Please read through the syllabus to see which topics most interest you and for which week you would like to lead the discussion.
3. Analytic Reading Memo: To help facilitate your discussion leadership, as well as develop your analytic and writing skills, you will prepare a 3- to 4-page (double-spaced) essay that highlights and analyzes the main themes of the readings for which you lead the discussion. Your analytic memo should summarize the arguments and raise questions and critical concerns. Remember that your analysis is not just spouting opinions about the material. The analysis may also employ other ideas and theories you have read in your other courses, but it should focus on the required readings. **Your analytic memo is due in class on the day of your presentation.**
4. Midterm Exam: The midterm will take the form of essay answers to questions posed in the exam. **The questions will be handed out on February 27, you will hand in your completed midterm in the following week's class, March 6, or send it via email before class on March 6.** To make your lives easier, instead of having new readings to discuss in class on March 6, we will view the film "**Skin**" when you come to class.
5. Final Exam: The final essay exam (1) The exam will be based on the readings and discussion in the class and should develop a theme and through a set of readings. It will be a take-home exam. **The questions will be handed out in class on May 1, you will send your completed exam via email to me on May 10, our official final exam date.**

Graduate student papers: Graduate student final research papers should be between 15-20 pages in length. The research paper *may be* (does not need to be) based on empirical research studies in addition to those included in the syllabus. But they need not be based on original research. The paper may be based on contemporary or historical issues. If you choose this option, please see me early in the semester to discuss potential topics and sources. I can recommend additional readings for your paper topic. The final paper is due on the official day of our class final exam.

A Note on Academic Misconduct (This is the standard format we use in the Sociology Department.)

Academic integrity is critical to maintaining fair and knowledge based learning at UW-Madison. Academic dishonesty is a serious violation: it undermines the bonds of trust and honesty between members of our academic community, degrades the value of your degree and defrauds those who may eventually depend upon your knowledge and integrity. As noted on the UW Academic Integrity page, UWS 14 is the chapter of the University of Wisconsin System Administrative code that regulates academic misconduct. UWS 14.03 defines academic misconduct as follows:

Academic misconduct is an act in which a student:

- seeks to claim credit for the work or efforts of another without authorization or citation;
- uses unauthorized materials or fabricated data in any academic exercise;
- forges or falsifies academic documents or records;
- intentionally impedes or damages the academic work of others;
- engages in conduct aimed at making false representation of a student's academic performance;
- submitting for credit work done by someone else,;
- assists other students in any of these acts.

Examples include but are not limited to: cutting and pasting text from the web without quotation marks or proper citation; paraphrasing from the web without crediting the source; using another person's ideas, words, or research and presenting it as one's own by not properly crediting the originator; signing another person's name to an attendance sheet; hiding a book knowing that another student needs it to prepare an assignment; collaboration that is contrary to the stated rules of the course.

If you are accused of misconduct, you may have questions and concerns about the process. If so, you should feel free to call SAJA at 263-5700 or send an email to dean@studentlife.wisc.edu.

The Department of Sociology will deal with these offenses harshly following UWS 14 procedures:

- The penalty for misconduct in most cases will be removal from the course and a failing grade.
- The department will inform the Dean of Students as required and additional sanctions may be applied
- The department will keep an internal record of misconduct incidents. This information will be made available to the teaching faculty writing recommendation letters.

If you see incidents of misconduct, you should tell your instructor about them, in which case they will take appropriate action and protect your identity. You could also choose to contact the administrative staff and your identity will be kept confidential.

TOPICS AND SCHEDULE OF READINGS:**MEETING 1. INTRODUCTION/OVERVIEW****MEETING 2. HISTORICAL STUDIES OF RACIAL CLASSIFICATION**

Gould, Stephen Jay. "The Geometer of Race." In *Discover* (November 1994): 65-69.

Hudson, Nicholas. "From 'Nation' to 'Race': The Origin of Racial Classification." *Eighteenth Century Studies* 29, no. 3 (1996): 247-264.

Frank B. Livingstone, "On the Nonexistence of Human Races," in Sandra Harding, ed., *The "Racial" Economy of Science: Toward a Democratic Future* (Bloomington: Indiana University Press, 1993).

Yudell, Michael. 2016. "Taking race out of human genetics: Engaging a century-long debate about the role of race in science," *Science* 351 (6273, 5 Feb 2016): 564-565.

