

LMC 3318: Biomedicine and Culture

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COURSE DESCRIPTION: This course discusses the history of biology and medicine; popular representations of health, disease, and the medical establishment; cross-cultural ethical issues; and the cultural implications of medical technologies. Subjects include the development of principles of experimental medicine, the Tuskegee syphilis study and the establishment of bioethics, the race among researchers to discover the HIV virus causing AIDS, and patients' rights and genetic technology. *Attributes: Humanities, Ethics*

LEARNING OUTCOMES:

- To increase awareness of the cultural factors affecting the development of biomedical knowledge and practice
- To increase awareness of and think critically about the role of biomedicine, including its technological means, in culture
- To explore nuance and ambiguity in ethical debates about research and practice in biomedicine
- To communicate in sophisticated ways about these issues of broad concern, orally and in writing

BOOKS THAT COULD BE PURCHASED; READINGS ALSO AVAILABLE IN PDF:

William Carlos Williams, *The Doctor Stories* New Directions, 1984. (\$11)—selected stories [also in pdf]
Claude Bernard, *Introduction to the Study of Experimental Medicine* (\$10) [excerpts in pdf]
Margaret Edson, *W;t* [or *Wit*]. Faber and Faber, 1993, 1999. (\$10) [also in pdf]
David Feldshuh, *Miss Evers' Boys*. Dramatists Play Service, 1989, 1995. (\$7.50) [also in pdf]

RESERVE READINGS also available as pdf documents in class t-square site:

Stanley Joel Reiser, "Examination of the patient in the seventeenth and eighteenth centuries" and "The stethoscope and the detection of pathology by sound," chapters 1 and 2 of *Medicine and the Reign of Technology* Cambridge University Press: 1-44.
James Jones, "A Moral Astigmatism" and "A Notoriously Bad Blood," chapters 1 and 2 of *Bad Blood*, Free Press, 1993: 1-29.
Susan Reverby, "Bioethics, History, and the Study as Gospel" and "The Court of Imagination," chapters 10 and 11 of *Examining Tuskegee: The Infamous Syphilis Study and Its Legacy*. The University of North Carolina Press, 2009: 187-215.
Stanley Joel Reiser, "Governing the Empire of Machines," *Technological Medicine: The Changing World of Doctors and Patients* Cambridge University Press, 2009: 186-203.
Bettyann Holtzmann Kevles, "Looking through Women: The Development of Ultrasound and Mammography." Chapter 10 of *Naked to the Bone: Medical Imaging in the Twentieth Century*. Addison-Wesley, 1997: 228-260.
Hannah Landecker, "Hela." Chapter 4 of *Culturing Life*, pp. 140-179
Randy Shilts, *And the Band Played On*. pp. 11-33, 80-92, 234-242, 263-277, 450-456, 486-503
A Timeline of HIV/AIDS <https://www.aids.gov/hiv-aids-basics/hiv-aids-101/aids-timeline/>
AIDS Retrospective Slideshow: A Pictorial Timeline of the HIV/AIDS Pandemic
<http://www.webmd.com/hiv-aids/ss/slideshow-aids-retrospective>
Rebecca Skloot, *The Immortal Life of Henrietta Lacks*. Broadway, 2010, 2011. (\$8.24) [excerpts]
Luc Montagnier, *Virus: The Co-Discoverer of HIV Tracks Its Rampage and Charts the Future*, 1999 (\$10) [Chapter 2]
Cindy Patton, *Inventing AIDS* [Introduction & Chapter 3]
Assignment 4 articles, which are available online and in pdf, are noted on the last page of this document.

TIPS: Download pdf files before leaving the US. We will reference texts during class discussions, so having access to print or electronic versions (on laptop, tablet, or phone) of these is helpful. Purchasing plays by Edson and Feldshuh and bringing these to GTL is recommended.

ADAPTS: The Office of Disability Services assists students self-identifying as having a disability to obtain reasonable accommodations. Documentation of disability is required to determine appropriate accommodations or modifications that may be helpful on campus. See <http://www.adapts.gatech.edu/>

ATTENDANCE IS REQUIRED IN THIS COURSE: Because class discussion and in-class assignments make up a significant percentage of the final grade, excessive absences could result in an unsatisfactory mark. Submit the appropriate documents to the instructor for medical, athletic, or other justified absences. Extended absences away from campus for family, medical, or legal reasons should be reported to Dr. Paul Voss at Georgia Tech Lorraine. The Georgia Tech Office of Student Life in Atlanta also has information: <https://studentlife.gatech.edu/content/class-attendance>

