#### Introduction to the Women's Caucus Syllabus Sampler

In the dozen or so years since the Women's Caucus of the History of Science Society (HSS) last compiled a syllabus sampler for courses on the history of women and gender in science, scholarship and teaching in this field has continued to expand and flourish. The Society's prize for the best article or book on women or gender in the history of science (given since 1987) was fully endowed largely due to the efforts of the HSS Women's Caucus. In 2004, the prize was named after pioneering historian of science, Margaret W. Rossiter, and as the quantity and richness of scholarship in this area has grown, it has become one of HSS's most competitive awards. Recent institutional transitions made by many college and university departments of "Women's Studies" to newly-christened departments of "Gender, Sexuality, and Women's Studies" reflect how the broad scholarly field in which many of our member historians locate their work now foregrounds the intersectionality of race, class, sex, and gender. The increased vibrancy and inclusively of this field has also complicated the prospect of teaching its themes and subjects in our courses, whether those courses are defined chronologically, by discipline, or by special topic.

We hope this updated syllabus sampler will provide a resource for enhancing or developing courses, units, or modules on women, gender, and sexuality in the history of what contemporary educational policy makers call STEM fields (i.e. Science, Technology, Engineering, and Mathematics). The syllabi presented here were submitted in response to a call for participants in an HSS Women's Caucus Workshop on this topic (held in at the 2011 Annual Meeting in Cleveland). Workshop participants discussed the diversity of ways in which the study of women and gender can transform the practice and teaching of history, engineering, and science for all students. Whether offered within a General Education course or as an upper-level majors-only elective, the materials presented draw our attention to the heterogeneous disciplinary framework of scholarship and teaching in the field (including historians, sociologists, and philosophers). Collectively, these syllabi offer a 'classroom-tested' set of sources and pedagogical strategies that we hope will inspire and encourage interested scholars and teachers.

We thank the contributors for sharing their insights and the products of their hard work, and also the workshop presenters and attendees, for a productive discussion. We are grateful to Jay Malone and the staff of the HSS Executive Office for overseeing the logistics of our meeting, and to the HSS Annual Meeting Local Arrangements Subcommittee and the VCU College of Humanities and Sciences (especially Associate Dean and physics faculty member Alison Baski) for support and funding.

Karen Rader, Co-Chair, Women's Caucus, 2009-2011

Erika Milam, Co-Chair, Women's Caucus, 2010-2012

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# HISTORY 607: SEMINAR IN EARLY TWENTIETH CENTURY TECHNOLOGY

# EMPHASIS: GENDER AND THE HISTORY OF TECHNOLOGY

Amy Bix, Iowa State University - spring, 1999

### **COURSE DESCRIPTION:**

This research seminar will concentrate on the history of American technology as linked to gender issues. We will investigate the ways in which men and women have approached technological change, the ways in which evolving technology has defined and redefined the workplace, the home, and personal lives. Our focus will cover issues such as gender and health technology, domestic technology, architecture, and workplace techniques.

# **REQUIRED BOOKS** -

- 1. Ruth Schwartz Cowan, More Work for Mother; Basic Books, 1983.
- 2. Virginia Scharff, Taking The Wheel; Free Press, 1991.
- 3. Judy Wajcman, Feminism Confronts Technology; Penn St., 1991.
- 4. Sharon Strom, Beyond the Typewriter; Illinois, 1992.

## Recommended books -

1. Marcus, Alan & Howard Segal; <u>Technology in America: A Brief History</u>, 2<sup>nd</sup> ed. HBJ, 1999.

Thursday, January 14 - Course introduction,

Thursday, January 21 – Introductory articles;

Thursday, January 28 - Judy Wajcman, Feminism Confronts Technology;

**Thursday, February 4 -** Ruth Schwartz Cowan, More Work for Mother;

Thursday, February 11 - Domesticity and Technology;

Phyllis Palmer, Domesticity & Dirt:

Dolores Hayden, The Grand Domestic Revolution: A History of Feminist Designs:

Barbara Ehrenreich, For her Own Good:

Laura Shapiro, Perfection Salad: Women & Cooking;

Carolyn Goldstein, Do It Yourself: Home Improvement in 20thC

Daphne Spain, Gendered Spaces;

Daniel Cohen, The Last Hundred Years: Household Technology;

Maureen Ogle, All the Modern Conveniences;

**Thursday, February 18** – Sharon Strom, Beyond the Typewriter; Illinois, 1992.

Thursday, February 25 – Technology, Gender, and the Workplace

Thomas Dublin, Women At Work: Transformation Work & Community in Lowell;

Judith McGaw, Most Wonderful Machine: Mechanization & Social Change in Papermaking:

Thomas Dublin, Transforming Women's Work: New England Lives Industrial Revolution;

Patricia Cooper, Once a Cigar Maker: Men, Women, Work Culture American Cigar Factories;

Margery Davies, Woman's Place is at the Typewriter;

Lisa Fine, The Souls of the Skyscraper;

Stephen Norwood, Labor's Flaming Youth: Telephone Operators;

Michele Martin, Hello Central: Gender, Technology, Culture in Formation Telephone Systems

# Thursday, March 4 – Virginia Scharff, Taking The Wheel;

# Thursday, March 11 – Gender and Aviation/Transport;

Deborah Douglas, <u>United States Women in Aviation</u>, 1940-1985;

Doris L. Rich, Amelia Earhart;

Mary Lovell, The Sound of Wings;

Susan Ware, Still Missing: Amelia Earhart;

Molly Merriam, Clipped Wings;

Sally Keil, Those Wonderful Women in their Flying Machines;

Mary Caodgan, Women With Wings:

Michael Schiffer, Taking Charge: Electric Auto in America;

# Thursday, March 25 - Gender, Invention, and Technology Issues;

Autumn Stanley, Mothers and Daughters of Invention;

Anne MacDonald, Feminine Ingenuity: How Women Inventors Changed America:

Cynthia Cockburn, Gender & Technology in the Making;

Cynthia Cockburn, Machinery of Dominance;

Cynthia Cockburn and Ruza Dilic, Bringing Technology Home;

Jan Zimmerman, The Technological Woman: Interfacing with Tomorrow;

Katherine Jellison, Entitled to Power: Farm Women & Technology, 1913-1963;

Roger Horowitz & Arwen Mohun, His and Hers: Gender, Consumption, and Technology;

# Thursday, April 1 - <u>Preliminary version of papers due:</u>

# Thursday, April 8 – <u>In-class paper critiques</u>;

## Thursday, April 15 - Gender and Health Technology/Leisure;

Kathryn Ratcliff, Healing Technology: Feminist Perspectives:

H. Patricia Hynes, Reconstructing Babylon;

Susan Squier, Babies in Bottles: 20thC Visions of Repro. Tech.

Robbie Davis-Floyd & Joseph Dumit, Cyborg Babies;

Anne Balsamo, Technologies of the Gendered Body;

Claudia Clark, Radium Girls: Women & Industrial Health Reform;

Kathy Peiss, Cheap Amusements: Working Women & Leisure;

Kathy Peiss, Hope in a Jar: The Making of America's Beauty Culture;

# Thursday, April 22 – Gender and Computer Technology;

Alison Adam, Artificial Knowing: Gender & the Thinking Machine:

Lynn Cherny, Wired Women: Gender & New Realities in Cyberspace:

Justine Cassell, From Barbie to Mortal Kombat;

Cheris Kramarae, <u>Technology and Women's Voices</u>;

Marguerite Zientara, Women, Technology & Power: Ten Stars;

Sally Hacker, Doing It the Hard Way: Investigations of Gender & Technology:

Sherry Turkle, <u>Life on the Screen</u>;

Steven Levy, <u>Hackers: Heroes of the Computer Revolution</u>;

Thursday, April 29 – Articles to be assigned;

#### Final version of papers due Monday, May 3

#### **UPDATED REFERENCE LIST – 2011 – ADDITIONAL BOOK POSSIBILITIES**

Rachel Maines, The Technology of Orgasm

Ruth Cowan, Heredity and Hope: The Case for Genetic Screening

Judy Wajeman, <u>TechnoFeminism</u>

Sherry Turkle, Alone Together: Why We Expect More from Technology & Less from Each Other

Jane Margolis, <u>Unlocking the Clubhouse: Women in Computing</u>

Thomas Misa, Gender Codes: Why Women Are Leaving Computing

Mary Frank Fox, Women, Gender, and Technology

Ruth Oldenziel, Making Technology Masculine: Men, Women, & Modern Machines in America

Nina Lerman, Gender and Technology: A Reader

Yasmin Kafai, Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming

Ruth Oldenziel, Cold War Kitchen: Americanization, Technology, and European Users

Georgine Clarsen, Eat My Dust: Early Women Motorists

Kurt Beyer, Grace Hopper and the Invention of the Information Age

Megan Elias, Stir it Up: Home Economics in American Culture

Sarah Stage, Rethinking Home Economics: Women and the History of a Profession

Jennifer Scanlon, The Gender and Consumer Culture Reader

Elaine Tyler May, America and the Pill: A History of Promise, Peril, and Liberation

Andrea Tone, <u>Devices and Desires</u>: A <u>History of Contraceptives in America</u>

Lara Marks, Sexual Chemistry: A History of the Contraceptive Pill

Elizabeth Watkins, On the Pill: A Social History of Oral Contraceptives

Andrea Tone, Controlling Reproduction: An American History

Rebecca Skloot, The Immortal Life of Henrietta Lacks

Laurel Thatcher Ulrich, <u>The Age of Homespun: Objects & Stories in Creation of American Myth</u> Linda Lavne, Feminist Technology

Francesca Bray, Technology and Gender: Fabrics of Power in Late Imperial China

Francine Moccio, Live Wire: Women and Brotherhood in the Electrical Industry

Susan Eisenberg, We'll Call You if We Need You: Women Working Construction

Janice Rutherford, Selling Mrs. Consumer: Christine Frederick & Rise of Household Efficiency

Venus Green, Race on the Line; Gender, Labor and Technology in the Bell System, 1880-1980

Betty Ann Holtzmann Kevles, Almost Heaven: The Story of Women in Space

Martha Ackmann, <u>The Mercury 13: The True Story of Thirteen Women & the Dream of Space</u> Margaret Weitekamp, <u>Right Stuff, Wrong Sex: America's First Women in Space Program</u> Stephanie Nolen, <u>Promised the Moon: The Untold Story of the First Women in the Space Race</u> Sarah Byrn Rickman, Nancy Love and the WASP Ferry Pilots of World War II

Molly Merryman, Clipped Wings: The Rise and Fall of the WASPs

Leslie Haynsworth, Amelia Earhart's Daughters

Eileen Lebow, Before Amelia: Women Pilots in the Early Days of Aviation

Gene Nora Jessen, Powder Puff Derby of 1929

Doris Rich, Queen Bess: Daredevil Aviator

Jessamyn Neuhaus, Manly Meals and Mom's Home Cooking: Cookbooks & Gender

Sherrie Inness, Kitchen Culture in America: Popular Representations of Food, Gender & Race

Arwen P. Mohun, <u>Steam Laundries: Gender, Technology & Work, US & Britain 1880-1940</u>

Jane Lancaster, Making Time: Lillian Moller Gilbreth

Laurel Graham, Managing On Her Own: Dr. Lillian Gilbreth & Women's Work Interwar Era

Jane Farrell-Beck, <u>Uplift: The Bra in America</u>

Valerie Steele, <u>The Corset: A Cultural History</u>

Paula Treichler, The Visible Woman: Imaging Technologies, Gender, and Science

Margarete Sandelowski, Devices and Desires: Gender, Technology & American Nursing

Margaret Layne, Women in Engineering: Pioneers and Trailblazers

Margaret Layne, Women in Engineering: Professional Life

Glenna Matthews, Silicon Valley, Women & the California Dream: Gender, Class, Opportunity

Ellen Lupton, Mechanical Brides: Women and Machines from Home to Office

Julie Wosk, Women and the Machine: Representations from Spinning Wheel to Electronic Age

Julie Wosk, Alluring Androids, Robot Women, and Electronic Eyes

# To XY and Beyond: Sexual Difference and Sexuality in the History of Science FRS 151, Fall 2008

Prof. Angela N. H. Creager Office hours, Monday, 1:00-3:00 p.m. Department of History, 125 Dickinson Hall Hargadon Hall G101A Thursdays, 1:30-4:20 pm Whitman College

# Course Description

This seminar will examine how biologists, physicians, sexologists, and other researchers have sought to explain sexual difference and sexuality in scientific terms. Rather than focus on current perspectives, we will examine the succession of theories and approaches that have been proposed during the past three hundred years, seeking to understand each on its own terms and in its own time. Topics will include the emergence of a two-sex model in the early modern period, nineteenth-century medical interest in hermaphroditism and sexual inversion, explanations of sex determination in terms of chromosomes and hormones, the study of animals and their mating patterns (in species from *Drosophila* to chimpanzees) with analogy to human sexual behavior, and twentieth-century understandings of sexual orientation, intersexuality, bisexuality, and transsexuality. We will pay attention to how ideas of sexual identity and expression have changed over time, and compare how meanings vary according to discipline. For example, we will see how and under what conditions researchers have differentiated between the categories of sex. gender, and sexuality. Our readings will also trace how scientific conceptions have shaped popular understandings of what it is to be male or female, straight or gay—as well as how cultural notions and norms have influenced researchers. The seminar will draw together scholarship in history of biology and medicine, feminist theory, and LGBT studies, with an aim to help students think historically about both science and culture.

# Course Requirements

We will read both primary sources, most by physicians and scientists from the nineteenth and twentieth centuries, and secondary sources, most by contemporary historians and theorists offer interpretations of past developments and perceptions. The seminar portion of the grade will be based on the quality and vociferousness of one's contributions to discussion and several short responses to the readings posted on Blackboard prior to class. Two short mid-term papers will be assigned during the fall. The final paper (15 pages, due 3 p.m. Dean's Date, Jan. 13, 2009; extensions *only* through Dean's Office) will be more open-ended; students are expected to engage the scholarship on sex and science analytically, choosing a topic of interest related to the course theme or materials.

1 <sup>st</sup> paper	20%
2 <sup>nd</sup> paper	25%
Final paper	30%
Seminar participation	25%

# **Readings and Class Schedule**

Please note that assigned readings must be completed before the seminar session. Readings marked by an asterisk are from required books available at Labyrinth. These books are also on 3-hour reserve in Firestone Library. The other readings can be found on the Blackboard site for FRS 151 under E-Reserves.

# Week 1. (9/11) Introduction to the Seminar

Alice Dreger, "Sex Beyond the Karyotype," in *Controversies in Science & Technology: From Climate to Chromosomes*, vol. 2, eds. Daniel Lee Kleinman, Karen A. Cloud-Hansen, Christina Matta, and Jo Handelsman (New Rochelle, NY: MaryAnn Liebert, 2008), pp. 481–492.

# Week 2. (9/18) Sexuality as a Historical Problem

- \*Anne Fausto-Sterling, "Dueling Dualisms" and "That Sexe Which Prevaileth'," in *Sexing the Body: Gender Politics and the Construction of Sexuality* (New York: Basic Books, 2000), pp. 1–44.
- Robert A. Padgug, "Sexual Matters: On Conceptualizing Sexuality in History (1979)," in *Culture, Society and Sexuality: A Reader*, 2<sup>nd</sup> edition, eds. Richard Parker and Peter Aggleton (London: Routledge, 2007), pp. 17–30.
- \*Michel Foucault, "We 'Other Victorians" and "Scientia Sexualis," in *The History of Sexuality: An Introduction*, trans. Robert Hurley (New York: Vintage Books, 1978), pp. 3–13, 53–73. (If you have the time and the patience, also read "The Repressive Hypothesis," pp. 17–49 to get the full argument.)
- Week 3. (9/25) Perceptions of Sexual Difference from the Greeks to Early Modern Europe: The Emergence of the Two-Sex Model
- Patrick Geddes and J. Arthur Thompson, "Preface to the Second Edition" and "Chapter 2: The Sexes, and Criticism of Sexual Selection," in *The Evolution of Sex* (1889; repr. London: Walter Scott, 1908), pp. i–viii, 16–33.
- \*Thomas Laqueur, "Of Language and the Flesh," "New Science, One Flesh," and "Discovery of the Sexes," Chapters 1, 3, and 5 of *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge: Harvard University Press, 1990), 1–24, 63–113, 149–192.
- Ludmilla Jordanova, "Natural Facts: A Historical Perspective on Science and Sexuality," in *Nature, Culture and Gender*, eds. Carol McCormach and Marilyn Strathern (Cambridge: Cambridge University Press, 1980), pp. 42–69.
- Weeks 4. (10/2) <u>The Two-Sex Model's Misfits: Inverts and Hermaphrodites</u> Vernon A. Rosario, "Turn-of-the-Century Sexual Inverts," *Homosexuality and Science: A Guide to the Debates* (Santa Barbara, CA: ABC-Clio, 2002), pp. 39–57.

