

## GEORGIA INSTITUTE OF TECHNOLOGY

### HTS 6123/LMC 8803: SOCIAL AND CULTURAL STUDIES OF BIOMEDICINE HTS 4086: SEMINAR IN HEALTH, MEDICINE AND SOCIETY

Fall 2018

Professor Jennifer Singh

Wednesday 3-5:45pm, Old Civil Engineering, Room 104

Office hours: Wednesday 11am-1pm or by appointment, Old CE, G-22

Jennifer.singh@hsoc.gatech.edu

This course is a graduate seminar that explores current scholarship in the social and cultural studies of science, technology and biomedicine in the 21st century. Although many of the themes addressed have a long history, the emphasis will be on recent interdisciplinary science and technology studies scholarship of current conditions, drawing together work in sociology, anthropology, cultural studies, and related fields. Objects of attention range in scale from molecules to bodies to environments of risk, and the texts for this course attend to diverse contexts of laboratory practices, clinical encounters, scientific research, and broader social debates.

#### **COURSE OBJECTIVES**

As a result of this course, students will

- Be able to think critically about the social, cultural and political contexts of contemporary biomedical issues;
- Be able to compare and contrast key theoretical engagements in biomedicine from diverse interdisciplinary perspectives;
- Be able to conduct a sociological analysis on a contemporary issue in biomedicine;
- Develop skills in facilitating a seminar discussion;
- Be able to conduct, analyze, and present original research in oral and written form.
- Develop critical thinking, analytical, reading and writing skills.
- HTS Undergraduates: Gain experience in developing a research topic and collecting primary data on a specific biomedical issue;

#### **COURSE REQUIREMENTS**

##### **1) Participation (20% of total grade)**

This course is designed as a doctoral seminar in which participation from all students is necessary if everyone is to profit. Therefore, a portion of the final grade will be based on the quality and appropriately relative frequency of participation, which, it is assumed, will be based on careful reading of all assigned materials. Do not assume that these are automatic points. You must earn them by contributing in class. The participation grade will not be based simply on the frequency of comments, but also upon the quality of your comments. For example, bringing up a point from the reading that was unclear or critiquing an argument in the reading is more involved (and of more quality) than merely reciting descriptive information in the text. If you have a question or comment or need something clarified, raise the issue in class.

**2) Reading Responses (10 total - 20%):** Before each class for which there is a book assigned, each student writes an entry responding to the readings for that day on T-Square. The weekly responses should be ~500 words each and must be posted by 10am the morning of class (Wednesday). Your responses need not be polished or formal, but they should give a sense of the overarching project and argument of the book, highlight some of its key theoretical and empirical contributions, and note specific comments and questions that you would like to raise in class. I suggest that at the end of each week, each student sign up for a specific chapter to review for the next week's class. **A template and questions to think about for your response and class discussion are at the end of the syllabus.**

By having prepared a response to the material in advance and sharing your evaluations with the rest of the class, it is my hope that you will be better prepared to engage in productive class discussions and that you will gain more from each other's analyses than you would otherwise. I will be looking for clear intellectual engagement with the materials, coherent examination of the topic, and thoughtful, relevant discussion questions.

**4) Current events paper and class facilitation (15% of total grade).**

Throughout the course, each student is required to find an article, either in print or online (using LexisNexis or the paper's online archive), from a reputable newspaper or news magazine (e.g., New York Times, Washington Post, etc.) that addresses an issue related to medicine, health and illness that you want to discuss in relation to the weekly themes of the course. Facilitation will require that you send the article to the professor by Monday at noon the week of class. The professor will post the article on T-Square. Everyone is required to print, read, and bring the articles to class. Facilitators will be required to describe (not read) the article and [a] explain how it connects to the major themes or theoretical concepts of the topic of the week and [b] explain how it could be re-conceptualized through a sociological lens based on the questions below.

The purpose of this assignment is to engage the theoretical writings in the context of contemporary issues facing medicine, health and society. In other words, to what extent does theoretical perspectives (biomedicalization, biological citizenship, etc.) and other sociological concepts give you better understanding of the current biomedical issue you choose? In what ways are they limited? For the facilitation, you should use this article to draw connections between what we have learned in class, the book of the week (biological citizenship, genetics, race and science), and the contemporary biomedical issue you choose. You may also address reading response questions and/or class questions to aid in discussion.

For the paper, also answer to the following questions (these can also be part of your facilitation):

- Briefly identify the biomedical issue highlighted in the article and provide a brief summary of the article. Why do you consider this an issue worthy of discussion?
- What part of society is most affected by this biomedical issue?
- How is this issue related to the week's reading?
- Using a theoretical framework discussed in class (e.g., biomedicalization, molecularization, biological citizenship, etc.) and/or any concepts that we have learned throughout the course, analyze the article through a sociological lens.