ACADEMIC HONESTY: If you quote, paraphrase, or summarize information that you originally obtained from a written (print or Internet) or a verbal source in your written assignment, this source reference should be cited in your text. You should use MLA style in your papers for this course: references should be parenthetically made within your essay, and references to texts not on the course reading list should be linked to a works cited section. Questions about appropriate forms of citation can be asked of the course instructor or the reference staff at the library. You should become familiar with the provisions of the Georgia Tech academic honor code and the policies governing violations of the honor code, both published in the Georgia Tech course catalog. For more information, see www.honor.gatech.edu

WRITTEN ASSIGNMENTS AND PARTICIPATION: Due dates for the writing assignments are listed in the syllabus. Your writing assignments will provide opportunities to extend classroom discussions and to meditate more thoughtfully on course topics. Class discussions depend on your analyses of the readings and your contributions to the conversations. Your essays should build on your reading and the class discussions. Please come to each class prepared to participate in discussions having read and thought about the text/s assigned for that day, bringing your ideas and questions to introduce into the discussion.

REPORTS: During each class a student will lead us through and share a short (5-8 minute) analysis of the text and topic, summarizing the reading's focus, evaluating its meaning and construction, and providing a question or two for class discussion. In preparing your presentation, consider what you learned from the reading, how it can apply to other readings, and which stylistic features of the text and aspects of its argument deserve consideration. You should consult the instructor if you have questions about your presentation. Remember that your contribution as a presenter should facilitate class conversations as you formulate appropriate questions that fit the course, provide a thoughtful way of approaching textual issues, and report on information gleaned from reading primary and critical material. Sign up for reports as soon as possible; "R:" indicates a report topic.

GRADING: All written assignments should be typed/printed and turned into the instructor or posted to the class tsquare site. Any postings to the class listserv should be in the body of the message (not sent as attachments). Late assignments will not be accepted unless you arrange with the instructor in advance of the due date.

Final grades will be calculated according to the following proportion:

- Assignment 1 (short essay on relationship of doctor/nurse and patient): 15% of final grade
- Assignment 2 (short essay on ethics, culture, medical technology) 15% of final grade
- Assignment 3 (short essay on public health, ethics) 15% of final grade
- Assignment 4 (team presentations on medical ethics article): 20% of final grade
- In-class oral report/leadership of one class discussion: 10% of final grade
- General class participation: 15% of final grade
- In-class writings: 10% of final grade

GRADING SCALE: 90-100=A, 80-89=B, 70-79=C, 60-69=D, less than 60=F

SCHEDULE:

Relationship of doctor and patient, diagnosis, therapy, ethics of research

W 5/17 Introduction to course; choose oral report topics (R:)

Discuss poems by W. C. Williams: "Médecin malgré lui," "The Poor," "To Close" (pp.129,132)

Th 5/18 Williams, *The Doctor Stories*, pp. 56-60 & pp. 92-98; Reiser, "Examination of the patient," *Medicine and the Reign of Technology*, pp. 1-22 (pdf)

R: Williams, "The Use of Force," *The Doctor Stories*, pp. 56-60

R: Williams, "The Paid Nurse," pp. 92-98

R: Reiser on cultural and technical issues related to examining the patient and diagnosing illness

F 5/19 Williams, *The Doctor Stories*, pp. 42-55 & 131-132; Reiser, "The stethoscope and the detection of pathology by sound," *Medicine and the Reign of Technology*, pp. 23-44 (pdf)

R: Williams, "The Girl with a Pimple Face," pp. 42-55

R: Williams, "The Dead Baby" and "A Cold Front," pp. 131-132

R: Reiser on development of stethoscope: technical and cultural factors

M 5/22 Claude Bernard, *Introduction to Experimental Medicine*, pp. 1-26, 115-122, 129-40 (pdf)

R: Observation and experiment (pp. 1-26, 115-122)

R: Passive experiment vs. experiment (pp. 1-26, 115-122)

R: Quantitative analysis and qualitative assessment (pp.132 ff)

R: Statistics and medicine (pp. 138 ff)

T 5/23 General Discussion of Bernard, *Introduction to Experimental Medicine*

Assignment 1 due: two-page (450-500-word) essay on doctor/nurse-patient relationship in readings by Williams, Reiser, Bernard

Development of evidence-based medicine, biomedical technologies

W 5/24 Stanley Joel Reiser, "Governing the Empire of Machines," *Technological Medicine*, 186-203 (pdf)

R: Ethical use of technologies in medicine

R: The example of ultrasound

M 5/29 Bettyann Kevles, "Ultrasound and Mammography," *Naked to the Bone*, Chapter 10: pp. 228-260 (pdf)