- Jennifer Terry, "Anxious Slippages between 'Us' and 'Them': A Brief History of the Scientific Search for Homosexual Bodies," in *Deviant Bodies: Critical Perspectives on Difference in Science and Popular Culture*, eds. Jennifer Terry and Jacquiline Urla (Bloomington, IN: Indiana University Press, 1999), pp. 129–169.
- Lisa Duggan, "The Trials of Alice Mitchell: Sensationalism, Sexology, and the Lesbian Subject in Turn-of-the-Century America," *Signs* 18 (1993): 791–814.
- Christina Matta, "Ambiguous Bodies and Deviant Sexualities: Hermaphrodites, Homosexuality, and Surgery in the United States, 1850-1940," *Perspectives in Biology and Medicine* 48 (2003): 74–83.
- Library Session with Dr. Elizabeth Bennett, 2-6-F Firestone, 3:00-4:20 pm

# Week 5. (10/9) Freud's Theory of Sexuality

- Sigmund Freud, "Some Psychological Consequences of the Anatomical Distinction Between the Sexes," (1925) in *Sexuality and the Psychology of Love*, ed. Philip Reiff (New York: Collier Books, 1963), pp. 183–193.
- Roger Horrocks, "Freud I: From Biology to Psychology," and "Freud II: Male and Female Sexuality," in *An Introduction to the Study of Sexuality* (London: Macmillan, 1997), pp. 25–67.
- October 13, 2008 First Paper Due, 3 p.m., 127 Dickinson Hall, "To: Creager" box

# Week 6. (10/16) Sexual Behavior Surveyed: Kinsey

- Alfred C. Kinsey, et al., Table of Contents and selected pages from Chapter 21, "Homosexual Outlet," *Sexual Behavior in the Human Male* (Philadelphia, PA: W. B. Saunders, 1948); Alfred C. Kinsey, et al., Table of Contents, *Sexual Behavior in the Human Female* (Philadelphia, PA: W. B. Saunders, 1953).
- Janice M. Irvine, "From Difference to Sameness: Gender Ideology in Sexual Science," *The Journal of Sex Research* 27 (1990): 7–24.
- Stephanie H. Kenen, "Who Counts When You're Counting Homosexuals? Hormones and Homosexuality in Mid-Twentieth-Century America," in *Science and Homosexualities*, ed. Vernon Rosario (New York: Routledge, 1997), pp. 197–218.
- Class screening of "Kinsey," 2004.

# Week 7. (10/23) Gender Trumps Sex?: Gender Identity and Transexuality

- Robert J. Stoller, "A Contribution to the Study of Gender Identity," *International Journal of Psycho-Analysis* 45 (1964): 220–226.
- Joanne Meyerowitz, "Sex Research at the Borders of Gender: Transvestites, Transsexuals, and Alfred C. Kinsey," *Bulletin of the History of Medicine* 75 (2001): 72–90.
- Bernice L. Hausman, "Introduction," *Changing Sex: Transsexualism, Technology, and the Idea of Gender* (Durham, NC: Duke University Press, 1995), pp. 1–20.

Anne Fausto-Sterling, "How to Build a Man," in *Science and Homosexualities*, ed. Vernon Rosario (New York: Routledge, 1997), pp. 219–225; or, for a more detailed and illustrated account, "Of Gender and Genitals: The Use and Abuse of the Modern Intersexual," in *Sexing the Body: Gender Politics and the Construction of Sexuality* (New York: Basic Books, 2000), pp. 46–77.

# Fall Break (10/30)

## Week 8. (11/6) Hormones and Chromosomes

- \*Anne Fausto-Sterling, "Sex Glands, Hormones, and Gender Chemistry," and "Do Sex Hormones Really Exist?" in *Sexing the Body: Gender Politics and the Construction of Sexuality* (New York: Basic Books, 2000), pp. 146–194.
- Nelly Oudshoorn, "Female or Male: The Classification of Homosexuality and Gender," *Journal of Homosexuality* 28:1/2 (1995): 79–86.
- Angela M. L. Pattatucci and Dean Hamer, "The Genetics of Sexual Orientation: From Fruit Flies to Humans," in *Sexual Nature /Sexual Culture*, eds. Paul R. Abramson and Steven D. Pinkerton (Chicago: University of Chicago Press, 1995), pp. 154–174.
- Sarah S. Richardson, "When Gender Criticism Becomes Standard Scientific Practice: The Case of Sex Determination Genetics," in *Gendered Innovations in Science and Engineering*, ed. Londa Schiebinger (Stanford: Stanford University Press, 2008), pp. 22–42.

#### Week 9. (11/13) Sexuality in Cross-Cultural Perspective

- \*Margaret Mead, Coming of Age in Samoa: A Psychological Study of Primitive Youth for Western Civilization (1928; repr. Perennial Classics, 2001), esp. "Introduction," "Formal Sex Relations," and "The Experience and Individuality of the Average Girl."
- Ruth Benedict, "Sex in Primitive Society," *The American Journal of Orthopsychiatry* 9 (1939): 570–575.
- Micaela di Leonardo, "Margaret Mead vs. Tony Soprano," *The Nation*, May 21, 2001.
- Wah-Shan Chou, "A World Without Homo-HeteroDuality: Rewriting the Traditional Chinese History of Same-Sex Eroticism," excerpt from chapter 1 of *Tongzhi: Politics of Same-Sex Eroticism in Chinese Societies* (New York: Haworth Press, 2000), pp. 13–26.

# Week 10. (11/20) Transgenderism

- Janice M. Irvine, "Boys Will Be Girls: Contemporary Research on Gender," in *Disorders of Desire: Sexuality and Gender in Modern American Sexology* (Philadelphia, PA: Temple University Press, 2005 [1990]), pp. 185–224.
- Ben A. Barres, "Does Gender Matter?" *Nature* 442 (July 13, 2006), pp. 133–136. *International Journal of Transgenderism*, Special Issue: What is Transgender?, Vol. 4, No. 3 (July/September 2000). Peruse.

Viewing of excerpts from 20/20's "My Secret Self" and "Transgenerations," followed by mock talk show panel in which each student acts as a scientist or researcher we have studied and explains transgender behavior from his or her perspective.

November 26, 2008 Second Paper Due, 3 p.m., 127 Dickinson Hall, "To: Creager" box

Thanksgiving holiday (11/27)

December 3, 2008 Joanne Meyerowitz speaking for the Modern America Workshop, Department of History, "'How Common Culture Shapes the Separate Lives': Sexuality, Race, and the History of Social Constructionist Thought." 12:00-1:20 pm, 210 Dickinson Hall

# Week 11. (12/4) Primatology and Sociobiology

- Sarah Blaffer Hrdy, "The Primate Origins of Female Sexuality" and "A Disputed Legacy," in *The Woman that Never Evolved* (1981; repr. Cambridge, MA: Harvard University Press, 1999), pp. 131–188.
- Adrienne Zihlman, "Gathering Stories for Hunting Human Nature," *Feminist Studies* 11:2 (1985): 365–377.
- Mildred Dickemann, "Wilson's Panchreston: The Inclusive Fitness Hypothesis of Sociobiology Re-Examined," *Journal of Homosexuality* 28:1/2 (1995): 147–183.
- Week 12. (12/11) <u>Humans and Creatures: Comparative Understandings of Sex</u> \*Joan Roughgarden, *Evolution's Rainbow: Diversity, Gender, and Sexuality in Nature and People* (Berkeley: University of California Press, 2004), Part I, pp. 1–188.
- Judith Halberstam, "Finding Nemo and Transgender Creatues," in 21<sup>st</sup> Century Sexualities: Contemporary Issues in Health, Education, and Rights, eds. Gilbert Herdt and Cymene Howe (London: Routledge, 2007), pp. 63–66.

January 13, 2009 Third Paper Due, 3 p.m., 127 Dickinson Hall, "To: Creager" box

# Seminar on Gender and Science WOM 393

Prof. Angela N. H. Creager Office hours 2:00–3:00 pm M, 1:30-2:30 pm Tu 125 Dickinson Hall, ext. 1680 Fall 2009 W 1:30–4:20 p.m. 101 Marx Hall

## **Course Description**

Why has science traditionally been a man's domain? What are the consequences of that? Have the growing numbers of women practitioners in many fields changed the culture of science? This course will start with the sex/gender distinction and both its promise and problems for understanding developments in science. We examine the historic systematic exclusion of women from science, while stressing that science has not been unique in its failure to welcome women as participants. Given that feminist critiques have been circulating for twenty-five years, we also ask how they have impacted science so far—and how feminism has challenged or changed technology and medicine as well. Our readings will include both classic works of feminist scholarship on science, medicine, and technology and current work, including perspectives on sexuality and science. This course is intended both to familiarize students with the scholarly issues around gender and science and to allow students to reflect on their own (gendered) experiences and expectations in encountering science as students, laboratory workers, patients, and consumers.

#### **Course Requirements**

Students are expected to read the assigned selections fully in preparation for seminar, and to post a page-long response to the readings on Blackboard at least five times during the semester. These responses will be due Tuesdays at 5 p.m. (in advance of the next day's afternoon seminar). In addition to these responses and your regular, vociferous participation in the discussions, two papers are required. The first paper is a biographical sketch (5–7 pages, due 5 p.m. Monday, Nov. 16, 2009) of the life and work of a woman scientist or natural philosopher. Students are urged to consult available primary and secondary source material, including any published papers or books by the scholar. In addition, the archives or national libraries where relevant manuscripts are available should be cited (if applicable). Where biographies have already been written on the subject, the student should comment on the adequacy of the biographical depictions available in the literature.

In the final paper (15–25 pages, due 3 p.m. Dean's Date, Jan. 12, 2010; extensions *only* through Dean's Office), students are expected to engage the scholarship on gender and science analytically. The specific topic may be one that we are covering in the syllabus or a topic of the student's interest. For example, the paper might be a thoughtful literature review, an examination of past or current gender issues in science, or an analysis, informed by feminist theory or perspectives, of a current problem in scientific or medical research.

The following required books are on sale at Labyrinth, as well as on reserve in Firestone. All other assigned readings are available on E-reserves through Blackboard.

Londa Schiebinger, *The Mind Has No Sex?*, Harvard University Press, 1989.

Anne Fausto-Sterling, *Sexing the Body*, Basic Books, 2000.

Joan Cassell, *The Woman in the Surgeon's Body*, Harvard University Press, 1998.

Angela N. H. Creager, Elizabeth Lunbeck, and Londa Schiebinger, eds., *Feminism in Twentieth-Century Science, Technology, and Medicine*, University of Chicago Press, 2001.

Rachel P. Maines, *The Technology of Orgasm*, Johns Hopkins Press, 1998.

# **Readings and Class Schedule**

Please note that assigned readings should be completed before the week's precept meeting. **The name under which each reading is listed in E-reserves is bolded.** 

- **Week 1.** (9/23) <u>Introducing Seminar Themes: Why Gender and Science?</u> Video: Bill Moyers' interview with Evelyn Fox Keller from "A World of Ideas"
- **Week 2.** (9/30) The Sex/Gender Distinction and Its Legacy for Science Studies Anne Fausto-Sterling, "Dueling Dualisms," *Sexing the Body*, chapter 1.
- Joan Wallach **Scott**, "Gender: A Useful Category of Historical Analysis," from *Gender and the Politics of History* (New York: Columbia University Press, 1988): 28–50.
- Evelyn Fox **Keller**, "The Gender/Science System: Is Sex to Gender as Nature is to Science?," in Nancy Tuana, ed., *Feminism and Science* (Bloomington: Indiana University Press, 1990), pp. 33–44.
- Genevieve **Lloyd**, "Reason, Science and the Domination of Matter," in Evelyn Fox Keller and Helen Longino, eds., *Feminism & Science* (New York: Oxford University Press, 1996), pp. 41–53.
- Robert J. **Stoller**, "A Contribution to the Study of Gender Identity," *International Journal of Psycho-Analysis* **45** (1964): 220–226.
- Moira **Gatens**, "A Critique of the Sex/Gender Distinction," in Sneja Gunew, ed., *A Reader in Feminist Knowledge* (London: Routledge, 1991), pp. 139–157.
- Judith **Butler**, "The Compulsory Order of Sex/Gender/Desire" and "Identity, Sex, and the Metaphysics of Substance," from *Gender Trouble:* Feminism and the Subversion of Identity (New York: Routledge, 1990), pp. 6–7, 16–25.
- Elizabeth **Week**, "Introduction," and Judith Butler, "Against Proper Objects," in Elizabeth Week and Naomi Schor, eds., *Feminism Meets Queer Theory* (Bloomington, IN: Indiana University Press, 1997), pp. vii–xiii, 1–30.

### A. Women and the History of Science, Technology, and Medicine

- **Week 3.** (10/7) The History of Science as a Manly Vocation
- Londa Schiebinger, *The Mind Has No Sex?*, Introduction and Chapters 1, 2, 3, and 7.
- Evelyn Fox **Keller**, "Spirit and Reason at the Birth of Modern Science," from *Reflections on Gender and Science* (New Haven: Yale University Press, 1985), pp. 43–65.
- Jan **Golinski**, "The Care of the Self and the Masculine Birth of Science," *History of Science* 40 (2002): 125–145.
- Mary **Terrall**, "Gendered Spaces, Gendered Audiences: Inside and Outside the Paris Academy of Sciences," *Configurations* 2 (1995): 207-232.

- Sharon **Traweek**, "Pilgrim's Progress: Male Tales Told During a Life in Physics," *Beamtimes and Lifetimes: The World of High Energy Physics* (Cambridge, MA: Harvard University Press, 1988), Chapter 3.
- **Week 4.** (10/14) <u>Overcoming the Odds: 19th and 20th Century Women</u>
  Scientists and Physicians
- Note: We will meet with Emily Belcher, bibliographer for women and gender, in Firestone Library foyer for a session from 1:30-2:30 pm on this day.
- Margaret **Rossiter**, *Women Scientists in America: Struggles and Strategies to* 1940 (Baltimore: The Johns Hopkins University Press, 1982), Introduction, Chapters 1, 2, 5, and Conclusion.
- Ellen M. **More**, Elizabeth Fee, and Manon Perry, "New Perspectives on Women Physicians and Medicine in the United States, 1849 to the Present," in Ellen M. More, Elizabeth Fee, and Manon Perry, *Women Physicians and the Cultures of Medicine* (Baltimore, MD: Johns Hopkins University Press, 2009), pp. 1–20.
- Carla **Bittel**, "Mary Putnam Jacobi and the Nineteenth-Century Politics of Women's Health Research," in *Women Physicians and the Cultures of Medicine*, pp. 23–51.
- Edward H. **Clark**, *Sex in Education; Or, A Fair Chance for Girls* (Boston: Houghton, Mifflin, and Co., 1882), pp. 11–60.
- Evelyn Fox **Keller**, "A World of Difference," from *Reflections on Gender and Science* (New Haven: Yale University Press, 1985), pp. 158–176.
- Nina V. **Federoff**, "Two Women Geneticists," *American Scholar* **65** (1996): 587–592.
- In addition, each of you will read and report on one of these biographical sketches (the books are on reserve, not E-reserves):
- Sally Gregory Kohlstedt, "Maria Mitchell and the Advancement of Women in Science," in *Uneasy Careers and Intimate Lives: Women in Science,* 1789–1979, edited by Pnina G. Abir-Am and Dorinda Outram (New Brunswick: Rutgers University Press, 1987), pp. 129–146.
- Joy Harvey, "'Strangers to Each Other': Male and Female Relationships in the Life and Work of Clémence Royer," in *Uneasy Careers and Intimate Lives*, pp. 147–171.
- Ann Hibner Koblitz, "Career and Home Life in the 1880s: The Choices of Mathematician Sofia Kovalevskaia," in *Uneasy Careers and Intimate Lives*, pp. 172–190.
- Helena M. Pycior, "Marie Curie's 'Anti-natural Path': Time Only for Science and Family," in *Uneasy Careers and Intimate Lives,* pp. 191–215.
- Peggy Kidwell, "Cecilia Payne-Gaposchkin: Astronomy in the Family," in *Uneasy Careers and Intimate Lives*, pp. 216–238.
- Pnina G. Abir-Am, "Synergy or Clash: Disciplinary and Marital Strategies in the Career of Mathematical Biologist Dorothy Wrinch," in *Uneasy Careers and Intimate Lives*, pp. 239–280.
- Penina Migdal Glazer and Miriam Slater, "The Promise of New Opportunities in Science," *Unequal Colleagues: The Entrance of Women into the*

- *Professions, 1890–1940* (New Brunswick: Rutgers University Press, 1987), pp. 119–164.
- Marsha L. Richmond, "Women in the Early History of Genetics: William Bateson and the Newnham College Mendelians, 1900–1910," *Isis* 92 (2001): 52–90.
- Maria Rentetzi, "Gender, Politics, and Radioactivity Research in Interwar Vienna: The Case of the Institute for Radium Research," *Isis* 95 (2004): 359–393.
- Arleen Tuchman, "Situating Gender: Marie E. Zakrzewska and the Place of Science in Women's Medical Education," *Isis* 95 (2004): 34–57.
- Judy Tzu-Chun Wu, "A Chinese Woman Doctor in Progressive Era Chicago," in *Women Physicians and the Cultures of Medicine*, pp. 89–112.
- Ellen S. More, "Professionalism versus Sexuality in the Career of Dr. Mary Steichen Calderone, 1904–1998," in *Women Physicians and the Cultures of Medicine*, pp. 113–137.
- **Week 5.** (10/21) <u>Contemporary Science: Does Gender Still Matter? What</u> about Race?
- Professor Elizabeth Gavis, of the Department of Molecular Biology, will visit the class to discuss the current experiences of women in science, especially at Princeton.
- Ben A. Barres, "Does Gender Matter?" Nature 442 (July 13, 2006): 133-136.
- Henry **Etzkowitz**, Carol Kemelgot, Michael Neuschatz, Brian Uzzi, and Joseph Alonza, "The Paradox of Critical Mass for Women in Science," *Science* 266 (1994): 51–54.
- Evelyn Fox Keller, "The Anomaly of a Woman in Physics," from *Working It Out: 23 Women Writers, Artists, Scientists, and Scholars Talk About Their Lives and Work*, eds. Sara **Ruddick** and Pamela Daniels (New York: Pantheon Books, 1977), p. 78–91.
- Shirley **Tilghman**, "Science vs. the Female Scientist" and "Science vs. Women A Radical Solution," *New York Times* editorials, January 25 and 26, 1993. (Note: these are two entries on E-reserves.)
- C. Megan **Urry**, "Are Photons Gendered? Women in Physics and Astronomy," in *Gendered Innovations in Science and Engineering*, ed. Londa Schiebinger (Stanford, CA: Stanford University Press, 2008), pp. 150–164.
- Christine **Wennerås** and Agnes Wold, "Nepotism and Sexism in Peer-Review," *Nature* 387 (1997): 341–343.
- Erica **Frank**, Elizabeth Fee, Manon Perry, and Ellen S. More, "Opportunities and Obstacles for Women Physicians in the Twenty-First Century," in Ellen M. More, Elizabeth Fee, and Manon Perry, *Women Physicians and the Cultures of Medicine* (Baltimore, MD: Johns Hopkins University Press, 2009), pp. 319–341.
- Evelynn **Hammonds** (interview by Aimee Sands), "Never Meant to Survive: A Black Woman's Journey," from *The "Racial" Economy: Towards a Democratic Future*, ed. Sandra Harding (Bloomington: Indiana University Press, 1993), pp. 239–248.