- What are the social factors or social processes that are important to understanding this biomedical issue? What people, institutions, technologies are involved?
- What are some of the social, political, and/or economic implications of this biomedical issue?

This paper should be 2-3 pages, double-spaced, and all references (including article) must be cited. The papers are due the day you sign up and facilitate the class discussion (final draft due by midnight- T-Square). Papers can also serve as a springboard for your final paper.

## **GRADUATE STUDENTS**

**Midterm take-home essay exam 20%:** Two questions ~1200 words each, due October 10, 2018 at 3pm. One question will ask you to analyze a key theme across a range of readings, and the second will ask you to choose one chapter from Biomedicalization and analyze it in the context of the unit.

**Final Paper 25%:** ~2400 words. The structure of the final is flexible. You might choose to structure it along the same lines as the midterm: one part analyzing a key concept across a range of course readings, another part relating an outside source to the readings. Alternatively, you might use the final as an opportunity to reflect on how ideas from this class relate to your main research in your own discipline, or another mutually-agreed upon structure that demonstrates your mastery of course material and insightful analysis of biomedicine and culture (e.g., see option 2 below).

## **UNDERGRADUATE STUDENTS (GRADUATE STUDENT FINAL PAPER OPTION 2) RESEARCH PROJECT (45% - 10% Annotated Bibliography; 5% Summary/Outline; 10% Presentation; 20% Research Project Paper)**

The project involves essentially six assignments: a meeting with me, an individual meeting with Bruce Henson in the Library, a bibliographic exercise, a short summary, a research presentation, and a final paper. This project is meant, in part, to demonstrate to students that writing and research are processes that do not end with the first draft (or begin the night before it is due). Also, by breaking this project into several parts, I hope to facilitate students' completion of the final paper. To get full credit for the research project, all assignments must be completed by the date indicated.

### **Research Project Timeline**

Sept. 10 - 13<sup>th</sup> – Schedule a time to meet with Professor Singh to discuss project ideas.

Sept. TBD – Meet with Bruce Henson in the library to gather resources for project.

Oct. 10<sup>th</sup> – Turn in annotated bibliography by 3PM

Oct. 10<sup>th</sup> – Share ideas for project with class

Nov. 28<sup>th</sup> – Summary and/or Outline of Final Paper – 3pm

Dec. 3<sup>rd</sup> – HSOC Undergraduate Research Symposium

Dec. 10<sup>th</sup> – Final Papers Due – 3pm – T-Square

- 1) First, during the *fourth week of classes (September 10<sup>th</sup> - 13<sup>th</sup>)*, *students will meet individually with Professor Singh* to discuss ideas for the research paper. You should come

to the meeting with at least two ideas. Therefore, you should begin thinking about topics now. I have attached a list of past projects to generate ideas. To help narrow down a broad topic, browse review articles in sociology journals on the topics of interest to you. Students will **share their research idea in class on October 10<sup>th</sup>**.

- 2) Second, students will **meet individually with Bruce Henson** in the library during weeks 5 & 6, **September TBD**. At this meeting, you should be prepared to explain your research topic to Bruce, and he will help you find both secondary and primary sources for your project. You will need to contact Bruce on your own; his e-mail address is [bruce.henson@library.gatech.edu](mailto:bruce.henson@library.gatech.edu). You need to have this meeting between your meeting with me and our class on October 10<sup>th</sup>.
- 3) Third, an **annotated bibliography is due by Oct. 10<sup>th</sup> at 3PM**. For this exercise, you need to find 4 academic sources (e.g., journal articles, books) and 2 primary sources (e.g., newspaper articles, Congressional hearings, historical archives, etc.) to use in your research paper. (Websites do not qualify as academic sources.) For each resource, provide a brief explanatory or evaluative commentary of the citation. Be sure to cite each source in ASA citation style. The bibliographic assignment should start with a brief statement about your research topic and the questions the research will be addressing. I will provide instructions and sample of annotated bibliography.
- 4) Fourth, you will need to turn in a **paper summary and outline on November 28<sup>th</sup> at 3 pm**. This paper should be about 5-7 pages (typed, double-spaced). In it, you will want to describe your research topic in more detail, the research strategy description (what type of data you are collecting and when/how it will be collected), a re-statement of research questions and an outline of the paper, including the theoretical approaches/sociological concepts you will be drawing on and an indication of research findings. You should include a brief bibliography with this paper of all the sources being used (academic and primary sources).
- 5) Fifth, students will **present their research at the HSOC Undergraduate Research Symposium – Dec. 3, 2018, 9-12pm**. These presentations will follow the standard time allotment at academic conferences: about 15 minutes. All presentations must be placed in T-Square.
- 6) Finally, you need to turn in a final paper. This paper should be approximately 20 pages long, double-spaced, with one-inch margins, in Times New Roman 12-point font or a font of similar size. The paper should include: a) an introduction indicating the topic and question, and why it is interesting/important, b) a review of relevant prior research and theories, leading to a more precise statement of the research question, c) a statement of the methods you have used in collecting and analyzing your data, d) a statement or summary of your research findings, and e) a discussion of how your findings relate to prior research and the theories/sociological concepts used for your analysis. You must draw on the theory of biomedicalization or other relevant frameworks, and f) a concluding section in which you show how (or the ways in which) your findings answered your research question and the significance of your findings for the prior studies and theories you reviewed (how this research adds to the existing literature) and highlight any interesting implications you foresee of this research topic, such as for daily life, health policy, or future research. In the conclusion, you must also write a paragraph about how your own social location may be influencing what you examine or how you interpret your observations. In this self-reflexive paragraph, also describe what was most challenging about this experience and what you learned most from the process. Please use ASA citation style – a guide will be available in T-