R: Development of ultrasound: technical factors

R: Development of ultrasound: cultural factors

T 5/30 Kevles, "Ultrasound and Mammography," *Naked to the Bone*, Chapter 10 228-260 (pdf)

R: Development of mammography: technical factors

R: Development of mammography: cultural factors

W 5/31 Discussion comparing discussions of culture and medical technologies in Bernard, Reiser, Kevles

Conflicts between medical therapy and research

Th 6/1 & F 6/2 Margaret Edson's *Wit* (Dir. Mike Nichols) Screen film

T 6/6 Edson, *Wit* (play)

R: Vivian Bearing's character

R: Doctors in the play

R: Nurse in the play

W 6/7 Discussion considering readings on culture and technology, play *Wit*, and film adaptation
Assignment 2 due: two-page (450-500-word) essay on tensions/ethical conflicts related to use of technologies in medical practice in two of these course texts: Reiser, Kevles, Edson.

The Tuskegee syphilis study, the development of bioethics, media representations of Tuskegee study

Th 6/8 James Jones, *Bad Blood*, chapter 1: pp. 1-15 (pdf)

R: *Bad Blood*, chapter 1: Public Health Service “experiment” on syphilis

R: *Bad Blood*, chapter 1: Nazi experiments and the Tuskegee syphilis study

F 6/9 James Jones, *Bad Blood*, chapter 2: pp.16-29 (pdf)

R: *Bad Blood*, chapter 2:cultural perceptions of race and sexuality and diagnosis of syphilis

R: *Bad Blood*, chapter 2:cultural perceptions of race and sexuality and treatment of syphilis

M 6/12 David Feldshuh, *Miss Evers’ Boys*

R: Patients in the play: their concerns

R: Doctors in the play: professional ethics in developing “study”

R: Nurse in the play: professional ethics in implementing “study”

T 6/13 David Feldshuh, *Miss Evers’ Boys*

R: Patients in the play: their concerns after “treatment”

R: Doctors in the play: professional ethics, considered in retrospect

R: Nurse in the play: professional ethics, considered in retrospect

W 6/14 Selections from Miss Evers’ Boys film (<https://www.youtube.com/watch?v=nHP1p9bRQ3Q>)

Th 6/15 Susan Reverby, “Bioethics, History, and the Study as Gospel,” ch. 10 of *Examining Tuskegee*, 187-203

R: Public imaginary of race and Tuskegee syphilis study

R: Tuskegee study and bioethics

T 6/20 Reverby, “The Court of Imagination,” ch. 11 of *Examining Tuskegee*, 204-215

R: Representing an historical case in popular film

R: Ethical concerns in film, according to Reverby

Medical research studies and patients’ rights; journalistic ethics

W 6/21 Rebecca Skloot, *Henrietta Lacks*, pp. 13-17, 62-66, 105-109, 127-143

R: Diagnosis of Henrietta Lacks

R: Treatment of Henrietta Lacks

Th 6/22 Skloot, *Henrietta Lacks*, pp. 152-169, 180-187, 315-328

R: Skloot’s interest in history of HeLa and Henrietta Lacks

R: Journalistic ethics and Skloot’s example

F 6/23 Assignment 3 DUE: two-page (500-word) essay on ethical conflicts in medical practice and research (syphilis, cancer), referencing representations in two of these course texts: Jones, Feldshuh, Reverby, Skloot.

Ethics and Public Health

T June 27- F June 30 On own watch *And the Band Played On* (Dir. Roger Spottiswoode; online at HBO Go, Amazon, and Vimeo)

W 7/5: In advance of class, review these websites:

A Timeline of HIV/AIDS <https://www.aids.gov/hiv-aids-basics/hiv-aids-101/aids-timeline/>

AIDS Retrospective Slideshow: A Pictorial Timeline of the HIV/AIDS Pandemic

<http://www.webmd.com/hiv-aids/ss/slideshow-aids-retrospective>

Class discussion: why is it important to know the history of HIV/AIDS as a disease? why is it important to consider politics and policy related to AIDS/HIV research and therapies?