- **Week 6.** (10/28) <u>Women's History and the History of Technology:</u> Interactions and Contradictions
- Donna **Haraway**, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," from *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), pp. 149–181.
- Carol **Cohn**, "Sex and Death in the Rational World of Defense Intellectuals," *Signs* 12 (1987): 687–718.
- Hugh **Gusterson**, "Becoming a Weapons Scientist," from *People of the Bomb: Portraits of America's Nuclear Complex* (St. Paul, MN: University of Minnesota Press, 2004), pp. 3–20.
- Carroll Pursell, "Feminism and the Rethinking of the History of Technology," in *Feminism in Twentieth-Century Science, Technology, and Medicine*, eds. Angela N. H. Creager, Elizabeth Lunbeck, and Londa Schiebinger (Chicago: University of Chicago Press, 2001), pp. 113–127.
- Ruth Oldenziel, "Man the Maker, Woman the Consumer: The Consumption Junction Revisited," in *Feminism in Twentieth-Century Science, Technology, and Medicine*, pp. 128–148.
- Michael S. Mahoney, "Boys' Toys and Women's Work: Feminism Engages Software," in *Feminism in Twentieth-Century Science, Technology, and Medicine*, pp. 169–185.
- Tatiana Butovitsch Temm, "If You Meet the Expectations of Women, You Exceed the Expectations of Men: How Volvo Designed a Car for Women Customers and Made World Headlines," in *Gendered Innovations in Science and Engineering*, ed. Londa **Schiebinger** (Stanford, CA: Stanford University Press, 2008), pp. 131–149.

Fall recess (11/4)

# **Week 7.** (11/11) <u>The World of Medicine I.: Physicians and Patients</u> Embodied

- Joan Cassell, *The Woman in the Surgeon's Body* (Cambridge, MA: Harvard University Press, 1998).
- Nelly Oudshoorn, "On Bodies, Technologies, and Feminisms," in *Feminism in Twentieth-Century Science, Technology, and Medicine*, pp. 199–213.

Elizabeth A. Wilson, "Gut Feminism," differences 15 (2004): 66–94.

Monday, Nov. 16: first paper due

- **Week 8.** (11/18) <u>The World of Medicine II.: The Consumption Junction</u>
  Ruth Schwartz Cowan, "Medicine, Technology, and Gender in the History of Prenatal Diagnosis," in *Feminism in Twentieth-Century Science, Technology, and Medicine*, pp. 186–198.
- Rachel P. Maines, *The Technology of Orgasm: "Hysteria," the Vibrator, and Women's Sexual Satisfaction* (Baltimore: Johns Hopkins Press, 1998).

- Amy **Hairston**, "The Debate Over Twilight Sleep: Women Influencing Their Medicine," *Journal of Women's Health* 5 (1996): 489–499.
- No class Wednesday, Nov. 25 due to Thanksgiving; reschedule during reading week.

#### **B.** Feminism and the Sciences

- **Week 9.** (12/2) "Making Sex": Differences and Their Discontents
- Suzanne J. **Kessler**, "The Medical Construction of Gender: Case Management of Intersexed Infants," *Signs* 16 (1990): 3–26.
- Jennifer **Terry**, "Anxious Slippages between 'Us' and 'Them': A Brief History of the Scientific Search for Homosexual Bodies," in *Deviant Bodies:* Critical Perspectives on Difference in Science and Popular Culture, eds. Jennifer Terry and Jacquiline Urla (Bloomington, IN: Indiana University Press, 1999), pp. 129–169.
- Stephanie H. **Kenen**, "Who Counts When You're Counting Homosexuals? Hormones and Homosexuality in Mid-Twentieth-Century America," in Vernon Rosario, ed., *Science and Homosexualities* (New York: Routledge, 1997), pp. 197–218.
- Angela M. L. **Pattatucci** and Dean Hamer, "The Genetics of Sexual Orientation: From Fruit Flies to Humans," in Paul R. Abramson and Steven D. Pinkerton, eds., *Sexual Nature / Sexual Culture* (Chicago: University of Chicago Press, 1995), pp. 154–174.
- Anne Fausto-Sterling. *Sexing the Body* (New York: Basic Books, 1992), chapters 2, 3, 4, and 9, plus a chapter of your choice among the others (5–8).
- **Week 10.** (12/9) <u>Scrutinizing Science: Critiques of/in Biology</u> *Note*: Final paper proposal due this week (1 paragraph).
- Alison Wylie, "Doing Social Science as a Feminist: The Engendering of Archaeology," in *Feminism in Twentieth-Century Science, Technology, and Medicine*, pp. 23–45.
- Emily **Martin**, "The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles," *Signs* 16 (1991): pp. 485-501.
- Sarah S. **Richardson**, "When Gender Criticism Becomes Standard Scientific Practice: The Case of Sex Determination Genetics," in *Gendered Innovations in Science and Engineering*, ed. Londa Schiebinger (Stanford, CA: Stanford University Press, 2008), pp. 22–42.
- Elizabeth A. **Wilson**, "Introduction: Somatic Compliance—Feminism, Biology and Science," *Australian Feminist Studies* 14:29 (1999): 7–18.
- Elisabeth A. **Lloyd**, "Pre-Theoretical Assumptions in Evolutionary Explanations of Female Sexuality," *Philosophical Studies* 69 (1993): 139–153.

- Vernon A. **Rosario**, "Homosexual Bio-Histories: Genetic Nostalgias and the Quest for Paternity," in *Science and Homosexualities*, ed. Vernon A. Rosario (New York: Routledge, 1997), pp. 1–25.
- **Week 11.** (12/16) <u>Primatology and Developmental Biology: "Pink-Ribbon"</u> Sciences?
- On this day we will also view and discuss a video entitled "The National Geographies of Primates" by Donna Haraway on her cultural interpretation of primatology in twentieth-century global history.
- Linda Marie Fedigan, "The Paradox of Feminist Primatology: The Goddess's Discipline?" in *Feminism in Twentieth-Century Science, Technology, and Medicine*, pp. 46–72.
- Donna **Haraway**, "Introduction: The Persistance of Vision," "Women's Place is in the Jungle," "Jeanne Altmann: Time-Energy Budgets of Dual-Career Mothering," and "Sarah Blaffer Hrdy," from *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989), pp. 1–15, 279–315, 349–367.
- Alison **Jolly** and Margaretta Jolly, "A View from the Other End of the Telescope," *New Scientist* 58 (21 April 1990): 58.
- Scott F. Gilbert and Karen A. Rader, "Revisiting Women, Gender, and Feminism in Developmental Biology," in *Feminism in Twentieth-Century Science, Technology, and Medicine*, pp. 73–97. [Required book]
- Evelyn Fox **Keller**, "Developmental Biology as a Feminist Cause?" *Osiris* 12 (1997): 16–28.
- Week 12. (1/6) <u>Alternative Visions: Toward Feminist Science?</u>
- Donna **Haraway**, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," from *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), pp. pp. 183–202.
- Charis **Thompson**, "Stem Cells, Women, and the New Gender and Science," in *Gendered Innovations in Science and Engineering*, ed. Londa Schiebinger (Stanford, CA: Stanford University Press, 2008), pp. 109–130.
- Carol Muske Dukes, *Saving St. Germ* (New York: Viking Penguin, 1994).

## ASB 301/SSH 301/HST 301 Spring 2011

(SLN 26474/ 26473/ 24609) MW 2:00-3:15pm Coor 170

#### GLOBAL HISTORY OF HEALTH

latest update: 01/18/2011

#### **Instructor:**

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F 9:30-10:30

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COURSE DESCRIPTION: In this course, we will look at a vast panoramic sweep of human history: across millennia, across national borders, across continents—for disease knows no such boundaries. Using the framework of the Three Epidemiological Transitions (major shifts in the types and prevalence of disease in human societies), we will emphasize infectious diseases because these most dramatically show how incessant biological factors always *combine* with human social factors to determine the manifestations of disease. More specifically, we will focus on eight paradigmatic infectious diseases: tuberculosis (TB), malaria, leprosy, smallpox, plague, syphilis, cholera, and HIV/AIDS. Our questions will include such inquiries as: How do we know which diseases afflicted humans in the prehistoric past? Where do "new" diseases come from? How were public health measures developed that could control disease spread? Finally, how can a long-term historical perspective help us understand current health challenges and their possible solutions?

**REQUIREMENTS:** This course combines study of the scientific methods of Bioarchaeology with the interpretive methods of History. Students will be expected to master the basic principles of both fields as we explore the long-term global history of human health. Class time will be devoted to both lecture and discussion. Conscientious preparation of the readings and active class participation are essential for the success of the course. The "laboratory" assignments will be explained in class. All written assignments should be submitted via the "Assignments" function on Blackboard. **Please note that papers will NOT be accepted via electronic mail.** In addition to the two labs, there will be three online quizzes plus a midterm and a final exam. The final course grade will be assessed as follows:

Quizzes (3): 5% (each – 15% total)

Paleopathology Lab: 15% History Lab: 15% Midterm Exam: 25% Final Exam: 30%

#### **POLICIES:**

Attendance – Regular attendance is crucial to the success of the course. Missed assignments must be made up by the next class period; thereafter, the grade will drop one full grade for each day late. In fairness to other members of the class, extensions cannot be granted.

**Classroom Etiquette** – Because we are gathered as a group to engage both in lectures and class discussion, it is vital that we maintain an atmosphere conducive to total participation. Therefore, the following rules will be observed in class:

- 1) No eating during class.
- 2) Cell phones and pagers should be switched off. No texting!!
- 3) Computers are allowed only for active note-taking. Persons using their computers for other purposes will be asked to turn them off.
- 4) Private conversation disturbs other students' ability to concentrate on the lectures; **disruptive** talkers will be asked to leave the lecture room.
- 5) Bathroom trips and early departures are equally disruptive. People who leave during lecture will be asked to sign a signout sheet.

Computer Etiquette – Many students wish to bring laptops to class to take notes and consult readings as we are discussing them. However, some students abuse the Wi-Fi capabilities in the classroom to check e-mail, browse the Web, and in other ways distract themselves while in lecture. Unfortunately, such practices are also distracting for others in the classroom. Students who do not seem to be actively taking notes and engaging with discussion will be asked to put away their computers.

**E-mail Etiquette** – Some students have taken to using e-mails to the instructor in lieu of asking questions in class. Any question that can be asked in class *should* be asked in class. We always spend a few minutes at the beginning of class taking care of "business" issues. Questions about assignments, etc., should be asked then. (If you're late to class, ask one of your fellow students what you missed.) This syllabus and the fuller information on our Blackboard have been designed precisely to give you as much information about the structure and expectations of the course as possible. So, before you zap off an e-mail to the instructor or the TA, ask yourself: (1) Did I check the syllabus first? (2) Did I check the Blackboard? (3) Have I asked a fellow classmate? (4) Can this wait to be asked in the next class meeting? By not overloading the instructor or TA with excessive e-mails, you help insure that we'll have time to answer urgent or personal matters when we need to. A final point: remember that all e-mails to the instructor or the TA should be considered "professional correspondence." Monitor your language, check your spelling and grammar, and strive to conform to all standards of professional discourse.

Written Work – All papers should conform to basic guidelines of neatness, standardized formatting (including numbered pages), etc. We do not accept submission of papers via e-mail; all work should be submitted via the "Assignments" function on Blackboard. ALWAYS keep a copy as backup.

Academic Honesty – No ethic is more important to the scientist's or historian's integrity than scrupulous use of, and documentation of, sources used. Improper use of others' work (whether obtained from printed, electronic, or oral sources) is a violation of academic standards and will result in an automatic failing grade for the course. We will spend class time discussing the nature of plagiarism and proper methods of citation. Additional information can be found on Blackboard under "Academic Honesty." Students are encouraged to bring their questions about this matter to the instructor or the TA.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>You will notice that even on this syllabus different forms of citation are used. That is because historians and anthropologists have different citation conventions. Depending on your major, please learn to use one or the other *consistently*.

<sup>&</sup>lt;sup>2</sup>See also Charles Lipson, *Doing Honest Work in College: How to Prepare Citations, Avoid Plagiarism, and Achieve Real Academic Success* (Chicago: University of Chicago Press, 2004).

Late Papers – See under "Attendance" above.

#### **IMPORTANT DATES:**

WEEK 1: Chronology Quiz this week (online); Test closes at midnight, Tuesday, January 25 WEEK 2: Terminology Quiz this week (online); Test closes at midnight, Tuesday, February 1

WEEKS 4 and 5: Paleopathology Lab; Lab must be submitted via Blackboard by midnight, Friday, February 18

WEEK 7: WEDNESDAY, March 2: MIDTERM EXAM

WEEK 10: Cholera Quiz this week (online); Test closes at midnight, Tuesday, March 22

WEEKS 11 and 12: History Lab; Lab must be submitted via Blackboard by midnight, Friday, April 8

Monday, May 9, 12:10 - 2:00: FINAL EXAM

#### **TEXTS:**

#### Required

Steven Johnson, *The Ghost Map: The Story of London's Most Terrifying Epidemic – and How It Changed Science, Cities, and the Modern World* (New York: Riverhead Books, 2006)

John Iliffe, *The African AIDS Epidemic: A History* (Athens, OH: Ohio University Press, 2006)

All other readings will be available via the "Weekly Readings" button on our course Blackboard.

BLACKBOARD: This course has a Blackboard site that functions as a supplement (but not a substitute!) to the work we do in class. All materials handed out in class—syllabus, hand-outs, announcements, study guides—will be posted on Blackboard within 24 hours of class meetings, if not before. Also, the flexibility of Blackboard allows us to develop a multi-media approach to our study. Thus, the Blackboard also has links to numerous websites, dictionaries, and other resources that can help you out when you're doing your class or exam preparation. They can also lead you to more information about topics (like Chinese medicine or drug development) which we do not have time to discuss in class. Finally, we have added an "At the Movies!" button and a "Book Club" one with information on movies and non-academic books that dramatize major moments or themes in the history of human health. So on a Saturday night when you're too tired to study, rent a video or pull out a book, throw some popcorn in the microwave, and kick back for some fun!

**HONORS CREDIT:** Instructions for receiving Honors Credit for this course will be determined with the instructors.

### LECTURE TOPICS

WEEK 1 (1/19): Introduction: Where Does Disease Come From? Why "Go Global" in Studying Its History?

# Chronology Quiz opens this week (online; Test closes at midnight on Tuesday, January 25) TOPICS:

 methods for studying disease in the past: paleopathology, genomics, ancient DNA, historical documents

## READINGS:

Roberts, C. and K. Manchester 1995 Ch. 1 The study of paleopathology. *The Archaeology of Disease*, 2nd ed., pp. 1-14. Cornell University Press, Ithaca, NY.

Waldron, T. 1991 Rates for the job: Measures of disease frequency in paleopathology. *International Journal of Osteoarchaeology* 1:17-25.

Zink, A. R., U. Reischl, H. Wolf, and A. G. Nerlich 2002 Molecular analysis of ancient microbial infections. *FEMS Microbiology Letters* 213:141-147.

- George C. Alter and Ann G. Carmichael, "Classifying the Dead: Toward a History of the Registration of Causes of Death," *Journal of the History of Medicine and Allied Sciences* 54 (1999), 114-132 SUPPLEMENTAL READINGS:
  - Ortner, D. J. 2003 *Identification of Pathological Conditions in Human Skeletal Remains*, 2nd ed. Academic Press, San Diego.
  - Steinbock, R. T. 1976 Paleopathological Diagnosis and Interpretation: Bone Diseases in Ancient Human Populations. Charles C. Thomas, Springfield, IL.
  - Waldron, T. 2007 *Palaeoepidemiology: The Measure of Disease in the Human Past*. Left Coast Press, Walnut Creek, CA.
  - Pääbo, S., H. Poinar, D. Serre, V. Jaenicke-Després, J. Hebler, N. Rohland, M. Kuch, J. Krause, L. Vigilant, and M. Hofreiter 2004 Genetic analyses from ancient DNA. *Annual Review of Genetics* 38:645-679.
  - Raoult, D. and M. Drancourt (eds.) 2008 *Palaeomicrobiology: Past Human Infections*. Springer, New York.

WEEK 2 (1/24 & 1/26): The Beginnings of Human Disease: Late Pleistocene Health Chronology Quiz ends this week (online; test closes at midnight, Tuesday, January 25) Terminology Quiz opens this week (online; test closes at midnight, Tuesday, February 1) TOPICS:

- overview of the three epidemiological transitions
- interrelation between subsistence, population size, and disease
- health and disease in the Late Pleistocene
- case studies: Upper Paleolithic Europe and Late Pleistocene Australia

#### **READINGS:**

- Kristin N. Harper and George J. Armelagos, "The Changing Disease-scape in the Third Epidemiological Transition," *The International Journal of Environmental Research and Public Health* 7, no. 2 (February 2010): 675-697, doi: 10.3390/ijerph7020675
- Holt, B. M. and V. Formicola 2008 Hunters of the Ice Age: The biology of Upper Paleolithic people. *Yearbook of Physical Anthropology* 51:70-99.
- Webb, S. 1995 Ch. 3 Upper Pleistocene pathology of Sunda and Sahul: Some possibilities. In *Palaeopathology of Aboriginal Australians: Health and Disease across a Hunter-Gatherer Continent*, pp. 21-40. Cambridge University Press, Cambridge.