Square. This paper should have at least 10 academic sources and at least 2 different primary sources. A bibliography should be included at the end of the paper. ***The final paper is due by 9am on December 10th (Monday, Finals Week)***. Please upload to T-Square in assignments – Final Research Paper.

### **ACADEMIC HONOR CODE**

Academic Integrity Statement: Students are expected to act according to the highest ethical standards. The immediate objective of an Academic Honor Code is to prevent any Students from gaining an unfair advantage over other Students through academic misconduct. The following clarification of academic misconduct is taken from Section XIX Student Code of Conduct, of the Rules and Regulations section of the Georgia Institute of Technology General Catalog: Academic misconduct is any act that does or could improperly distort Student grades or other Student academic records. Such acts include but need not be limited to the following:

**Plagiarism:** Plagiarizing is defined by Webster's as "to steal and pass off (the ideas or words of another) as one's own: use (another's production) without crediting the source." I will check all papers for plagiarism and your papers will be considered as "plagiarized" in part or entirely if you do any of the following:

- Submit a paper that was written by someone other than you.
- Submit a paper in which you use the ideas, metaphors or reasoning style of another, but do not cite that source and/or place that source in your list of references.
- Submit a paper in which you "cut and paste" or use the exact words of a source and you do not put the words within quotation marks, use footnotes or in-text citations, and place the source in your list of references.

If caught plagiarizing, you will not receive credit for the assignment and you will be dealt with according to the GT Academic Honor Code.

### **ACCOMMODATIONS**

Students with disabilities needing reasonable accommodations are encouraged to contact the instructor. The Office of the Dean of Students, ADAPTS Disability Services Program is available to assist us with the reasonable accommodations process. More information at: <http://www.adapts.gatech.edu/index.php>.

### **DIVERSITY AND INCLUSION**

The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in broader society.

## READING SCHEDULE

**Week 1: August 22, 2018 - Introduction** – Foucault excerpt to be read in class.

### UNIT 1: BIOMEDICALIZATION AND BIOLOGICAL CITIZENSHIP

**Week 2: August 29, 2018**

Clarke, A. et al. (2010) *Biomedicalization: Technoscience, Health and Illness in the U.S.* Durham: Duke University Press (Part 1 only)

**Week 3: September 5, 2018**

Rose, N. (2007). *The Politics of Life Itself*. Princeton, NJ: Princeton University Press. (Omit Ch. 6 and Ch. 7)

**Week 4: September 12, 2018**

Petryna, A. (2001). *Life Exposed: Biological Citizens After Chernobyl*. Princeton, NJ: Princeton University Press. (Omit Ch. 6)

### UNIT 2: GENES, GENETICS, AND GENOMICS

**Week 5: September 19, 2018**

Shostak, S. (2013). *Exposed Science: Genes, the Environment, and the Politics of Population Health*. Berkeley, Los Angeles, and London: University of California Press

**Week 6: September 26, 2018**

Singh, Jennifer (2016) *Multiple Autisms: Spectrums of Advocacy and Genomic Science*. Minneapolis and London: University of Minnesota Press.

**Week 7: October 3, 2018**

Roberts, D. (2011). *Fatal Invention: How Science, Politics, and Big Business Recreate Race in the Twenty-First Century*. New York and London: The New Press.