Not required, only recommended for those who want to read further:

Gould, Stephen Jay. "Why We Should Not Name Human Races - A Biological View." In *Ever Since Darwin: Reflections in Natural History*. New York: Norton, 1977, pp. 231-236. ISBN: 0393064255.

———. "Human Equality Is a Contingent Fact of History." In *The Flamingo's Smile: Reflections in Natural History*. New York: Norton, 1985, pp. 185-198. ISBN: 0393022285.

MEETING 3. HISTORICAL STUDIES OF BIOLOGICAL RACISM

Schiebinger, Londa. "Theories of Gender and Race." In *Nature's Body: Gender in the Making of Modern Science*. Boston: Beacon Press, 1993, pp. 143-183. ISBN: 0807089001.

Paul, Diane B. Chapter 8, "Eugenic origins of medical genetics." In *The Politics of Heredity: Essays on Eugenics, Biomedicine, and the Nature-Nurture Debate*. Albany, NY: State University of New York Press, 1998.

Jones, James. "The Tuskegee Syphilis Experiment: 'A Moral Astigmatism.'" In *The "Racial" Economy of Science: Toward a Democratic Future*. Edited by Sandra Harding. Bloomington: Indiana University Press, 1993, pp. 275-286. ISBN: 0253326931.

Reverby, Susan. "'Normal Exposure' and Inoculation Syphilis: A PHS 'Tuskegee' Doctor in Guatemala, 1946-1948," *Journal of Policy History* 23 (1): 2011.

Smith, Susan L. 2008. "Mustard Gas and American Race-Based Human Experimentation in World War II." *Journal of Law, Medicine & Ethics* 36 (3): 517–21.

MEETING 4. RACE AND RACIALIZATION IN THE EARLY 20th CENTURY

Jacobson, Matthew Frye. "Race and American Nativism. From Anglo-Saxons and Others, 1840-1924." In *Whiteness of a Different Color: European Immigrants and the Alchemy of Race*. Cambridge: Harvard University Press, 1998, pp. 68-90.

Hazard, Anthony Q. Jr. ^[L]_[SEP] "A Racialized Deconstruction? Ashley Montagu and the 1950 UNESCO STATEMENT ON RACE," *Transforming Anthropology*, Vol. 19, Number 2, pp. 174–186, ISSN 1051-0559, electronic ISSN 1548-7466. © 2011 by the American Anthropological Association.

Reading on Japanese Americans and racialization during WWII.

MEETING 5. SOCIAL SCIENCE PERSPECTIVE ON RACE – THEORETICAL FRAMES RACE AS STRUCTURAL AND INSTITUTIONAL VERSUS RACE AS INDIVIDUALIZED PREJUDICE OR IDENTITY

Omi, Michael. and Howard Winant. "Racial Formation." In *Racial Formation in the United States: From the 1960s to the 1990s*, 2nd ed. New York: Routledge, 1994, pp. 53-76. ISBN: 041590904X.

Eduardo Bonilla-Silva, Chapter 2 "The Central Frames of Color Blind Racism" in *Racism without Racists: Colorblind Racism and the Persistence of Racial Inequality in the US*, Third Edition. Rowman and Littlefield, 2010.

NOTE THAT THIS CHAPTER 2 IS DIFFERENT FROM THE CHAPTER 2, ABOVE, OF THE 2010 VERSION. Eduardo Bonilla-Silva, Chapter 2 "The New Racism: The U.S. Racial Structure Since the 1960s" in *Racism without Racists: Colorblind Racism and the Persistence of Racial Inequality in the US*, Fourth Edition. Rowman and Littlefield, 2013.

Loveman, Mara. 1999. "Is 'Race' Essential?" *American Sociological Review* 64(6):891-898.

Recommended, **not required**:

Eduardo Bonilla-Silva, "Rethinking Racism: Toward a Structural Interpretation," *American Sociological Review* 62 (465-480). This article is denser, is theoretical and includes no data. Otherwise, it is similar to Chapter 2 from the 2013 edition I've assigned above.

MEETING 6. HAND OUT MID-TERM EXAM QUESTIONS.