#### SUPPLEMENTAL READINGS:

- Barnes, Ethne. *Diseases and Human Evolution*. University of New Mexico Press. Albuquerque. 2005.
- Cohen, M. N. and G. J. Armelagos (eds.) 1984 *Paleopathology at the Origins of Agriculture*. Academic Press, Orlando, FL.
- Armelagos, G. J. 1990 Health and disease in prehistoric populations in transition. In A. C. Swedlund and G. J. Armelagos (eds.) *Disease in Populations in Transition: Anthropological and Epidemiological Perspectives*, pp. 127-144. Bergin and Garvey, New York.
- Brennan, M. U. 1991 Health and Disease in the Middle and Upper Paleolithic of Southwestern France: A Bioarchaeological Study. Ph.D. dissertation. Department of Anthropology, New York University.
- Trinkaus, E., S. W. Hillson, R. G. Franciscus, and T. W. Holliday 2006 Skeletal and dental paleopathology. In E. Trinkaus and J. Svoboda (eds.) *Early Modern Human Evolution in Central Europe: The People of Dolni Vestonice and Pavlov*, pp. 419-458. Oxford University Press, Oxford.
- Dillehay, T. D. 1991 Disease ecology and initial human migration. In T. D. Dillehay and D. J. Meltzer (eds.) *The First Americans: Search and Research*, pp. 231-264. CRC Press, Boca Raton, FL.

WEEK 3 (1/31 & 2/2): Tuberculosis in Early Agricultural Societies

Terminology Quiz closes at midnight, Tuesday, February 1

Guest Lecturer: Dr. Jane Buikstra, Regents' Professor of Bioarchaeology and Director, Center for Bioarchaeological Research

#### TOPICS:

- evolution of *Mycobacterium tuberculosis*: the evidence from ancient DNA
- biology and paleopathology of tuberculosis
- case study: pre-Columbian America

#### **READINGS**:

- Aufderheide, A. C. and C. Rodríguez-Martín 1998 Tuberculosis. In *The Cambridge Encyclopedia of Human Paleopathology*, pp. 118-141. Cambridge University Press, Cambridge.
- Donoghue, H. D. 2008 Palaeomicrobiology of tuberculosis. In D. Raoult and M. Drancourt (eds.) *Palaeomicrobiology: Past Human Infections*, pp. 75-97. Springer, New York.
- Arriaza, B. T., W. Salo, A. C. Aufderheide, and T. A. Holcomb 1995 Pre-Columbian tuberculosis in northern Chile: Molecular and skeletal evidence. *American Journal of Physical Anthropology* 98(1):37-45.
- Buikstra, J. E. 1999 Paleoepidemiology of tuberculosis in the Americas. In G. Pálfi, O. Dutour, J. Deák, and I. Hutás (eds.) *Tuberculosis: Past and Present*, pp. 479-494. Golden Book and Tuberculosis Foundation, Szeged, Hungary.

#### SUPPLEMENTAL READINGS:

- Andrew D. Cliff, M. R. Smallman-Raynor, P. Haggett, D. F. Stroup and S. B. Thacker, *Emergence and Re-Emergence: Infectious Disease: A Geographical Analysis* (Oxford: Oxford University Press, 2009)
- Roberts, C. A. and J. E. Buikstra 2003 *The Bioarchaeology of Tuberculosis: A Global View of a Reemerging Disease*. University Press of Florida, Gainesville.
- Stone, A. C., A. K. Wilbur, J. E. Buikstra, and C. A. Roberts 2009 Tuberculosis and leprosy in perspective. *Yearbook of Physical Anthropology* 52:66-94.
- Bedeir, S. A. 2004 Tuberculosis in ancient Egypt. In M. M. Madkour (ed.) *Tuberculosis*, pp. 3-13. Springer-Verlag, Berlin.
- Donoghue, H. D., O. Y.-C. Lee, D. E. Minnikin, G. S. Besra, J. H. Taylor, and M. Spigelman 2010 Tuberculosis in Dr. Granville's mummy: A molecular re-examination of the earliest known Egyptian mummy to be scientifically examined and given a medical diagnosis. *Proceedings of the Royal Society B* 277:51-56.
- Tayles, N. and H. R. Buckley 2004 Leprosy and tuberculosis in Iron Age Southeast Asia? *American Journal of Physical Anthropology* 125(3):239-256.
- Suzuki, T., H. Fujita, and J. G. Choi 2008 Brief communication: New evidence of tuberculosis from prehistoric Korea Population movement and early evidence of tuberculosis in Far East Asia. *American Journal of Physical Anthropology* 136(3): 357-360.

#### WEEK 4 (2/7 & 2/9): Malaria and Homo agricultor

# Paleopathology Lab this week and next, to be submitted via Blackboard by midnight, Friday, February 18

#### TOPICS:

- biology and paleopathology of malaria
- intensification of agriculture, deforestation, and the origins of malaria
- case studies: ancient Rome and the prehistoric Pacific Islands

#### **READINGS:**

Aufderheide, A. C. and C. Rodríguez-Martín 1998 Malaria. In *The Cambridge Encyclopedia of Human Paleopathology*, pp. 228-238. Cambridge University Press, Cambridge.

- Hume, J. C. C., E. J. Lyons, and K. P. Day 2003 Malaria in antiquity: A genetics perspective. *World Archaeology* 35(2): 180-192.
- O'Sullivan, L., A. Jardine, A. Cook, and P. Weinstein 2008 Deforestation, mosquitoes, and ancient Rome: Lessons for today. *Bioscience* 58(8):756-760.
- Cunha, C. B. 2007 Prolonged and perplexing fevers in antiquity: Malaria and typhoid fever. *Infectious Disease Clinics of North America* 21:857-866.
- Soren, D. 2003 Can archaeologists excavate evidence of malaria? World Archaeology 35(2):193-209.
- Buckley, H. R. 2006 "The predators within": Investigating the relationship between malaria and health in the prehistoric Pacific Islands. In M. Oxenham and N. Tayles (eds.) *Bioarchaeology of Southeast Asia*, pp. 309-332. Cambridge University Press, Cambridge.

#### SUPPLEMENTAL READINGS:

- W. Liu *et al.*, "Origin of the human malaria parasite Plasmodium falciparum in gorillas," *Nature* 467 (23 September 2010), 420-425, doi:10.1038/nature09442.
- Sallares, R. and S. Gomzi 2001 Biomolecular archaeology of malaria. Ancient Biomolecules 3:195-213.
- Sallares, R. 2006 Role of environmental changes in the spread of malaria in Europe during the Holocene. *Quaternary International* 150:21-27.
- Sallares, R. 2002 Malaria and Rome: A History of Malaria in Ancient Italy. Oxford University Press, Oxford.
- Poolsuwan, S. 1995 Malaria in prehistoric southeastern Asia. Southeast Asian Journal of Tropical Medicine and Public Health 26(1):3-22.
- Tayles, N. 1996 Anemia, genetic diseases, and malaria in prehistoric mainland southeast Asia. *American Journal of Physical Anthropology* 101(1):11-27.

#### WEEK 5 (2/14 & 2/16): Leprosy: The Insidious Scourge

# Paleopathology Lab this week, to be submitted via Blackboard by midnight, Friday, February 18 TOPICS:

- biology and paleopathology of leprosy
- origins and spread of leprosy
- social meaning and consequences of the disease
- case study: leprosy in medieval Europe

#### **READINGS**:

- Aufderheide, A. C. and C. Rodríguez-Martín 1998 Leprosy. In *The Cambridge Encyclopedia of Human Paleopathology*, pp. 141-154. Cambridge University Press, Cambridge.
- Martin C J Maiden. "Putting leprosy on the map," *Nature Genetics* 41, number 12 (December 2009), 1264-66.
- Jesper L. Boldsen, "Epidemiological Approach to the Paleopathological Diagnosis of Leprosy," American Journal of Physical Anthropology 115 (2001), 380-387
- Roberts, C. 2002 The antiquity of leprosy in Britain: The skeletal evidence. In C. A. Roberts, M. E. Lewis, and K. Manchester (eds.) *The Past and Present of Leprosy: Archaeological, Historical, Paleopathological, and Clinical Approaches*, pp. 213-221. BAR International Series 1054. Archaeopress, Oxford.

#### SUPPLEMENTAL READINGS:

- Monot, M. et al., "Comparative genomic and phylogeographic analysis of Mycobacterium leprae," *Nature Genetics* 41 (2009), 1282–1289.
- Roberts, C. A., M. E. Lewis, and K. Manchester (eds.) 2002 *The Past and Present of Leprosy: Archaeological, Historical, Paleopathological, and Clinical Approaches*. BAR International Series 1054. Archaeopress, Oxford.
- Richards, P. 1977 The Medieval Leper and His Northern Heirs. D. S. Brewer, Cambridge.
- Luke E. Demaitre, *Leprosy in Premodern Medicine: A Malady of the Whole Body* (Baltimore: Johns Hopkins University Press, 2007)
- Carole Rawcliffe, Leprosy in Medieval England (Woodbridge: Boydell & Brewer, 2006)

- Angela Ki Che Leung. Leprosy in China: A History. Studies of the Weatherhead East Asian Institute, Columbia University (New York: Columbia University Press, 2009)
- Manchester, K. 1991 Tuberculosis and Leprosy: Evidence for interaction of disease. In D. J. Ortner and A. C. Aufderheide (eds.) *Human Paleopathology: Current Syntheses and Future Options*, pp. 23-35. Smithsonian Institution, Washington, D. C.
- Gussow, Z. and G. S. Tracy 1970 Stigma and the leprosy phenomenon: The social history of a disease in the nineteenth and twentieth centuries. *Bulletin of the History of Medicine* 44(5):425-449.

# WEEK 6 (2/21& 2/23): The Dangers of Urban Civilization: Smallpox and Plague TOPICS:

- biology of smallpox, and the impact of urbanization on human health
- case study: smallpox in Europe prior to the discovery of the New World
- biology of Yersinia pestis and its vectors; origins of plague in ancient China
- case study: the Justinianic Plague (the First Plague Pandemic)

#### **READINGS**:

- Aufderheide, A. C. and C. Rodríguez-Martín 1998 Smallpox. In *The Cambridge Encyclopedia of Human Paleopathology*, pp. 201-207. Cambridge University Press, Cambridge.
- Rhazes, *A Treatise on the Smallpox and Measles*, trans. William Alexander Greenhill (London: Sydenham Society, 1848), 27-35
- Gage, K. L. and M. Y. Kosoy 2005 Natural history of plague: Perspectives from more than a century of research. *Annual Review of Entomology* 50:505-528.
- Giovanna Morelli, et al., "Yersinia pestis genome sequencing identifies patterns of global phylogenetic diversity," Nature Genetics 42, no. 12 (December 2010), 1140-1145

#### SUPPLEMENTAL READINGS:

- Hopkins, D. R. 1983 The Greatest Killer: Smallpox in History. University of Chicago Press, Chicago.Cunha, B. 2004 The cause of the plague of Athens: Plague, typhoid, typhus, smallpox, or measles?Infectious Disease Clinics of North America 18(1):29-43.
- Manchester, K. 1992 The paleopathology of urban infections. In S. Bassett (ed.) *Death in Towns: Urban Responses to the Dying and the Dead, 100-1600*, pp. 8-14. Leicester University Press, Leicester.
- Lewis, M. E. 2002 Impact of industrialization: Comparative study of child health in four sites from medieval and postmedieval England (AD 850-1859). *American Journal of Physical Anthropology* 119(3):211-223.
- Peckmann, T. R. 2003 Possible relationship between porotic hyperostosis and smallpox infections in nineteenth-century populations in the northern frontier, South Africa. *World Archaeology* 35(2):289-305.
- L. K. Little, ed., *Plague and the End of Antiquity: The Pandemic of 541-750* (Cambridge: Cambridge University Press, 2006)

#### WEEK 7 (2/28 and 3/2): The 2nd Plague Pandemic (The Black Death)

## WEDNESDAY, March 2: MIDTERM EXAM

#### TOPICS:

- assessing catastrophic mortality
- idea of quarantine and the beginnings of public health
- · why pandemics end
- case study: comparative impact of the Black Death in the Muslim and Christian worlds READINGS:

Haensch S, Bianucci R, Signoli M, Rajerison M, Schultz M, et al. 2010 Distinct Clones of *Yersinia pestis* Caused the Black Death. *PLoS Pathog* 6(10): e1001134, doi:10.1371/journal.ppat.1001134

Hawkins, D. 1990 The Black Death and the new London cemeteries of 1348. *Antiquity* 64:637-642.

"The Black Death and the Jews 1348-1349 CE," available online @

http://www.fordham.edu/halsall/jewish/1348-jewsblackdeath.html

Michael Dols, "The Comparative Communal Responses to the Black Death in Muslim and Christian Societies," *Viator* 5 (1974), 269-287

#### SUPPLEMENTAL READINGS:

"East Smithfield Black Death Cemetery",

 $\frac{http://www.museumoflondon.org.uk/English/Collections/OnlineResources/CHB/Database/Medieval+cemeteries/ESmithfieldBlackDeath.htm$ 

- Sharon N. DeWitte and James W. Wood, "Selectivity of Black Death Mortality with Respect to Preexisting Health," *PNAS* 105, No. 5 (5 February 2008), 1436-1441
- O. J. Benedictow, *The Black Death, 1346–1353: The Complete History* (Woodbridge, Suffolk: Boydell Press, 2004)
- Rosemary Horrox, trans., *The Black Death* (Manchester: University of Manchester Press, 1994) an excellent collection of primary sources

# WEEK 8 (3/7 & 3/9): The Columbian Exchange: Smallpox (again) and Syphilis TOPICS:

- biology and paleopathology of syphilis
- early Spanish & Portuguese explorers in the Atlantic
- New World demography and pathocenosis before and after Contact
- case studies: disease exchanges between Old World and New (smallpox and syphilis)

#### **READINGS**:

- Aufderheide, A. C. and C. Rodríguez-Martín 1998 Treponematosis. In *The Cambridge Encyclopedia of Human Paleopathology*, pp. 154-171. Cambridge University Press, Cambridge.
- Baker, B. J. and G. J. Armelagos 1988 The origins and antiquity of syphilis. *Current Anthropology* 29:703-737.
- de Melo, F. L., J. C. M. de Mello, A. M. Fraga, K. Nunes, and S. Eggers 2010 Syphilis at the crossroad of phylogenetics and paleopathology. *PLoS Neglected Tropical Diseases* 4(1):1-11.
- Ann F. Ramenofsky, Alicia K. Wilbur, and Anne C. Stone, "Native American Disease History: Past, Present, and Future Directions," *World Archaeology* 35, No. 2, *Archaeology of Epidemic and Infectious Disease* (October 2003), 241-257
- McCaa, R. 1995 Spanish and Nahuatl views on smallpox and demographic catastrophe in Mexico. *Journal of Interdisciplinary History* 25(3):397-431.

#### SUPPLEMENTAL READINGS:

- Meyer, C., C. Jung, T. Kohl, A. Poenicke, A. Poppe, and K. W. Alt 2002 Syphilis 2001: A paleopathological reappraisal. *Homo* 53(1):39-58.
- von Hunnius, T. E., D. Yang, B. Eng, J. S. Waye, and S. R. Saunders 2007 Digging deeper into the limits of ancient DNA research on syphilis. *Journal of Archaeological Science* 34:2091-2100.
- Verano, J. W. and D. H. Ubelaker (eds.) 1992 *Disease and Demography in the Americas*. Smithsonian Institution, Washington, D. C.
- Baker, B. J. and L. Kealhofer (eds.) 1996 *Bioarchaeology of Native American Adaptation in the Spanish Borderlands*. University Press of Florida, Gainesville.
- James C. Riley, "Smallpox and American Indians Revisited," *Journal of the History of Medicine and Allied Sciences* 65, no. 4 (Oct. 2010), 445-477.
- Noble David Cook, *Born to Die: Disease and New World Conquest, 1492-1650* (Cambridge: Cambridge University Press, 1998)
- David S. Jones, *Rationalizing Epidemics: Meanings and Uses of American Indian Mortality since 1600* (Cambridge, MA: Harvard University Press, 2004)
- Robert Boyd, *The Coming of the Spirit of Pestilence: Introduced Infectious Diseases and Population Decline among Northwest Coast Indians, 1774-1874* (Seattle: U. of Washington Press, 1999)
- Elizabeth Fenn, Pox Americana: The Great Smallpox Epidemic of 1775-82 (NY: Hill and Wang, 2001)
- Laura McGough, Gender, Sexuality, and Syphilis in Early Modern Venice: The Disease that Came to Stay, Early Modern History: Society and Culture (New York: Palgrave Macmillan, 2010)

WEEK 9 (3/13-3/20): SPRING BREAK!!!

WEEK 10 (3/21 & 3/23): The 17th-19th Centuries: Slavery, Colonialism and Cholera Cholera Quiz this week (online; Test closes at midnight, Tuesday, 3/22) TOPICS:

- the establishment of European colonialism and the rise of the slave trade
- smallpox (again) and yellow fever in the Atlantic world
- industrialization and urban growth
- case study: the cholera pandemics of the 19th century

#### **READINGS:**

- Dauril Alden and Joseph C. Miller, "Out of Africa: The Slave Trade and the Transmission of Smallpox to Brazil, 1560-1831," *Journal of Interdisciplinary History* 18 (1987), 195-224
- David Arnold, "The Indian Ocean as a Disease Zone, 1500-1950," *South Asia: Journal of South Asian Studies* 14, No. 2 (1991), 1-21
- Richard J. Evans, "Epidemics and Revolutions: Cholera in Nineteenth-Century Europe," *Past and Present*, No. 120 (August 1988), 123-146
- Johnson, S. 2006 The Ghost Map: The Story of London's Most Terrifying Epidemic and How It Changed Science, Cities, and the Modern World. Riverhead Books, New York.