### MID TERM

**Week 8: October 10, 2018**

Undergraduate Students: Turn in annotated bibliography (3PM). Please bring a paragraph about your ideas for final research project.

Graduate Students: Midterm exams due at 3pm. We will discuss exams in class and share ideas about research topics.

### UNIT 3: BIOMEDICINE AT THE INTERSECTION OF RACE, CLASS AND GENDER

**Week 9: October 17, 2018**

Shim, J. (2014). *Heart Sick: The Politics of Risk, Inequality and Heart Disease*. New York and London: New York University Press.

**Week 10: October 24, 2018**

Epstein, S. (2007) *Inclusion: The Politics of Difference in Medical Research*. Chicago and London: University of Chicago Press.

**Week 11: October 31, 2018**

Bridges, K. M. (2011) *Reproducing Race: An Ethnography of Pregnancy as a Site of Racialization*. Berkeley, Los Angeles, and London: University of California Press.

**Week 12: November 7, 2018** – Pick one additional book and be prepared to provide summary to class based on your reading response. Also provide introduction chapter to class by Week 11. List of Books at end of syllabus. Half class will present Nov. 7<sup>th</sup>.

**Week 13: November 14, 2018** - Second half of class will present summary of additional book to class.

**Week 14: November 21, 2018 - THANKSGIVING BREAK**

**Week 15: November 28, 2018** – Last class. Writing and presentation workshop as well as course wrap up. Chapter on how to write a research report in T-Square.

**Week 16: December 3, 2019 (Undergraduate Students Only)** – HSOC Undergraduate Symposium (9-12pm). All undergraduate students are required to present as part of your final grade. Graduate students are strongly encouraged to attend and offer support and feedback to students!!

**Week 16: December 10, 2018** – Final papers due – 9 am on T-Square

**List of Books (Pick only ONE or find another that aligns with your research interest – it must be an academic book. This is a very partial list and books that have used in this course in the past).**

Benjamin, Ruha (2013). *People's Science: Bodies and Rights on the Stem Cell Frontier*. Stanford University Press.

Reuter, Shelley Z. (2016) *Testing Fate: Tay-Sachs Disease and the Right to be Responsible*. Minneapolis and London: University of Minnesota Press.

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

Pollock, A. (2012). *Medicating Race: Heart disease and durable preoccupations with race*. Durham: Duke University Press.

Mol, A. (2002). *The Body Multiple: Ontology in Medical Practice*. Durham: Duke University Press.

*Drugs for Life: How Pharmaceutical Companies Define our Health* by Joe Dumit

*Impure Science: AIDS, Activism, and the Politics of Knowledge* by Steven Epstein

*Saving Babies: The Consequences of Newborn Genetic Screening* by Stephan Timmermans and Mara Buchbinder

*Body and Soul: The Black Panther Party and the Fight Against Medical Discrimination*

*The Rise of Viagra: How a Little Blue Pill Changed Sex in America* by Mika Loe

*Making the Mexican Diabetic: Race, Science and the Genetics of Inequality* by Michael J. Montoya

*Born and Made: An Ethnography of Preimplantation Genetic Diagnosis* by Sarah Franklin and Celia Roberts

Mei Zhan, *Other-Worldly: Making Chinese Medicine Through Transnational Frames* (Duke 2009)

Melinda Cooper and Catherine Waldby *Clinical Labor: Tissue Donors and Research Subjects in the Global Bioeconomy* (Duke 2014)

S. Lochlann Jain *Malignant: How Cancer Becomes Us* (University of California Press, 2013)



Dumit, J. (2004). *Picturing Personhood: Brain scans and Biomedical Identity*. Princeton, NJ: Princeton University Press.

Wilson, E. (2004). *Psychosomatic: Feminism and the Neurological Body*. Durham, NC: Duke University Press.

Silverman, C. (2012). *Understanding Autism: Parents, Doctors, and the History of a Disorder*. Princeton, NJ: Princeton University Press.

Waldby, C. and Mitchell, R. (2006) *Tissue Economies: Blood, Organs, and Cell Lines in Late Capitalism*. Durham and London: Duke University Press.

Additional Books:

Maudlin, L. (2016). *Made to Hear: Cochlear Implants and Raising Deaf Children*. Minneapolis and London. University of Minnesota Press.

Lindee, S. (2005) *Moments of Truth in Genetic Medicine*. Baltimore: The Johns Hopkins University Press.

Pitts-Taylor, V. (2016). *The Brain's Body: Neuroscience and Corporeal Politics*. Durham and London: Duke University Press.

Holloway, K.F.C. *Private Bodies, Public Texts: Race, Gender and a Cultural Bioethics*. Durham and London: Duke University Press.