Th 7/6: Randy Shilts, *And the Band Played On*, pp. 11-33, 80-92, 234-242, 263-277

R: Raising public awareness of infection

R: Alerting government officials to the AIDS health crisis

F 7/7: Shilts, *And the Band Played On*, pp. 450-456, 486-503

R: Collective action by patients and caregivers

R: Professional ethics in public health

M 7/10: Luc Montagnier, chapter 2: "The Red Notebook," *Virus* (autobiography of HIV researcher), pp. 42-82

R: Montagnier's discovery of HIV and the conflict with Gallo

R: AIDS epidemic: understanding origins and reducing infections

T 7/11: Cindy Patton, *Inventing AIDS*, Introduction and Chapter 3

R: Different interest groups concerned about HIV/AIDS

R: Community activism as an influence on medical research and practice

W 7/12, Th 7/13, T 7/18: In-class team meetings preparing group presentations (Assignment 4)

W 7/19: In-class team meetings practicing group presentations

Th 7/20, F 7/21, M 7/24, T 7/25, W7/26: Group presentations (Assignment 4) reflecting on ethical dilemmas in medical research and practice, referencing articles noted on next page and included in reserve and t-square readings.

Th 7/27 General discussion about course readings, discussions, and assignments

F 7/28 READING DAY

Assignment 4: Team oral presentation (20 minutes) on medical ethics, each presentation referencing one of these articles (all are on t-square and on reserve):

Carolyn Kohrman, "Through the Looking Glass," *The New Yorker*. December 21 & 28, 2015.
<http://www.newyorker.com/magazine/2015/12/21/through-the-looking-glass-annals-of-science-carolyn-kormann>
[Producing a low cost microscope for use in non-industrial countries]

Rebecca Solnit, "Medical Mountaineers," *The New Yorker*. December 21 & 28, 2015.
<http://www.newyorker.com/magazine/2015/12/21/medical-mountaineers>
[Providing medical care in remote places such as the Himalayas]

David C. Bellinger "Lead Contamination in Flint — An Abject Failure to Protect Public Health," *The New England Journal of Medicine*, 2016. <http://www.nejm.org/doi/full/10.1056/NEJMp1601013>

Suzanne Koven, "The Doctor's New Dilemma," *The New England Journal of Medicine*. 374, 7 (February 18, 2016) [Managing efficient, economic, and effective physician/patient visits]
<http://www.nejm.org/doi/full/10.1056/NEJMp1513708>

Atul Gawande, "Overkill" *The New Yorker*. May 11, 2015
An avalanche of unnecessary medical care is harming patients physically and financially. What can we do about it? <http://www.newyorker.com/magazine/2015/05/11/overkill-atul-gawande>

Amanda Schaffer, "The Moral Dilemmas of Doctors During Disaster," *The New Yorker*. September 12, 2013.
<http://www.newyorker.com/tech/elements/the-moral-dilemmas-of-doctors-during-disaster>

Jerome Amir Singh, "How Bioethics is Complementing Human Rights in Realizing Health Access for Clinical Trial Participants: The Case of Formative PrEP Access in South Africa," *Health and Human Rights* 17, 1 (June 2015), pp. 58-62. <http://www.hhrjournal.org/2015/06/how-bioethics-is-complementing-human-rights-in-realizing-health-access-for-clinical-trial-participants-the-case-of-formative-prep-access-in-south-africa/>

Emmanuel Kabengele Mpinga, Tshimungu Kandolo, Henk Verloo, Ngoyi K. Zacharie Bukonda, Ngianga-Bakwin Kandala and Philippe Chastonay, "Traditional/alternative medicines and the right to health: Key elements for a convention on global health." *Health and Human Rights* 15, 1 (June 2013), pp. 44-57.
<https://cdn2.sph.harvard.edu/wp-content/uploads/sites/13/2013/06/Mpinga-FINAL.pdf>

Sandra Soo-Jin Lee, "American DNA: The Politics of Potentiality in a Genomic Age," *Current Anthropology* 54,S7, *Potentiality and Humanness: Revisiting the Anthropological Object in Contemporary Biomedicine* (October 2013), pp. S77-S86 (pdf)

Atul Gawande, "The Heroism of Incremental Care (Tell Me Where It Hurts)," *New Yorker* January 23, 2017. *Our medical system rewards heroic intervention. When will we grasp the power of incremental care?*
<http://www.newyorker.com/magazine/2017/01/23/the-heroism-of-incremental-care> (pdf)

Michael Specter, "Rewriting the Code of Life." *New Yorker* January 2, 2017. *Through DNA editing, researchers hope to alter the genetic destiny of species and eliminate diseases.*
<http://www.newyorker.com/magazine/2017/01/02/rewriting-the-code-of-life> (pdf)

The group presentation should define the ethical concerns, dilemmas, conflicts, or problems in medicine or public health noted in the article. Often thinking about the interests of different individuals or groups can help define an ethical conflict or a possible conflict. If relevant, you can link issues to other course readings. Consider what could be and should be done to solve the problem or eliminate the conflict. What social/cultural or technical innovations could be developed and applied to this problem or another? Describe possible resistance to the solution or technology. What initiatives could overcome resistance?

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