#### SUPPLEMENTAL READINGS:

- J. H. Powell, *Bring Out Your Dead: The Great Plague of Yellow Fever in Philadelphia in 1793* (Philadelphia: University of Pennsylvania Press, 1949)
- David Arnold, *Science, Technology, and Medicine in Colonial India*, Cambridge History of India, Part 3, Volume 5 (Cambridge: Cambridge University Press, 2000)
- Sandra Hempel, *The Strange Case of the Broad Street Pump: John Snow and the Mystery of Cholera* (Berkeley: University of California Press, 2007)
- Frank Snowden, *Naples in the Time of Cholera 1884-1911*, rev. ed. (Cambridge: Cambridge University Press, 2002)
- Philip D. Curtin, *Death by Migration: Europe's Encounter with the Tropical World in the Nineteenth Century* (Cambridge: Cambridge University Press, 1989)
- Philip D. Curtin, *Disease and Empire: The Health of European Troops in the Conquest of Africa* (Cambridge: Cambridge University Press, 1998)
- David Arnold, ed., Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500-1900 (Amsterdam: Rodopi, 1996)
- WEEK 11 (3/28 & 3/30): From the Global to the Microscopic: International Commerce and Laboratory Science

# History Lab this week and next (to be submitted via Blackboard by midnight, Friday, April 8) TOPICS:

- Pasteur, Koch, and the success of germ theory
- how European drugs took over the world
- case studies: the Third Plague Pandemic, 1894-1930; the 1918 Flu Pandemic

#### **READINGS:**

- Myron Echenberg, "Pestis Redux: The Initial Years of the Third Bubonic Plague Pandemic, 1894-1901," *Journal of World History* 13, No. 2 (Fall 2002), 429-449
- Jeffery K. Taubenberger, Johan V. Hultin, and David M. Morens, "Discovery and Characterization of the 1918 Pandemic Influenza Virus in Historical Context," *Spotlight on Respiratory Viruses*, eds. Frederick Hayden and Menno D. de Jong, a special issue of *Antiviral Therapy* 12 (2007), 581-591 SUPPLEMENTAL READINGS:
  - Irvine Loudon, The Tragedy of Childbed Fever (New York: Oxford University Press, 2000)

- Carol Benedict, *Bubonic Plague in Nineteenth-Century China* (Stanford: Stanford University Press, 1996)
- Myron Echenberg, *Plague Ports: The Global Urban Impact of Bubonic Plague, 1894-1901* (New York: New York University Press, 2007)
- James C. Mohr, *Plague and Fire: Battling Black Death and the 1900 Burning of Honolulu's Chinatown* (New York: Oxford University Press, 2005)
- Lien-teh Wu, *Plague Fighter: The Autobiography of a Modern Chinese Physician* (Cambridge: W. Heffer & Sons Ltd., 1959) a participant's account of the 1910-1911 Manchurian plague epidemic
- John M. Barry, *The Great Influenza: The Epic Story of the Deadliest Plague in History*, rev. ed. (New York: Viking, 2005)
- Carol R. Byerly, Fever of War: The Influenza Epidemic in the U.S. Army during World War I (New York: New York University Press, 2005)
- Geoffrey W. Rice, with assistance from Linda Bryder, *Black November: The 1918 Influenza Pandemic in New Zealand* (Christchurch: Canterbury University Press, 2005)

### WEEK 12 (4/4 & 4/6): TB and the Rise of Modern Public Health

# History Lab (finish – to be submitted via Blackboard by midnight, Friday, April 8) TOPICS:

- public health campaigns and the "Gospel of Germs"
- why were the effects of the 2nd Epidemiological Transition so unequal?
- case studies: diphtheria in New York; TB and Black health in the U.S. and South Africa READINGS:
  - Seale Harris, "Tuberculosis in the Negro," *Journal of the American Medical Association* 41 (1903), 834-838
  - L. C. Allen, "The Negro Health Problem," *American Journal of Public Health* 5, No. 3 (March 1915), 195-203
  - Randall Packard, "Preindustrial South Africa: A Virgin Soil for Tuberculosis?," Chapter 1 of White Plague, Black Labor: Tuberculosis and the Political Economy of Health and Disease in South Africa (Berkeley: University of California Press, 1989), 22-32

#### SUPPLEMENTAL READINGS:

- Charlotte A. Roberts and Jane E. Buikstra, *The Bioarchaeology of Tuberculosis: A Global View on a Reemerging Disease* (Gainesville: University Press of Florida, 2003)
- Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge: Harvard University Press, 1998)
- Evelynn Maxine Hammonds, Childhood's Deadly Scourge: The Campaign to Control Diphtheria in New York City, 1880-1930 (Baltimore: Johns Hopkins University Press, 1999)
- Samuel Kelton Roberts, Jr., *Infectious Fear: Politics, Disease, and the Health Effects of Segregation* (Chapel Hill, NC: University of North Carolina Press, 2009)
- Allan M. Brandt, No Magic Bullet: A Social History of Venereal Disease in the United States since 1880 (New York: Oxford University Press, 1985)
- Susan M. Reverby, ed., *Tuskegee's Truths: Rethinking the Tuskegee Syphilis Study* (Chapel Hill: University of North Carolina Press, 2000)
- Susan M. Reverby, *Examining Tuskegee: The Infamous Syphilis Study and its Legacy* (Chapel Hill: University of North Carolina Press, 2009), see also http://www.examiningtuskegee.com
- John W. Ward and Christian Warren, eds., *Silent Victories: The History and Practice of Public Health in Twentieth-Century America* (New York: Oxford University Press, 2007)

# WEEK 13 (4/11 & 4/13): Diseases of the Tropics: From Defense to Control to Eradication TOPICS:

- "tropical medicine" as a concept and a practice
- discovering the etiology of insect-borne diseases

- the Rockefeller Foundation and the World Health Organization (WHO)
- case studies: the failure of eradication campaigns in Latin America vs. the success of the worldwide smallpox campaign
- SUMMARY: assessment of the 2nd Epidemiological Transition in global perspective READINGS:
  - Marcos Cueto, "The Cycles of Eradication: The Rockefeller Foundation and Latin American Public Health, 1918-1940," in *International Health Organizations and Movements, 1918-1939*, ed. Paul Weindling (Cambridge: Cambridge University Press, 1995), 222-243
  - Brown, P. J. 1997 Culture and the global resurgence of malaria. In M. C. Inhorn and P. J. Brown (eds.) *The Anthropology of Infectious Disease: International Health Perspectives*, pp. 119-141. Routledge, London.
  - WHO, *The World Health Report 1998*, Chapter 1, "Leading and Responding" [a history of WHO up through 1998], 15-44, available online @ http://www.who.int/whr/1998/en/whr98 en.pdf
  - Donald A Henderson, "Eradication: Lessons from the Past," *Morbidity and Mortality Weekly Report* December 31, 1999 / 48(SU01), 16-22, available online @ http://www.cdc.gov/mmwr/preview/mmwrhtml/su48a6.htm

#### SUPPLEMENTAL READINGS:

- James L. A. Webb, Jr., *Humanity's Burden: A Global History of Malaria* (Cambridge: Cambridge University Press, 2009)
- Frank M. Snowden, *The Conquest of Malaria: Italy, 1900-1962* (New Haven, CT: Yale University Press, 2005)
- Diego Armus, ed., *Disease in the History of Modern Latin America: From Malaria to AIDS* (Durham, NC: Duke University Press, 2003)
- John R. McNeill, *Mosquito Empires: Ecology and War in the Greater Caribbean, 1640-1914* (Cambridge & New York: Cambridge University Press, 2010)
- W. F. Bynum and Caroline Overy, eds., *The Beast in the Mosquito: The Correspondence of Ronald Ross and Patrick Manson* (Amsterdam: Rodopi, 1998)
- Douglas Haynes, *Imperial Medicine: Patrick Manson and the Conquest of Tropical Disease* (Philadelphia: University of Pennsylvania Press, 2001)
- Anne-Emanuelle Birn and Gilberto Hochman, eds., special issue of *Canadian Bulletin of Medical History* 25, No.1 (2008) on History of Latin American International Health
- Anne Hardy and Lise Wilkinson, *Prevention and Cure: The London School of Hygiene & Tropical Medicine, A 20th Century Quest for Global Public Health* (London: London School of Hygiene & Tropical Medicine, 2001)
- Eric Silla, "People Are Not the Same": Leprosy and Identity in Twentieth-Century Mali (Portsmouth, N.H., 1988).
- Frank Fenner, et al., Smallpox and Its Eradication (Geneva: World Health Organization, 1988), available online @ http://whqlibdoc.who.int/smallpox/9241561106.pdf
- Donald A. Henderson, *Smallpox: The Death of a Disease. The Inside Story of Eradicating a Worldwide Killer*, foreword by Richard Preston (Amherst, NY: Prometheus Books, 2009)
- Sanjoy Bhattacharya, *Expunging Variola: The Control and Eradication of Smallpox in India 1947-1977* (London: Sangam, 2006)

# WEEK 14 (4/18 & 4/20): HIV/AIDS, Part I: The Beginning of a New Pandemic **Monday, 4/18, 7pm: screening of** *And the Band Played On* TOPICS:

- the 3rd Epidemiological Transition: the end of the "golden age" of biomedicine
- the "4-H Club": early epidemiology, science, and social reactions to HIV/AIDS
- case study: the pandemic in North America

# READINGS:

Allan M. Brandt and Martha Gardner, "The Golden Age of Medicine?," in *Medicine in the Twentieth Century*, eds. Roger Cooter and John Pickstone (Amsterdam: Harwood, 2000), 21-37

First U.S. case report of "AIDS," available online @

http://www.cdc.gov/mmwr/Preview/mmwrhtml/june 5.htm

Michael H. Merson, Jeffrey O'Malley, David Serwadda, and Chantawipa Apisuk, "The History and Challenge of HIV Prevention," *The Lancet* 372, Issue 9637 (9 August 2008), 475-488 SUPPLEMENTAL READINGS:

Randy Shilts, *And the Band Played on: Politics, People, and the AIDS Epidemic* (New York: St. Martin's Press, 1987)

Paul Farmer, AIDS and Accusation: Haiti and the Geography of Blame (Berkeley: University of California Press, 1992)

Steven Epstein, *Impure Science: AIDS, Activism, and the Politics of Knowledge* (Berkeley: University of California Press, 1996)

Ronald Bayer and Gerald M. Oppenheimer, *AIDS Doctors: Voices from the Epidemic* (New York: Oxford University Press, 2000)

# WEEK 15 (4/25 & 4/27): HIV/AIDS, Part II: The Global Pandemic TOPICS:

- the fifth "H": HIV and women, or how a "gay disease" became global
- the advent of HAART and the politics and economics of treatment
- case study: the HIV/AIDS pandemic in sub-Saharan Africa

#### **READINGS:**

John Iliffe, *The African AIDS Epidemic: A History* (Athens, OH: Ohio University Press, 2006) SUPPLEMENTAL READINGS:

Paul Farmer, Margaret Connors, and Janie Simmons, eds., Women, Poverty, and AIDS: Sex, Drugs, and Structural Violence (Monroe, ME: Common Courage Press, 1996)

Paul M. Sharp & Beatrice H. Hahn, "AIDS: Prehistory of HIV-1," *Nature* 455 no. 7213 (October 2008), 605-6; this is the "interpretive" essay that goes along with the main research study: Michael Worobey, *et al.*, "Direct evidence of extensive diversity of HIV-1 in Kinshasa by 1960," *Nature* 455, 661-664 (2 October 2008) | doi:10.1038/nature07390

Philippe Denis and Charles Becker, *The HIV/AIDS Epidemic in Sub-Saharan Africa in a Historical Perspective*, posted on website of the Senegalese Network on "Law, Ethics, Health" @ <a href="http://www.refer.sn/rds/article.php3?id">http://www.refer.sn/rds/article.php3?id</a> article=245

Carolyn Baylies and Janet Bujra, eds., AIDS, Sexuality, and Gender in Africa: The Struggle Continues (New York: Routledge, 2001)

Didier Fassin, When Bodies Remember: Experiences and Politics of AIDS in South Africa (Berkeley: University of California Press, 2007)

Shawn Smallman, *The Aids Pandemic in Latin America* (Chapel Hill: University of North Carolina Press, 2007)

Tony Barnett and Alan Whiteside, AIDS in the Twentieth Century: Disease and Globalization (New York: Palgrave, 2002)

# WEEK 16 (5/2): Global Disease, Global Drugs, and Global Philanthropy TOPICS:

- "emerging diseases" (e.g., Ebola, SARS, avian flu) and drug resistance
- who pays for global health initiatives?
- case study: "celebrity" philanthropy and the state of global health today

#### **READINGS**:

review Harper and Armelagos (from Week 2)

Paul Farmer, "Social Inequalities and Emerging Infectious Diseases," *Emerging Infectious Diseases* 2, No. 4 (1996), 259-269

- Martin Enserink, "What's Next for Disease Eradication?," *Science* Vol. 330 no. 6012 (24 December 2010), 1736-1739, DOI: 10.1126/science.330.6012.1736.
- David McCoy, Gayatri Kembhavi, Jinesh Patel, and Akish Luintel, "The Bill & Melinda Gates Foundation's Grant-Making Programme for Global Health," *The Lancet* 373 (2009), 1645-1653
- Read one week's worth of news from any of the resources listed under "Breaking News" on Blackboard SUPPLEMENTAL READINGS:
  - Marcos Cueto and Víctor Zamora, eds., *Historia, salud y globalización* (Lima: Universidad Peruana Cayetano Heredia, 2006)
  - N. Arinaminpathy and A. R. McLean, "Evolution and Emergence of Novel Human Infections," *Proceedings of the Royal Society* B 276, No. 1675 (22 November 2009), 3937-3943
  - Greg Guest, ed., *Globalization, Health, and the Environment: An Integrated Perspective* (Lanham: Alta Mira Press, 2005)
  - Paul Farmer, *Partner to the Poor: A Paul Farmer Reader*, ed. Haun Saussy, foreword Tracy Kidder (Berkeley: University of California Press, 2010)
  - Tracy Kidder, Mountains beyond Mountains: The Quest of Dr. Paul Farmer, A Man Who Would Cure the World (New York: Random House, 2003)
  - Poonam Bala, ed., *Biomedicine as a Contested Site: Some Revelations in Imperial Contexts* (Lanham, MD: Lexington Books, 2009)
  - Mark S. Smolinski, Margaret A. Hamburg, and Joshua Lederberg, eds., *Microbial Threats to Health: Emergence, Detection, and Response* (Washington: The National Academies Press, 2006)
  - Hormoz Ebrahimnejad, *The Development of Modern Medicine in Non-Western Countries: Historical Perspectives* (Abingdon/New York: Routledge, 2008)
  - Laurie Garrett, *The Coming Plague: Newly Emerging Diseases in a World out of Balance* (New York: Farrar, Straus, and Giroux, 1994)

WEDNESDAY, May 4: Review Session

MONDAY, May 9, 12:10 - 2:00: FINAL EXAM

HST 312 (Fall 2008) Line #85188 TuTh 10:30-11:45 Farmer Ed Bldg 220

#### THE HISTORY OF WOMEN IN SCIENCE AND MEDICINE

Instructor: Dr. Monica Green

Department of History 4568 Lattie F. Coor Bldg.

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office hours: Tu and Th noon -2pm (or by appt.)

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[President Lawrence] Summers [of Harvard] ... asked the wrong question. He saw the surface and missed what was behind it.

'I think the question is ... are there women and have there been women who want to do science and could be doing great science, but they never really got the opportunity?'

"A Woman's Place in the Cosmos," Washington Post, 16 March 2005

COURSE DESCRIPTION: In January 2005, President Lawrence Summers of Harvard University ignited a firestorm of controversy by questioning whether women were really capable of doing high-powered science. This course starts from the premise that to answer that question adequately, we need to understand the full complexity of how gender issues in Western science and medicine have developed historically. We will range in our analysis from Greco-Roman Antiquity through the beginning of the 21st century, addressing the topic from two perspectives: (1) The history of scientific and medical theories about women and sex differences: what these theories are, why they change, how they reflect or are influenced by wider cultural concerns. (2) The history of women as actual participants in science and medicine: who the prominent women scientists and healers of the past have been, what opportunities women have had to learn and practice science and medicine, what difference (if any) women's participation makes to the content or practice of science and medicine.

After introductory discussions about the concept of "gender," the course will be divided into two major sections: first, there will be three weeks of lecture giving a broad overview of the development of science and medicine in the Western tradition. Then, we will spend the rest of the semester doing "case studies" of several key issues/episodes in the history of women/gender and science/medicine. Students will be divided into research teams that will collectively work with the instructor to develop lectures and presentations for the rest of the class.

**NOTE:** This course focuses on the development of western science and medicine. Students are welcome, however, to bring in non-western perspectives for the purposes of contrast or criticism and, with the instructor's approval, to pursue a research project on a non-western topic.

**REQUIREMENTS:** A major part of our weekly discussions will revolve around the assigned readings, many of which are primary sources. Conscientious preparation of the readings and active class participation will be considered an essential part of your grade. Needless to say, you cannot participate if you are not present; **any more than three (3) unexcused absences will result in an automatic lowering of your grade.** After the lecture part of the course and the first exam, written work and testing will focus on each of the five "case studies." There will *either* be a quiz *or* a short (1-2 page) writing assignment due on the *last* day of each of the units. Additionally, for the case study where you are part of the research group, you will not only contribute to the collective work of the group

(presented over two days in class) but you will also develop an independent research project (10-12 pages). Further details will be announced in class and posted under the "Assignments" button on our Blackboard page. Papers can be submitted in hardcopy or posted to the "Drop Box" on Blackboard; they will NOT be accepted via electronic mail. The course grade will be assessed approximately as follows:

Class Participation: 10% (attendance and general discussion)

10% (group project)

Case Study Quizzes/Short Essays: 5% (each) for a total of 20%

Research Paper: 25% First Exam: 15% Final Exam: 20%

**Extra Credit** can be earned in one of two ways: (1) using non-English sources for your research project; or (2) writing a "professional quality" book review of any of the books on the "Supplementary Readings" list that you did *not* use for your assigned report (see our Blackboard). Up to 10 points can be earned that will be applied to raise the grade on any **one** of your regular assignments, up to one full grade level.