VIEW FILM. “*Skin* is a British-South African 2008 biographical film – based on the book *When She Was White: The True Story of a Family Divided by Race* by Judith Stone – directed by Anthony Fabian, about Sandra Laing, a South African woman born to white parents, who was classified as “Coloured” during the apartheid era, presumably due to a genetic case of atavism.” “SKIN is one of the most moving stories to emerge from apartheid South Africa: Sandra Laing is a black child born in the 1950s to white Afrikaners, unaware of their black ancestry. Her parents are rural shopkeepers serving the local black community, who lovingly bring her up as their ‘white’ little girl. But at the age of ten, Sandra is driven out of white society. The film follows Sandra’s thirty-year journey from rejection to acceptance, betrayal to reconciliation, as she struggles to define her place in a changing world - and triumphs against all odds.” Quotes taken from websites about the movie.

MEETING 7. CONTEMPORARY SOCIOLOGICAL STUDIES OF CLASSIFICATION AND CATEGORIES

MIDTERM DUE BY THE END OF DAY.

AAA Statement on Race. <http://www.aaanet.org/stmts/racepp.htm>

ASA Statement on Race. http://www2.asanet.org/media/asa_race_statement.pdf

Telles, Edward E. Chapter 4 “Racial Classification.” In Telles, *Race in Another America: The Significance of Skin Color in Brazil*. Princeton: Princeton University Press, 2004.

Loveman, Mara and Muniz, Jeronimo O. (2007). " How Puerto Rico Became White: Boundary Dynamics and Intercensus Racial Reclassification." *American Sociological Review*, 72(6):915-39.

Bowker, Geoffrey C., and S. Leigh Star. pp. 195-225. "The Case of Race Classification and Reclassification under Apartheid." In *Sorting Things Out: Classification and Its Consequences*. Cambridge: MIT Press, 2000. ISBN: 0262024616.

MEETING 8. RACE, BLOOD, GENETICS, IDENTITY, AND SOVEREIGNTY

Nelson, Alondra. 2008. “Bio Science : Genetic Genealogy Testing and the Pursuit of African Ancestry,” *Social Studies of Science* 38(5): 759-783

TallBear, Kimberly. 2013. Native American DNA: Tribal Belonging and the False Promise of Genetic Science. Chapter 2 “Racial Science, Blood and DNA” (pp. 31-66) and Conclusion “Indigenous and Genetic Governance and Knowledge” (pp. 177-204).

Kauanui, J. Kehaulani. 2008. “Racialized Beneficiaries and Genealogical Descendants,” Chapter 1 in *Hawaiian Blood: Colonialism and the Politics of Sovereignty and Indigeneity*. Durham and London: Duke University Press, pp. 37-66.

Recommended, **not required**:

Readings on Law and the Havasupai Case. (Please let me know if you are interested in this case, I will send you the readings.)

MEETING 9. THE CONSTRUCTION OF WHITENESS

James Baldwin, "On Being White . . . And Other Lies." (One page article.)

SKIM. LAW REVIEW ARTICLES ARE VERY LONG. Harris, Cheryl. 1993. Whiteness as property. *Harvard Law Review* 106(8): 1707–1791.

Reardon, Jenny and Kim TallBear, ^[L]_[SEP] "Your DNA Is Our History": Genomics, Anthropology, and the Construction of Whiteness as Property," *Current Anthropology*, Vol. 53, No. S5, (April 2012), pp. S233-S245.

Ruth Frankenberg, "The Mirage of an Unmarked Whiteness."

Dominguez, Virginia R. 1998. "Exporting U.S. Concepts of Race: Are There Limits to the U.S. Model?" ^[L]_[SEP] *Social Research*, Vol. 65, No. 2, pp. 369-399^[L]_[SEP].

MEETING 10. EUGENICS REBORN THROUGH MEDICINE? OR A DIFFERENT KIND OF DIFFERENCE?

Duster, Troy. *Backdoor to Eugenics*, 2nd edition. New York: Routledge, 2003. pp. 3-59.

Braun, Lundy, Anne Fausto-Sterling, Duana Fullwiley, Evelyn M. Hammonds, Alndra Nelson, William Quivers, Susan M. Reverby, Alexandra E. Shields, Racial Categories in Medical Practice: How Useful are They? *PLoS Medicine*, 4 (9): 1423-1428.

Fujimura, Joan H. and Rajagopalan, Ramya 2011 'Different Differences: The Use of "Genetic Ancestry" Versus Race in Bio-medical Human Genetic Research' *Social Studies of Science* 41(1): 5–30.