Landecker, H. (2007). *Culturing Life: How cells became Technologies*. Harvard University Press.

**For more ideas – review different Academic Press Websites and do a search!  
Duke University Press, University of California Press, NYU Press, Minnesota University Press, Chicago University Press, etc.**

## **READING RESPONSE TEMPLATE**

CITATION: Properly cite the book/chapter

MAJOR CONCEPTS AND/OR THEORIES ADDRESSED (feel free to define concepts that are new and that you are learning for the first time. These will be concepts used to help analyze your research papers).

DISCUSSION QUESTIONS (2): These questions can be broad to the course or specific to a particular aspect of the book. What questions came up for you when you read this book?

READING RESPONSE: Use these questions to help with your response. Not all questions need to be answered. These questions will be used as starting points for our class discussion.

### ***What does the piece say?***

What research question does the reading address? (Or, what theoretical question?) What argument does the reading make? Is the reading clear? Are there difficult or problematic points that we should address in class?

### ***How does the piece support its claims?***

Is the argument based on systematically collected data, personal experience, theory, criticism/appreciation of others' ideas, or something else?

If based on data: Does the data support the author's claims? How strongly? Are there gaps or weaknesses in the analysis?

If based on theory: What are the author's basic theoretical assumptions, e.g. about medicine, health, disease, illness, human behavior, or the workings of organizations or other social groups? Are these assumptions plausible?

### ***How does it compare to other works on similar subjects?***

How are the author's claims similar to and/or different from those of other works we have read?

Who would this author agree with, and who would s/he disagree with? What would they agree/disagree about?

### ***Who cares?***

Does the piece have practical implications, e.g., does it tell us anything about how we ought to live our lives, organize our collective affairs, structure our major social institutions and policies, etc.?

Does it yield theoretical insights, e.g. does it tell us anything about how people, society, (bio) medicine, etc. work *in general*?

Does it include useful interpretations, e.g. does it cast familiar situations in fresh light or help us

understand our experiences in new and perhaps better ways?

Does it make a methodological contribution, e.g. does it demonstrate new ways of collecting and analyzing data or weighing ideas that might be useful in examining other topics?

How broadly do these insights apply? Do they apply to every person (or every innovation, every audience, etc.) in the world always? Or only to a particular society? To a particular society at a given time? To only certain people in that society at that time? Does the author make any claims about how broadly his or her conclusions apply, and do you agree?

***What do you think overall?***

What do you like and dislike about this reading? Why? Do you agree or disagree with the argument? Why?

### **General Sociology Resources:**

American Sociological Association: [www.asanet.org](http://www.asanet.org). There is a section for students that will let you browse the site and find information that could be applicable for this class.

<http://www.asanet.org/teaching-learning/undergraduate-student-resources>

**Socio-Web:** The SocioWeb is an independent guide to the sociological resources available on the Internet and is founded in the belief that the Internet can help to unite the sociological community in powerful ways. <http://www.socioweb.com/>

Sociological Images: Sociological Images encourages people to exercise and develop their sociological imaginations with discussions of compelling visuals that span the breadth of sociological inquiry. <http://thesocietypages.org/socimages/>

Dictionary of Sociology: <http://www.webref.org/sociology/sociology.htm>

### **Mainstream Medical Journals:**

Lancet

Journal of the American Medical Association (JAMA)

New England Journal of Medicine (NEJM)

### **Web Sites (there are hundreds of good websites on health):**

US Food and Drug Administration [www.fda.gov](http://www.fda.gov)

Institute of Medicine [www.iom.edu](http://www.iom.edu)

National Institutes of Health [www.nig.gov](http://www.nig.gov)

National Library of Medicine [www.nlm.nih.gov](http://www.nlm.nih.gov)

National Women's Health Network [www.womenshealthnetwork.org](http://www.womenshealthnetwork.org)

Center for Genetics and Society [www.genetics-and-society.org](http://www.genetics-and-society.org)

American Cancer Society [www.cancer.org](http://www.cancer.org)

American Heart Association [www.americanheart.org](http://www.americanheart.org)

American Lung Association [www.lungusa.org](http://www.lungusa.org)

Center for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)

### **Georgia Tech Library Resources**

Medical Journal Searches: [PubMed](http://pubmed.ncbi.nlm.nih.gov/)

Media searches: [Lexis-Nexus Academic Database](http://www.lexisnexis.com/)

Social Science Databases: [JSTOR](http://www.jstor.org/) and/or [Web of Science](http://www.science.org/)

### **Other Websites**

Criteria for evaluating news stories: <http://www.healthnewsreview.org/>