#### **IMPORTANT DATES:**

## Papers/Quizzes:

- formats and content of the Case Study mini-assessments will be determined by the student leaders for the period; whether it is a quiz or a written assignment, it will always be due (or taken in class) on the *last* day of the unit (October 2, October 16, October 30, November 13, and December 4)
- the due date for your own Research Paper is one week after the last day of your Case Study session. For example, if you're in Case Study #1, your paper will be due October 9. The one exception is for Case Study #5, where the paper will be five days later, on December 9.

#### Exams:

**First Exam (covering Weeks 1-4):** available on-line at our Blackboard site from Thursday, September 18 through Thursday, October 2

**Quizzes/Short Essays for Case Studies:** October 2, October 23, November 6, November 20, and December 4

Final Exam: Tuesday, Dec 16, 9:50 - 11:40 AM

Academic Status Reports: #1 – September 22–29, 2008; #2 – October 22–29, 2008

#### Religious Holidays recognized by ASU Registrar:

1st Day of Ramadan September \*2, 3

Yom Kippur October \*8, 9

Sukkot October \*13, 14, 15

Shemini Atzeret October \*20, 21

Simchat Torah October \*21, 22

Navaratra Dashara September 30 - Oct. 8

Birth of the B'ab October \*19, 20

Eid-al-Fitr October 2

Dusshera/Dasera October 9

Divali/Diwali October 28

All Saints Day November 1

Birth of Baha'u'llah November \*11, 12

Day of Covenant November \*25, 26

Ascension of Abdul'l-Baha November \*27, 28

Immaculate Conception of Virgin Mary December 8

Bodhi Day December 8

#### **POLICIES:**

**Attendance** - As noted above, regular attendance is crucial to the success of the course. More than **three** absences will result in a lowering of your Class Participation grade. Missed assignments must be made

up by the next class period; thereafter, the grade will drop one full grade for each day late. You are welcome to turn in essays before the due date if that suits your schedule better. **In fairness to other members of the class, extensions cannot be granted.** (See our Blackboard for missed assignments due to Religious Holidays.) If you know that you will be absent in advance or if you are sick, please send an e-mail directly to me: monica.green@asu.edu.

- **Classroom Etiquette** Because we are gathered as a group to participate both in lectures and class discussion, it is vital that we maintain an atmosphere conducive to total participation. Therefore, the following rules will be observed in class:
  - 1) No eating during class.
  - 2) Cell phones and text-messagers should be switched off. Students who use computers to take notes are asked to disable their wireless connections during lecture, unless specifically given permission by the instructor.
  - 3) Private conversation disturbs other students' ability to concentrate on the lectures; **disruptive** talkers will be asked to leave the lecture room.
- **E-mail Etiquette** Some people have taken to using e-mails to the instructor in lieu of asking questions in class. Any question that can be asked in class *should* be asked in class. I always spend a few minutes at the beginning of class taking care of "business" issues. Questions about assignments, etc., should be asked then. (If you're late to class, ask one of your fellow students what you missed.) This syllabus and the fuller information on our Blackboard have been designed precisely to give you as much information about the structure and expectations of the course as possible. So, before you zap off an e-mail to the instructor, ask yourself: (1) did I check the syllabus first? (2) did I check the Blackboard? (3) have I asked a fellow classmate? (4) can this wait to be asked in the next class meeting? By not overloading the instructor with excessive e-mails, you help insure that we'll have time to answer urgent or personal matters when we need to.
- ALWAYS INCLUDE "HST 312" IN THE SUBJECT HEADER IF YOU ARE NOT E-MAILING VIA BLACKBOARD!! If you don't, your message might get deleted as junk mail.
- Written Work I still accept papers written in the "old technology"—typed or even written by hand. All papers, whatever the technology, should conform to basic guidelines of neatness, standardized formatting, etc. (If you need guidelines about proper formatting, check the "Academic Honesty" button on our Blackboard. I'm flexible about style, but in general prefer *Chicago Manual of Style*.) I do not accept submission of papers via e-mail; all work should be submitted in hard copy or digitally via the "Drop Box" function on Blackboard. If submitting via Blackboard, please send a note to the instructor to confirm submission. (See also the section "Case Studies" below.)
- Academic Honesty no ethic is more important to the historian's integrity than scrupulous use of, and documentation of, sources used. Improper use of others' work (whether obtained from printed, electronic, or oral sources) is a violation of academic standards and will result in an automatic failing grade for the course. We will spend time discussing the nature of plagiarism and proper methods of citation; additional information can be found on our Blackboard under the "Academic Honesty" button. In addition, students are encouraged to bring their questions about this matter to the instructor.

# **TEXTS** (Available at the ASU Bookstore):

P.G. ABIR-AM & D. OUTRAM, eds., *Uneasy Careers and Intimate Lives: Women in Science*, 1789-1979 (New Brunswick, NJ: Rutgers University Press, 1987)

Nelly OUDSHOORN, *Beyond the Natural Body: An Archaeology of Sex Hormones* (London: Routledge, 1994)

Joan CASSELL, The Woman in the Surgeon's Body (Cambridge, MA: Harvard University Press, 1998)

**OTHER ASSIGNED READINGS:** All other assigned readings beyond the purchased textbooks will be made available through our course Blackboard. (Once you've registered for the class, you will automatically be listed among the registered users of the course site. To access, go to myasucourses.asu.edu and sign in with your ASURITE ID, then click on the appropriate links.) Some readings will be in RTF files; some in PDF; and some are found through links to other websites, including subscriptions through ASU libraries.

My preference is that you print out all primary source readings and bring them to class on the days we're discussing them. For all other readings (or if you prefer not to print out everything), you must take sufficient notes to allow you to participate actively in class discussions. **No excuses!** 

**CASE STUDIES:** Students from many different disciplines and with many different interests take this course. Therefore, we begin with a general historical survey in Weeks 1-4 to put everyone "on a level playing field". The first exam assesses your grasp of the major themes we have covered. Then, we move to "Case Studies" where we focus more intently of specific issues of how women have practiced science/medicine or how the sciences and medical fields have conceptualized women and sex differences. These case studies have three components: (1) communal readings, general lectures by the instructor, films, etc.; (2) reports/lectures/presentations prepared by each Study Group and delivered to the rest of the class; and (3) formal research papers that each student in the Case Study Group prepares out of work they have done for the group report (this is due one week after the in-class presentation). Each student will be assigned to one of the five Case Study Groups. The Group's assignment is to do additional research about specific issues on the general topic (for example, one group member might do a biographical study on an individual scientist; another might research the history of breast cancer). **Together** the group will design additional presentations/reports/lectures to be presented to the rest of the class. The group will also design the form and content of the assessment for that period. In other words, you will become the teachers of the course for your Case Study. More details about these group projects will be given in class and posted on our Blackboard.

**SUPPLEMENTAL READINGS** (see our Blackboard): Aside from material you choose to use for your Case Study project, these readings are *not* required. Rather, they are listed to provide you with background to the weekly topics should you be interested in exploring certain questions further. Also, as noted above, you can choose to write a "professional quality" review of one of these books for extra credit; see details on our Blackboard.

# **WEEKLY ASSIGNMENTS Part I: Introduction**

WEEK 1 (8/26 & 8/28): Why Study Women's History in the Sciences and Medicine?

**READINGS:** 

Jennifer Frey, "A Woman's Place in the Cosmos," Washington Post, 16 March 2005

Linda Nochlin, "Why Have There Been No Great Women Artists?"

Aimee Sands, "Never Meant to Survive: A Black Woman's Journey" (an interview with Evelynn Hammonds)

optional: Sandra G. Harding, "Gender and Science"

# Part II: General Survey

WEEK 2 (9/2 & 9/4): Science and Medicine in the Premodern World

#### **READINGS:**

Aristotle, "Selections" (Generation of Animals, History of Animals, On Dreams, and Politics)
Phintys, "On the Moderation of Women" (includes Pythagorean women; Hyginus on Agnodice;
Soranus on midwives; Socrates Scholasticus on Hypatia; "Documents on Midwives in Late
Antiquity")

University of Paris, "The Case of a Woman Doctor in Paris" and "An Unlicensed Woman Surgeon" Michael Shank, "A Female University Student in Late Medieval Kraków"

WEEK 3 (9/9 & 9/11): Women's Education and the Rise of the "Professional Amateur," 1400-1850 **READINGS:** 

Susan Broomhall, "Women's Experiences as Readers, Owners and Collectors of Books" (thru p. 26) Christine de Pizan, *Book of the City of Ladies* (excerpt)

Catherine des Roches, "On Agnodice"

Madame du Châtelet, preface to her translation of Mandeville's Fable of the Bees

WEEK 4 (9/16 & 9/18): Science and Medicine in the Modern World, 1850-2008

#### **READINGS:**

ABIR-AM & OUTRAM, Chapters 7 & 10 (Maria Mitchell & Marie Curie)

Natalie Pigeard-Micault, "A History of Women's Entrance Into Medicine," http://www.bium.univ-paris5.fr/histmed/medica/femmesmed va.htm

"Changing the Face of Medicine," an online exhibit sponsored by the National Library of Medicine, Bethesda, MD, http://www.nlm.nih.gov/changingthefaceofmedicine/physicians/— click on the button "Physicians," go to the section marked "Medical Schools," and look up the biographies of at least three physicians born before 1880 (aside from Elizabeth Blackwell) who studied at any of these institutions: Case Western Reserve, Central Medical College, Cornell University, Female Medical College of Pennsylvania, Hering Medical College, Johns Hopkins, Kansas City Medical College, Keokuk Medical College, New England Female Medical College, New York Women's Medical School, University of Michigan, University of Oregon, Woman's Medical College of Baltimore, Woman's Medical College of Pennsylvania, Woman's Medical College of the New York Infirmary

Henry Etzkowitz, et al., "The Paradox of Critical Mass for Women in Science," Science 266 (1994), 51-54

The exam covering Weeks 1-4 will be available on-line at our Blackboard site from Thursday, September 18 through Thursday, October 2. During that period, you can take it as many times as you like until you are satisfied with your performance.

## **Part III: Case Studies**

Case Study #1 (WEEKS 5 and 6, September 23–October 2): Female Midwives, Male Surgeons, and the Gendering of Women's Medicine in Premodern Europe

#### **READINGS:**

M. H. Green, "Bruno's Paradox: Women and Literate Medicine" (= chapter 3 of Making Women's Medicine Masculine: The Rise of Male Authority in Premodern Gynaecology)

childbirth stories from M. Rogers and P. Tinagli, Women in Italy: 1350-1650

Sprenger & Kramer, Malleus maleficarum (excerpts)

"Early Modern Regulation of the Practice of Midwifery" (midwives' licenses)

Louise Bourgeois, "Observations diverses" (excerpts)

Hugh Chamberlen on the Obstetrical Forceps

Elizabeth Cellier, "A Scheme for the Foundation of a Royal Hospital" (excerpts), and "Letter to Dr. . . . an Answer to his Queries, concerning the Colledg of Midwives"

#### WEEK 7: No class Week of October 7-9

Case Study #2 (WEEKS 8 and 9, October 14-23): Science in the Salons: Women and the Enlightenment **READINGS:** 

Londa Schiebinger, "Maria Winkelmann at the Berlin Academy: A Turning Point for Women in Science," *Isis* 78 (June 1987), 174-200

Paula Findlen, "The Scientist's Body: The Nature of a Woman Philosopher in Enlightenment Italy," in *The Faces of Nature in Enlightenment Europe*, ed. L. Daston and G. Pomata (Berlin, 2003), 211-236

Mary Terrall, "Émilie du Châtelet and the Gendering of Science," *History of Science* 33 (1995), 283-310

ABIR-AM & OUTRAM, Chapter 2

Case Study #3 (WEEKS 10 and 11, October 28 to November 6): Sex & Education in the 19th and Early 20th Century: A Fair Chance for the Girls?

## **READINGS:**

Elizabeth Fee, "Nineteenth-Century Craniology: The Study of the Female Skull"

Anonymous, "Biology and 'Woman's Rights'

Margaret Rossiter, "'Women's Work' in Science"

ABIR-AM & OUTRAM, *Uneasy Careers*, Chapter 3 plus *one* of the biographical studies from Part II Darlene C. Hine, "Co-Laborers in the Work of the Lord: Nineteenth-Century Black Women Physicians"

Case Study #4 (WEEKS 12 and 13, November 11–20): The Hormonal Paradigm and 20th–Century Rethinkings of "Female Nature"

## **READINGS:**

Joseph Breuer & Sigmund Freud, "The Psychic Mechanism of Hysterical Phenomena"

"The Quest for a Psychology of Womanhood" (excerpts from Freud & Karen Horney)

OUDSHOORN, Beyond the Natural Body (entire)

"A Thin Blue Line: The History of the Pregnancy Test Kit," an online presentation of the National Library of Medicine, http://history.nih.gov/exhibits/thinblueline/

Case Study #5 (WEEKS 14 and 15, November 25, and December 2–4): Equality Achieved? Women Scientists and Medical Practitioners from 1930-2005

## Thursday, November 27: THANKSGIVING!!

## **READINGS:**

Margaret Rossiter, Chapter 1 from Women Scientists in America: Before Affirmative Action, 1940-1972 (Baltimore: Johns Hopkins University Press, 1995)

W. Barkley Fritz, "The Women of ENIAC," *IEEE Annals of the History of Computing* 18, no. 3 (September 1996), 13-28

Sherwin Nuland, "A Triumph of Twentieth-Century Medicine: Helen Taussig and the Blue-Baby Operation"

Joan Cassell, The Woman in the Surgeon's Body (entire)

In class: film – *The Missing Link* (Lise Meitner)

# Part IV: Conclusions

WEEK 16 (December 9): Is Feminism Relevant Anymore?

#### **READINGS:**

Monica H. Green, "Defining Women's Health: An Interdisciplinary Dialogue – Background," posted 4/15/2002 on <a href="http://www.fas.harvard.edu/womenstudy/events/proposal.htm">http://www.fas.harvard.edu/womenstudy/events/proposal.htm</a>

"A Study on the Status of Women Faculty in Science at MIT" (March 1999), available at http://web.mit.edu/fnl/women/women.html

Lawrence Summers, address given on women & science in January 2005 and public apology for his remarks in February 2005, available on-line at

http://www.president.harvard.edu/speeches/2005/nber.html

http://www.president.harvard.edu/speeches/2005/facletter.html

Final Exam: Tuesday, Dec 16, 9:50 - 11:40 AM

#### WGS/ES 350: GENDER, RACE, SCIENCE AND TECHNOLOGY

#### Instructor

Dr. Jane L. Lehr

Email: jlehr@calpoly.edu IM/iChat: jlehrcalpoly Office Location: 38-140 Office Phone: 756-6442 Office Hours: TBA

#### **Required Texts**

B.K. Rothman (1998/2001). The Book of Life.

L. Schiebinger (1999). Has Feminism Changed Science?

M. Wyer et al (eds.) (2009). *Women, Science, and Technology*, **2**<sup>nd</sup> **edition** 

## **Required Electronic Materials**

This course will also use a large number of articles and excerpts that will be posted on the course Blackboard site in PDF or HTML format. If you do not have access to a reliable printer, consider printing or making copies at the library (10 cents/page), in a campus computer lab, or at a local copy shop.

Note that this upper-level course involves significant amounts of reading. Unless otherwise indicated, you are expected to complete <u>all</u> the readings. You are <u>strongly</u> encouraged to bring copies of all readings to class <u>each day</u>, as well as to take notes as you read. Stay on top of the assigned readings and multimedia content. Read or view them in pieces if you are pressed for time. Do what works best for you to achieve high levels of comprehension and engagement with the course content.

**NOTE:** Students who complete **all** required course readings will be positioned to do well in the course. Students who do not complete all assigned readings – for whatever reason – will not do well. Do not take this course if you do not plan to complete the assigned readings

### **Course Description**

This course examines the complex relationships between gender, race, science, and technology in historical and contemporary contexts. This examination highlights the role of ethical, social, cultural, political, and economic factors in determining historical and contemporary meanings of scientific and technical practice, as well as knowledge and beliefs about gender, race, class, and sexuality. The course also asks students to engage with reform efforts that seek to create more socially responsible scientific and technical knowledge production and decision-making practices (Fulfills GE F, USCP).

# **Expected Learning Outcomes**

Students will demonstrate:

- substantial knowledge of <u>foundational</u> and <u>contemporary</u> research literature in the interdisciplinary fields of Women's & Gender Studies, Ethnic Studies, and Science & Technology Studies (STS) that explores the complex relationships between gender, race, science, and technology;
- an ability to define key concepts and terms employed in this literature, and to use these concepts and terms to conduct independent analyses in individual and group settings;
- an understanding of the ways in which WGS/ES/STS scholars argue that social, cultural, political, and economic factors shape historical and contemporary meanings of scientific and technical practice, as well as knowledge and beliefs about gender, race, class, and sexuality;
- engagement with efforts that seek to create more socially responsible scientific and technical practices; and.
- 5) the effective use of computer and web-based skills in a liberal arts context with the understanding that basic technical literacy is required to meet the demands of today's university and professional settings.

It is also expected that students who demonstrate the learning outcomes of the course will be better prepared to understand the social, cultural, political, historical, and economic factors that have shaped their own social and occupational identities, as well as the social and occupational identities of others. This knowledge should better prepare students to work, collaborate, and interact more responsibly and effectively in an increasingly diverse and globalized workplace and world.