MEETING 11. RACE, GENETICS, AND DISEASE

Burchard, E. G., Ziv, E., Coyle, N., Gomez, S. L., Tang, H., Karter, A. J., et al. 2003. "The importance of race and ethnic background in bio-medical research and clinical practice," *New England Journal of Medicine*, 348 (12, March): 1170 –1175.

Ossorio, Pilar N. & Duster, Troy, "Race and Genetics: Controversies in Biomedical, Behavioral and Forensic Sciences," *American Psychologist*, vol. 60 (2005): 115-128.

Kreiger, Nancy, and Mary Bassett. "The Health of Black Folk: Disease, Class, and Ideology in Science." In *The "Racial" Economy of Science: Toward a Democratic Future*. Edited by Sandra Harding. Bloomington: Indiana University Press, 1993, pp. 161-169. ISBN: 0253326931.

Brooks, Katherine C., "A Silent Curriculum," *Journal of the American Medical Association (JAMA)*, Vol 313, No. 19: 1909-1910, May 19, 2015.

MEETING 12. RACE AND THERAPEUTICS

Sankar, P. and J. Kahn. 2005. "BiDil: Race Medicine Or Race Marketing?" *Health Affairs* 24:W5455-63.

Rajagopalan, R. and J.H. Fujimura (2012) "Will Personalized Medicine Challenge or Reify Categories of Race and Ethnicity?" *Virtual Mentor. American Medical Association Journal of Ethics*, 14(8): 657-663.

Wailoo, Keith, and Stephen Pemberton,

Chapter 2 "Risky business in white America: gene therapy and other ventures in the treatment of cystic fibrosis" and

Chapter 3 "A perilous lottery for the black family: sickle cells, social justice, and the new therapeutic gamble."

In *The Troubled Dream of Genetic Medicine: Ethnicity and Innovation in Tay-Sachs, Cystic Fibrosis, and Sickle Cell Disease*. Baltimore: Johns Hopkins University Press, 2006. ISBN 0-8018-8326-1.

Krieger, Nancy. 2010. "The Science and Epidemiology of Racism and Health: Racial/Ethnic Categories, Biological Expressions of Racism, and the Embodiment of Inequality—an Ecosocial Perspective." In *What's the Use of Race*, edited by D. Jones and I. Whitmarsh, MIT Press, 2010, pp. 169-183.

MEETING 13. RACE AND GENETICS IN FORENSICS

Ossorio, Pilar. 2006. "About Face: Forensic Genetic Testing for Race and Visible Traits," *Journal of Law, Medicine & Ethics* 277-292.

Pamela Sankar. 2012. "Forensic DNA Phenotyping: Continuity and Change in the History of Race, Genetics, and Policing," in *Genetics and the Unsettled Past*, eds. Keith Wailoo Alondra Nelson Catherine Lee, Rutgers University Press.

I will add one more article.

Big Data, Surveillance, and Race in the Criminal Justice System, scheduled for Feb 22, at 7pm, in the Fluno Center on campus.

**MEETINGS 14. HOW DO WE INTERPRET POPULATION GENETIC
“POPULATIONS”?**

THIS ARTICLE INCLUDES A LOT OF GENETICS, I WILL EXPLAIN. JUST READ IT AS BEST YOU CAN. Fujimura, Joan H., Bolnick, Deborah A., Rajagopalan, Ramya, Kaufman, Jay S., Lewontin, Richard C., Duster, Troy, Ossorio, Pilar and Jonathan Marks. 2014 “Clines without Classes: How to Make Sense of Human Variation,” *Sociological Theory* 32(3): 208–27.

Marks, Jonathan, “The Nature/Culture of Genetic Facts,” *Annu. Rev. Anthropol.* 2013. 42:247–67.

AGAIN, THIS ARTICLE IS DIFFICULT, I WILL EXPLAIN. JUST READ IT AS BEST YOU CAN Krieger, Nancy. 2012. “Who and What Is a “Population”?: Historical Debates, Current Controversies, and Implications for Understanding “Population Health” and Rectifying Health Inequities” *The Milbank Quarterly*, Vol. 90, No. 4, (pp. 634–681)^{SEP.}

FINAL EXAM ESSAY QUESTIONS WILL BE HANDED OUT, FINAL ESSAYS DUE ON OUR OFFICIAL FINAL EXAMINATION DAY.