#### **COURSE REQUIREMENTS**

Exam 1	15%	
Exam 2 – Take-Home Essay	15%	
Final	25%	
Online Dialogue Papers	15%	
Critical Book Analysis	10%	
Cohort Class Lead	10%	
Class Participation *	10%	
Total	100%	
2 Cultural Events	+2%	(extra credit possible; 1 point per write-up)

<sup>\*</sup> Any Pop Quizzes will count as part of your Class Participation grade

#### COMMUNICATION

blackboard: Blackboard (available via <a href="http://my.calpoly.edu">http://my.calpoly.edu</a>) will be used as our primary course web site. This site will house the course syllabus, schedule, electronic readings, and so forth. You will also submit assignments through this site, access your grades, and participate in asynchronous class discussions. Make it a habit to regularly visit the Blackboard course site. All announcements will be posted to this site. You are responsible for timely receipt of announcements.

email: You must have a Cal Poly User name for this course. This address is necessary to receive course email and to log onto the electronic Blackboard system. If you wish to use AOL, Hotmail, Yahoo, etc., as your primary email address instead of your Cal Poly email account to, log into <a href="http://my.calpoly.edu">http://my.calpoly.edu</a> and use the Personal Information channel to change your Email Delivery Address.

your name: If there is a difference between your "primary" (or birth/given) name and the name you would like to be called in your courses, please follow this procedure. Log into <a href="http://my.calpoly.edu">http://my.calpoly.edu</a> and use the Personal Information Channel to add/change your "preferred" name. This will change how your name appears on the class role and the Blackboard site. You can also update the name you would like to appear on your diploma via this same process.

#### **ADDITIONAL GUIDELINES**

## Make-Up & Extensions Policy

Participation grades will be adversely affected if students have more than **two** unexcused absence per quarter. **You will lose 1.5% points off your final grade for each additional unexcused absence**. Two excessive tardies (10 minutes or more) will count as one unexcused absence, as will missing the 2<sup>nd</sup> half of class following any short mid-class breaks. While there is no guarantee that missed class work can be made-up or that extensions to assignment due dates will be provided, arrangements may be made if extenuating circumstances are involved. Whenever possible, arrangements must be made prior to the absence or assignment due date. Appropriate supporting documentation will be required in these instances, such as a letter from the dean of your college or your academic advisor providing the details of your extenuating circumstance. If you do not make arrangements prior to the due date, late assignments – if accepted – will be penalized at the rate of 1 letter grade per day.

#### **Grading Policies**

The instructor's goal is a 10-day turnaround for all grading. All grades will be posted to the online gradebook, available on the Blackboard site via the *My Grades* link. The standard grading scale for this course is:

A 93.3-100%	B+ 86.6-89.9%	C+ 76.6-79.9%	D+ 65.0-69.9%
A- 90.0-93.2%	B 83.3-86.5%	C 73.3-76.5%	D 60.0-64.0%
	B- 80.0-83.2%	C- 70.0-73.2%	D- 55.0-59.9%

From the date that any assignment or exam grade is posted, you have one week to request a formal re-grade. To request a regrade, please submit a list of concerns to the instructor by email and then make an appointment with the instructor.

# Plagiarism & Cheating

Please remember that Cal Poly does not tolerate academic cheating or plagiarism in any form. Please review the formal policy on cheating and plagiarism (including definitions, sanctions, and appeal procedures) found in the Campus Administrative Manual, Section 684, available at:

http://www.academicprograms.calpoly.edu/academicpolicies/Cheating.htm.

According to Cal Poly policies, "Examples of plagiarism include, but are not limited to, the following: the submission of a work, either in part or in whole, completed by another; failure to give credit for ideas, statements, facts or conclusions which rightfully belong to another; failure to use quotation marks when quoting directly from another, whether it be a paragraph, a sentence, or even a part thereof; close and lengthy paraphrasing of another's writing without credit or originality; use of another's project or program or part thereof without giving credit."

The instructor takes any evidence of academic dishonesty very seriously. You must document **all** outside sources, including web sites, using MLA or APA guidelines. Failure to do so constitutes a violation of Cal Poly policy. Please note that cases of plagiarism will be dealt with as 'cheating' and that, according to Cal Poly policies, "Cheating requires an 'F' course grade."

For additional clarification, please review the following online modules and then contact me if you have any additional questions:

http://irc.uconn.edu/PlagiarismModule/intro\_m.htm http://www.umuc.edu/ugp/ewp\_writingcenter/modules/plagiarism/

Please also note that submitting work for which you have already received credit in another course also counts as cheating, according to the Cal Poly Office of Student Rights and Responsibilities.

#### **Religious Holidays**

If any of our scheduled course meetings or due dates conflict with your observation of specific religious holidays, please notify the instructor. I can help you find a fellow student to share notes with you, or I can arrange to have the class recorded. I may also arrange an alternate assignment for the day(s) in question. However, you must make arrangements prior to the holiday in question, or it will be counted as an unexcused absence.

## **Writing Center**

For assistance with your writing, you may wish to use the free services offered by Cal Poly's University Writing Lab. They can provide help as you review and revise your work, such as by offering writing tips, grammar rules, stylistic suggestions, etc. Since your grade in this course is significantly based on writing, the Writing Center can be a valuable resource. They are located at 10-138. For more information, see: <a href="http://www.calpoly.edu/~wrtskils/writlab/">http://www.calpoly.edu/~wrtskils/writlab/</a>. If applicable, the Writing Center also offers an ESL Conversation Lab every Friday, 10 a.m. - 12 p.m.

## **Disability Accommodations**

Reasonable accommodations are available for students who have a documented disability. Please notify the instructor during the first week of class if accommodations are needed. To receive accommodation, you must show the instructor a *visa* from the Disability Resource Center. For more information, see: <a href="http://www.drc.calpoly.edu/">http://www.drc.calpoly.edu/</a>. If you will need special assistance in the event of an on-campus emergency, please also alert the instructor.

#### **ABOUT CLASS PARTICIPATION**

Discussion and participation are critical components of this course. Much of the work in class involves collaboration with fellow students; it is an *active* learning environment. You are expected to participate in all class activities. I realize that some people are more vocal than others are; that does not matter much in this class where participation means many things besides talking. The silent participant is often the most active because listening is often more important than speaking. Courtney Cazden gives a useful summary of the functions of discussion in her book *Classroom Discourse* (Heinemann, 1988):

- 1. Discussion acts as a catalyst: it forces us to confront alternative or contradictory ideas or arguments. We either revise our ideas to take counter arguments into account, or we augment our arguments to counter the objections that have been raised.
- 2. Discussion is a particular kind of social event that provides us with ways of enacting complementary roles, of participating in mutual guidance and support.
- 3. Discussion constitutes ideas and opinions. That is, we don't go into a classroom (or other discussion setting) with fully formed and articulated ideas in our heads, waiting to shoot them out of our mouths. Instead, we use talk and discussion as a way to clarify in our own minds what we "think." Discussion allows us to participate in "exploratory talk."

You are expected to carefully read assigned readings before each class so that you can participate in both small and large group discussions.

For our synchronous and asynchronous discussions to work, they must proceed in a fashion that allows everyone to participate in a constructive manner where *differences* are respected and appreciated. Our classroom needs to be open

and hospitable to *all* members of the class. This does not happen naturally. In previous courses, students have found the following pointers constructive:

- On talking: While you do not need to talk all the time, you will need to actively participate in large and small group discussions/activities.
- **On disagreement**: Please, be comfortable disagreeing with the instructor and each other. Do not assume that every question asked has a right answer.
- On listening: You must actively listen and avoid dominating the conversation. There will be times when you won't get to say everything that you want! When this happens, consider putting your thoughts into your discussion board 'blog' or participation journal.
- On respect and civility: You must honor other speakers and the texts that you are dealing with by treating them with respect and civility. Do not pigeon-hole other speakers by naming (calling them "sexist," "racists," "conservatives," "liberals," emotional," "relativist," "politically correct," etc.). This will close off discussion. Be conscious of gender, racial, ethnic, and ESL dynamics so that you can avoid the unconscious behavior that these may lead to i.e., interrupting, ignoring or denigrating comments, asking challenging rather than supportive questions, and general domination of the floor.
- On prior experiences: Some of you will have read more than others on our class topics; some of you may have extensive personal experience with some of the things we discuss in class. Do not simply dismiss someone who is saying something that goes against all of your experience or learning. Do draw on your experience when relevant, but explain, illustrate, make an argument that is open to response by those who don't share your specific expertise.
- On confidentiality: One of the goals of this course is to create a trusting and open environment where we may reflect upon personal life experiences it is through this situation that the topics that we cover will actually become relevant to the way that you understand yourself and the world. Given the nature of the subject matter, it is quite plausible that course participants may disclose personal information related to life situations. Therefore, it is expected and required that course participants will not divulge the personal circumstances of others.

We will discuss these suggestions on the first day of class and establish any additional guidelines for participation, which we will have the opportunity to revisit throughout the quarter.

#### **ABOUT ASSIGNMENTS**

There is an in-class midterm and final exam in this course, as well as other scheduled assignments. Surprise or 'pop' in-class reading checks will occur throughout the quarter – the number of which will increase if students are not completing the assigned readings in a timely and attentive manner. All readings and assignments build on previous ones, and you are responsible for the cumulative information.

Because each class of students is unique – with unique interests, goals, and conversations – it is not easy to anticipate how our session will develop. Therefore, the instructor reserves the right to redesign the syllabus and some of the assignments as we move along – just as you have the right to make suggestions for readings and assignments, and, more generally, to shape our course of study.

In all cases, the instructor has designed assignments to allow you to show your ability to think critically and to comprehend and apply course material. She will know that you really understand the analytical frameworks we are exploring when you can apply them in interesting and creative ways to new situations or questions.

You are expected to turn in work that has been **PROOFREAD**. In all cases in which you are asked to post work online, first develop and save the work in a word processing program and then post it. Each written assignment (unless otherwise noted) should follow standard grammatical and stylistic rules for expository writing.

To complete assignments, you will need to use assigned readings, recommended readings, and additional research. The instructor is happy to meet with you to discuss how you can best develop and organize your research programs.

Your assignments will be judged based upon the following criteria:

## For the Grade of A:

In addition to meeting all the requirements for a B grade: Asks generative questions, i.e., questions that do not have simple answers, but that point you in the direction of some sustained inquiry. The A paper/project provides insightful synthesis of readings and class discussion, and goes beyond issues raised in class.

#### For the Grade of B:

Shows clear comprehension of the readings, class discussion, and the assignment. The paper/project is thoughtful, and reflective, written in a clear, comprehensible style without major grammatical or spelling errors.

#### For the Grade of C:

Fails to show full comprehension of the readings, class discussion, and assignment. Limited in thought and reflection. Is not entirely clear and comprehensible, may have major grammatical and spelling errors.

#### For the Grade of **D**:

Almost entirely fails to comprehend the readings, class discussion, and assignment. Has very little thought and reflection. Unclear and almost incomprehensible. Has major grammatical and spelling errors.

#### For the Grade of F:

Entirely fails to comprehend the readings, class discussion, and assignment. Has no thought and reflection. Entirely unclear and incomprehensible. Has major grammatical and spelling errors.

#### **ASSIGNMENTS**

#### Online Dialogue Papers (3 x 5 points)

In addition to our twice-weekly meetings, course interactions will also occur via **online dialogue papers**. Online dialogue papers are due in the appropriate Blackboard discussion board by class time on *M* 9/26, *M* 10/10, and *M* 11/14. In addition to the specific directions provided below, these **online dialogue papers** will allow for reflection on the previous class readings, presentations, and discussions and will allow for both the review and extension of class materials in a collaborative learning environment.

Each **online dialogue paper** should be a minimum of 500 words, and include at least **two** quotations from at least **two** different assigned readings and/or films from previous weeks (cite the author's last name and the page number of the quotation for the assigned readings). NOTE: Quotations do not count towards your minimum word count. In all cases, first develop your response in your word processing program, save the file, and then copy your response into the discussion board.

To complete the assignment, **each student is also <u>required</u> to post two 'critical responses' to at least two different classmates' online dialogue papers**. As you respond to your classmates' postings, constructively challenge each other's assumptions, and note any oversights. Each critical response should be a minimum of 75 words. Please respond to different classmates throughout the quarter. Critical responses are due by class time on *W* 9/28, *W* 10/12 and *Th* 11/16.

All students are strongly encouraged to review all online dialogue papers prior to the next class following the due date.

#### ONLINE DIALOGUE PAPER GRADING RUBRIC

	2 2.5	3 3.5	4 4.25 4	.5 5
	Minimal	Average	Good	Superior
Overall	Demonstrates insufficient, naïve or confused understanding of key concepts, terms, arguments, and/or analyses	Partially, superficially or incompletely demonstrates understanding of key concepts, terms, arguments, and/or analyses	Demonstrates understanding of key concepts, terms, arguments, and/or analyses; two critical responses submitted	Demonstrates sophisticated understanding of key concepts, terms, arguments, and/or analyses; two critical responses are insightful and complex
Discussion of Course Materials	Discussion relies primarily on superficial generalizations or is highly inaccurate, confused and/or contradictory	Discussion is limited and may be partially inaccurate and/or may neglect major aspects of author arguments	Discussion is clear, accurate, and adequate. Development aided by the inclusion of some key details.	Discussion is clear, accurate, integrated, and sophisticated. Consistently includes details that point to the complex nature of the topic.

Data	0	Superficial effort	0	Limited effort to	0	Adequate and valid	0	Substantial and
Collection and		to collect data by		collect data by		effort to collect data		sincere effort to collect
Personal		following the		following the		by following the		data by following the
Argument		assignment		assignment		assignment directions		assignment directions
Development		directions; data		directions; data	0	Clear assertions and	0	Makes fully developed
		appears "made-		may appear		conclusions are		assertions and draws
		up"		"made-up"		made; evidence is		logical conclusions
	0	Assertions and	0	Assertions and		usually used		that are supported by
		conclusions are		conclusions are		effectively		accurate and
		identifiable, but		sometimes	0	Some errors in logic		appropriate evidence.
		are not supported		supported by		or understanding may		Insightful
		by accurate or		accurate &		be detectable but do	0	Consistently includes
		appropriate		appropriate		not detract		details that point to the
		evidence		evidence, but		significantly from		complex nature of the
	0	Significant errors		generalities		overall discussion		topic
		in logical or		persist	0	Thoughtful and	0	Asks generative
		understanding	0	Does not		reflective		questions, i.e.,
		detectable		sufficiently move	0	Development aided		questions that do not
	0	Some repetition		beyond summary		by the inclusion of		have simple answers,
		persists &	0	Errors in logic or		some key details		but that point you in
		reading difficult at		understanding				the direction of some
		times		detectable				sustained inquiry
	0	Very little thought	0	Limited in thought				
		and reflection		and reflection				

Online Dialogue Paper 1: Implicit Association Tests & Self-Reflection (Due M Sept 26)

Test yourself for hidden bias by using materials made available via Tolerance.Org and Project Implicit.

- Take at least 4 Implicit Association Tests (IATs) you <u>must</u> take the Gender-Career **and** Gender-Science IATs plus at least two others https://implicit.harvard.edu/implicit/demo/
- 2. Read Tolerance.Org's tutorial on hidden biases: http://www.tolerance.org/hidden bias/tutorials/

Then, in this minimum 500-word analysis paper, react to the IATs and hidden bias tutorial by discussing:

- how the IATs intersect with class discussions and/or readings during Week 1 or 2
- how your results relate (or do not relate) to your life experiences and choices related to gender, race, science, and technology
- what role you think the IATs might play in theorizing Women's & Gender Studies or Ethnic Studies, and/or what productive role they could play in other contexts (for instance, professional training)
- what you think can be learnt from the IAT project in general.

If you wish, you may also wish to discuss whether you were surprised by the test results you received, as well as any weaknesses you have identified with the test premises (and how these might be addressed).

You must include at least **two** quotations from at least **two** different assigned readings and/or films from Week 1 or 2. *Two* critical responses due by *Th* Sept 28.

Online Dialogue Paper 2: Interviews with 2 Past, Current or Future STEM Professionals (Due M Oct 10)

For this online dialogue paper, you will interview at least 2 people who work or plan to work in a STEM profession. Interviewees can be

- STEM professionals (e.g., scientists, engineers, technicians)
- STEM office/lab workers (who may or may not have official STEM training or actually do STEM work in these contexts for instance, an administrative assistant at an engineering firm or medical office could be included as an interviewee)

- someone who is currently training to be a STEM professional (e.g., a science or engineering undergraduate or graduate student)
- someone who was training to be a STEM professional or did work in a STEM context but left for another career
  option.

At least one of your interviewees must be from an <u>underrepresented group</u> in STEM professions (i.e., a woman, a person of color, a sexual minority, someone from a working class background, a dis/abled person, etc.).

Develop your interview questions based on themes and analyses in course readings. For instance, pay attention to factors in interviewee's life histories and contemporary situations that have propelled these individuals towards a STEM career, as well as any challenges they have experienced or situations/interactions they have observed related to the ways in which race, class, gender, sexuality, dis/ability, etc. can matter in STEM contexts. Also pay attention to things like the ratio of men to women (and/or white people to people of color) in different types of jobs at their places of employment or in their schooling and what type of flexibility is provided to persons with children or other family obligations (like caring for aging parents). It might also be interesting to ask about what role your interviewees think scientific knowledge should play in personal and public decision-making (e.g., how much authority and weight should scientific knowledge have and why).

You do not need to turn in actual interview transcripts. You are only required to have these conversations, listen, and learn. These conversations give you a chance to APPLY THE COURSE MATERIAL. Use the course material to make some sense of what you're hearing from these interviewees. Are their experiences typical or atypical? Are their expectations realistic or idealistic? What would the various authors we have read say is going on in response to the data you have collected? Do their experiences and observations fit specific demographic, economic, and historical trends? Be sure to say whom you interviewed – not by name but by their position within STEM fields and other demographic information.

In this minimum 500-word paper, complete your analysis. You must include at least **two** quotations from at least **two** different assigned readings and/or films. Finally, briefly (i.e., 1-2 sentences) comment on what you gained from this assignment. How have the readings and/or the interviewing affected your views of your own present or future situation with regard to STEM work? *Two critical responses due by W Oct 12*.

Online Dialogue Paper 3: The Personal & Public Politics of Pregnancy and Childbirth (Due T Nov 14)

For this online dialogue paper, you will interview at least 2 people about the personal and/or public politics of childbirth. You must interview at least one woman, and at least one person who is either now a parent (any sex), or who has terminated or lost a pregnancy, or was/is the partner of someone who has terminated or lost a pregnancy.

Develop your interview questions based on themes and analyses in course readings. You may explore both the politics of childbirth (ob-gyn vs. midwife, etc.) and/or the politics of selecting for or against specific traits.

You do not need to turn in actual interview transcripts. You are only required to have these conversations, listen, and learn. These conversations give you a chance to APPLY THE COURSE MATERIAL. Use the course material to make some sense of what you're hearing from these interviewees. Are their experiences typical or atypical? Are their expectations realistic or idealistic? What would the various authors we have read say is going on in response to the data you have collected? Do their experiences and observations fit specific demographic, economic, and historical trends? Be sure to say whom you interviewed – not by name but by their demographic information, including age, race, profession, etc.

In this minimum 500-word paper, complete your analysis. You must include at least **two** quotations from at least **two** different assigned readings and/or films. Finally, briefly (i.e., 1-2 sentences) comment on what you gained from this assignment. How have the readings and/or the interviewing affected your views of the personal and public politics of pregnancy and childbirth? *Two critical responses due by Th Nov 16*.

#### Critical Book Analysis (10 points)

A separate handout will be distributed the 2<sup>nd</sup> week of class describing this assignment in more detail. Due W Nov 30.

# Cohort Class Lead (10 points)

On the second day of class, students will sign-up for a cohort class lead. Your cohort will be responsible for leading at least one hour of one class during the quarter. You are expected to SYNTHESIZE assigned readings to identify main points and concepts in order to facilitate class discussion. While you may find it useful to provide an overview of readings via a powerpoint presentation or handout as part of your class lead, your primary job is to facilitate discussion and/or other activities that engage your classmates and the readings. (You may also find it useful to incorporate additional materials like videos, poems, or songs. You may also give pop quizzes if you wish.)

NOTE: In many cases, assigned articles may have significant overlap. Focus on how articles intersect with and differ from each other. If two authors make the exact same point, you do not need to cover it in-depth twice. Note that it may appear to be easiest to divide up responsibilities for the class lead by article, but this will probably not make the most sense for leading discussions on your topic area. As well, in some cases you may wish to focus on a subset of articles as part of your class lead. You must address at least 70% of the required articles assigned for the day in your class lead. Please alert the instructor in advance if you will not be discussing one or more of the required articles. NOTE: You are welcome to include one or more of the recommended readings in your class lead, but this inclusion is not mandatory.

Components of class leads include:

- Article Overview: Post Main Points and Analysis at least 12 hours before class on the Class Lead Discussion Board (minimum 500 words)
  - o Include at least one quotation from each assigned article
  - o Include at least 3 questions for class discussion − 2 about the day's articles, 1 about how the day's articles relate to topics discussed in previous classes
  - NOTE: If you are using a powerpoint presentation as part of your class lead, you may upload this instead of the Article Overview.
- During class, your cohort will introduce the articles and be responsible for facilitating at least 1 hour of class activities/discussion.
- After your class lead, cohort members will be asked to complete self-evaluations. These will be used in the determination of your grade for this assignment.
- All students are required to read and prepare for each discussion, and actively participate in class discussions.
- NOTE: Cohort Class Lead grades may not be posted until all class leads have been completed.
- NOTE: Each cohort must meet with the instructor for discussion and planning at least 2 days prior to the class lead. If possible, each cohort member should be present for this meeting, however, a minimum of half the cohort members must be present to proceed without penalty. This meeting may take anywhere from 10-30 minutes depending on the state of cohort preparation. You should come to the meeting with the instructor having already identified the main themes of the class readings assigned for the day of your class lead.

#### **Exam 1** (15%)

This exam will occur on M Oct 17. Questions may include short answer, id/definition questions, essay questions, multiple choice, etc. Make-up exams will be given only in the case of dire circumstances (assuming relevant and substantial documentation is provided).

#### Exam 2: Take Home – Critical Article Review (15%)

A separate handout will be distributed by M Oct 24 describing this minimum 750-word assignment, which will allow you to explore the intersections of gender and race with scientific and technical knowledge in a more substantive manner. The due date is W Nov 9.

#### Final Examination (25%)

Comprehensive exam designed to explore and integrate the quarter's work. It will cover readings, lectures, videos, and any guest speakers. Questions may include short answer, id/definition questions, essay questions, multiple choice, etc., as well as a comprehensive essay.

#### **READINGS & CLASS SCHEDULE**

Note: Unless otherwise indicated, you are expected to complete <u>all</u> the readings prior to class meeting times. You are **strongly** encouraged to bring copies of all readings to class **each day**, as well as to take notes as you read.

Module 1: Women & People of Color in Science and Engineering			
Week 1	Introduction & Course Overview; Introduction to Terms & Frameworks		
M Sept 19	Wyer et al (2009), "General Introduction: Science, Technology & Feminism" (WST, pp. 1-12)		
	Schiebinger (1999), "Introduction: Terminology" (HFCS, pp. 15-18)		
	Lorber (1994), "'Night to His Day': The Social Construction of Gender" (PDF – 7 p)		
	U.S. Commission on Civil Rights (1981), "Part A – The Problem: Discrimination" (PDF – pp. 15-21)		
	Tatum, "Defining Racism: 'Can We Talk?'" (PDF – 7 p)		

1	Recommended: Schiebinger (1999), "Introduction: Blind Alleys" (HFCS, pp. 3-8)
	AACU (1999), "Frequently Asked Questions about Feminist Science Studies" (PDF – 18 p)
	Fedigan (2000), "Gender Encounters" (PDF – 22 p)
	A Brief History of Women & People of Color (PoC) in STEM Fields; The "Problem" of Women and POC in the Twentieth-Century
Cohort Class Lead S	Schiebinger (1999), "Hypatia's Heritage" (HFCS, pp. 21-32)
Sign-Up V	Wyer et al (2009), "Educating Women for Scientific Careers" (WST, pp. 15-22)
	Takaki (1976), "Aesculapius Was a White Man: Antebellum Racism and Male Chauvinism at Harvard Medical School" (PDF – 8 p)
	Hess (1995), "The Origins of Western Science: Technotems in the Scientific Revolution" (PDF, pp. 54-68; 82-86)
8	Schiebinger (1999), "Meters of Equity" (HCFS, pp. 33-53)
S	Schiebinger (1999), "The Pipeline" (HCFS, pp. 54-64)
u	"Penn to work on increasing faculty diversity" (html)
F	HIGHLY RECOMMENDED – Select one additional reading to complete:
	1. Hubbard (2003), "Science, Power, Gender: How DNA Became the Book of Life" (PDF – 8 p)
	2. Light (1999), "When Computers Were Women" (PDF – 27p)
	<ol> <li>Oldenziel (1997), "Boys and Their Toys: The Fisher Body Craftsman's Guild, 1930-1968, and the Making of a Male Technical Domain" (PDF – 36p)</li> </ol>
	<ol> <li>Bix (2000), "Feminism Where Men Predominate: The History of Women's Science and Engineering Education at MIT" (PDF – 24p)</li> </ol>
	<ol> <li>Bix (2004), "From "Engineeresses" to "Girl Engineers" to "Good Engineers": A History of Women's U.S. Engineering Education" (PDF – 27p)</li> </ol>
F	Recommended: Keller (1977), "The Anomaly of a Woman in Physics" (WST, pp. 23-30)
	Horn (1998), "The Shoulders of Giants" (WST, pp. 46-49)
	Rose (1994), "Nine Decades, Nine Women, Ten Nobel Prizes: Gender Politics at the Apex of Science" (WST, pp. 57-71)
	Stanley (1983), "Women Hold Up Two-Thirds of the Sky: Notes on a Revised History of Technology" (PDF – 13 p)
	Schiebinger (2004), "Feminist History of Colonial Science" (PDF)
	West & Curtis (2006), "AAUP Faculty Gender Equity Indicators 2006" (PDF)
Week 2	Focusing on Race: Intersections of Race & Gender
	Morrill Land Grant Act, http://eca.state.gov/education/engteaching/pubs/AmLnC/br27.htm
Due – Online	McDowell (2003), "Engaged Universities: Lessons from the Land-Grant Universities and Extension" (PDF, pp. 33-36)
V	Washington (1895), "A Sunday Evening Talk,"
Critical Book	http://teachingamericanhistory.org/library/index.asp?document=595
Assignment	Washington (1896), "Industrial Education is the Solution," [excerpts], <a href="http://www.yale.edu/glc/archive/1147.htm">http://www.yale.edu/glc/archive/1147.htm</a>
Introduced	Washington (1903), "Industrial Education for the Negro," <a href="http://teachingamericanhistory.org/library/index.asp?document=62">http://teachingamericanhistory.org/library/index.asp?document=62</a>
	Du Bois (1903), "The Talented Tenth," from <i>The Negro Problem: A Series of Articles by Representative Negroes of To-day</i> [excerpts], <a href="http://www.yale.edu/glc/archive/1148.htm">http://www.yale.edu/glc/archive/1148.htm</a>
	Dunn (1993), "The Educational Philosophies of Washington, DuBois, and Houston: Laying the Foundations for Afrocentrism and Multiculturalism" (PDF, pp. 24-29)
V	Wennersten (1991), "The Travails of Black Land-Grant Schools in the South, 1890-1917" (PDF – 8p)
J	Jenkins (1991), "The Black Land-Grant Colleges in Their Formative Years, 1890-1920" (PDF – 9p)

Sands (1993), "Never Meant to Survive: A Black Woman's Journey - An Interview with Evelynn Hammonds" (WST, pp. 31-39) Sabramaniam (2000), "Snow Brown and the Seven Detergents' (WST, pp. 40-45) Ong (2005), "Body Projects of Young Women of Color in Physics: Intersections of Gender, Race. and Science" (PDF) U. of Washington (2011), ""Race matters when recruiting, retaining undergraduate women engineers" (html) "Cal Poly Architecture, Agriculture Ranked in Top 10 Nationally in Degrees to Minority Students" (html) Recommended: Slaton (2004), "'Minority Engineering Education in the United States Since 1945': A Research Proposal" (PDF – 14p) W Sept 28 The Social Structures of Science and Engineering Education & Occupations Due - ODP 1 Wyer et al (2009), "Stereotypes, Rationality, and Masculinity in Science and Engineering" (WST, pp. Critical Responses 93-98) Schiebinger (1999), "The Clash of Cultures" (HCFS, pp. 67-91) CLASS LEAD 1 Schiebinger (1999), "Science and Private Life" (HCFS, pp. 92-104) COSEPUP (2007), "Beyond Bias & Barriers: Fulfilling the Potential of Women in Academic Science and Engineering – Executive Summary" (PDF) Hoopes (2007), "Family-Work Issues for Women Scientists: An Interview with Diane F. Halpern" (PDF – 3 pages) (AWIS Summer 2007 PDF, pp. 8-10) Martinez (2007), "Having a Family: Flexibility and Women at Top Tier Research Institutions" (PDF -3 pages) (AWIS Summer 2007 PDF, pp. 11-13) Dean (2009), "Women Bridging Gap in Science Opportunities" (html) Wenneras & Wold (1997), "Nepotism and Sexism in Peer Review" (WST, pp. 50-56) Hartcolois (2010), "Getting into Med School Without Hard Sciences" (html) Discover Magazine (2010), "15-minute writing exercise closes the gender gap in university-level physics" (html) Inside Higher Ed (2011), "Inoculation Against Stereotype" Rolison (2003), "Can Title IX Do for Women In Science and Engineering What It Has Done for Women In Sports?" (PDF) Sevo (2008), "The Case for Title IX Compliance in Science and Engineering" (PDF) Mangan (2010), "Women in Academic Medicine: Equal to Men, Except in Pay" (html) Harris (2011), "More Physicians Say No to Endless Workdays" (html) McBay (1989), "Improving Education for Minorities" (PDF – 11p) AAAS/NSF (2001), "Introduction" + "What We Know from Existing Research" + "Gaps in Current Research" from In Pursuit of a Diverse Science, Technology, Engineering, and Mathematics Workforce: Recommended Research Priorities to Enhance Participation by Underrepresented Minorities (PDF - 7 p) Recommended: Hynes (2000), "Toward a Laboratory of One's Own: Lesbians in Science" (PDF) Margolis, Fisher, & Miller (2000), "The Anatomy of Interest: Women in Undergraduate Computer Science" (PDF) Wilson (2004), "Where the Elite Teach, It's Still a Man's World" (PDF – 10 p) Kozol (2005), "Still separate, still unequal: America's Educational Apartheid" (PDF) Babco (2005), "The Status of Native Americans in Science and Engineering" (PDF) Margolis et al (2008), "The Myth of Technology as the "Great Equalizer" (PDF) Bilimoria & Stewart (2009), "'Don't Ask, Don't Tell': The Academic Climate for Lesbian, Gay, Bisexual and Transgender Faculty in Science and Engineering" (PDF) Poirier et al (2009). "The Road to the STEM Professoriate for Underrepresented Minorities: A Review of the Literature" (PDF)

Bayer (2010), "Key Survey Findings" from Bayer Facts of Science Education XIV (PDF)

NAE (2010), "Gender Differences at Critical Transitions in the Careers of Science,

Engineering, and Mathematics Faculty" (PDF)

President's Council of Advisors on Science & Technology (2010), "Prepare and Inspire: K-12 Education in STEM for America's Future (PDF)

Mutegi (2011), "The Inadequacies of "Science for All" and the Necessity and Nature of a Socially Transformative Curriculum Approach for African American Science Education" (PDF)

Fry (2011), "Hispanic College Enrollment Spikes, Narrowing Gaps with Other Groups" (PDF)

# Week 3 M Oct 3

CLASS LEAD 2

Complicating Narratives – Asian Americans in STEM Fields; Global STEM Development & Workforce

Thrupkaew (2002), "The Myth of the Model Minority" (html)

Chang & Au (2007), "You're Asian. How Could You Fail Math?" (PDF)

Rana (2000), "Fulfilling Technology's Promise: Enforcing the Rights of Women Caught in the Global High Tech Underclass" (WST, pp. 322-333)

Lee (2005), "Asian Americans and the Gender Gap in Science and Technology" (WST, pp. 72-83)

Mellström (2009), "The Intersection of Gender, Race and Cultural Boundaries, or Why is Computer Science in Malaysia Dominated by Women?" (PDF)

Grossman (2006), "Where Computers Go to Die – and Kill" (HTML)

Hickman (2010), "Concern over human cost overshadows iPad launch" (html)

Cox (2006), "War, Murder, and Rape ... All for your Cell Phone" (HTML)

The Enough Project (2009), "Can You Hear Congo Now?" (PDF)

(Browse) Silicon Valley Toxics Coalition Website http://www.etoxics.org/

Video: http://www.huffingtonpost.com/brooke-smith/hello-im-a-mac-and-heres b 617256.html

#### Module 2: Medical Care & Health - Introduction to Questions of Access, Questions of Quality

W Oct 5

The Women's Health Movement in the United States; Case Study – The Politics of Child Birth

Boston Women's Health Collective (1973), "Preface from the 1973 Edition of Our Bodies,

Ourselves" http://www.ourbodiesourselves.org/about/1973obos.asp

Ehrenreich & English (1973). Witches, Midwives, and Nurses

Norsigian, et al (1999). "The Boston Women's Health Book Collective and Our Bodies, Ourselves: A Brief History and Reflection" <a href="http://www.ourbodiesourselves.org/about/jamwa.asp">http://www.ourbodiesourselves.org/about/jamwa.asp</a>

Ruzek & Becker (1999), "The Women's Health Movement in the United States: From Grassroots Activism to Professional Agendas" (PDF – 5 p)

Browse: Blood Sisters (c. 1995), "Hot Pants: Do It Yourself Gynecology" (PDF)

Blustain (2009), "Modern Childbirth: Failure to Progress" (PDF – 3 p)

Block (2009), "Where's the Birth Plan?" (PDF – 3 p)

Pikington (2010), "New York midwives lose right to deliver babies at home" (html)

AFP (2010), "US low score on world motherhood rankings: charity" (html)

Bazelon & Lithwick (2003), "Motherhood Lost" (html)

Grigoriadis (2010), "Waking up from the Pill" (html)

Recommended: (Browse) History of Our Bodies, Ourselves,

http://www.ourbodiesourselves.org/about/history.asp

Cyr (2005), "Myth of the Ideal Cesarean Rate" (PDF – 4 p)

Goodman (2007), "Piercing the Veil: The Marginalization of Midwives in the United States" Morgen (2002), "The Politics of Race and Class: Dreams of Diversity, Dilemmas of Difference" (PDF)

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Week 4	How Gender, Race and Class Matter in Medical Care & Health
M Oct 10	Optional Background Reading – Schiebinger (1999), "Medicine" (HFCS, pp. 107-125)
	Jones (1981), "The Tuskegee Syphilis Experiment" (PDF – 11 p)
CLASS LEAD 3	Reuss (2005), "Cause of Death: Inequality" (PDF – 5 p)
	Children's Defense Fund (2006), "Introduction" + "Health Disparities Around the United States" (PDF
Due – Online	– pp. 1-9)
Dialogue Paper 2	World Health Care Costs (jpg – 1 p)
	California Center for Public Health Advocacy, "Searching for Healthy Food: The Food Landscape in California" (PDF – 5 p)
	"Toxic Waste Executive Summary (2007) (PDF – read pp. 4-13)
	CDC (2010), "A Closer Look at African American Men and High Blood Pressure Control" (PDF – pp. 3-13)
	Watkins & Whaley (2000), "Gender Role Stressors and Women's Health" (PDF – 3 p)
	Wald & Wu (2010), "Of Mice and Men: The Bias in Animal Models" (PDF – 2 p)
	Recommended: Martin, "Premenstrual Syndrome, Work, Discipline, and Anger" (WST, pp. 343-359)
	The Food Trust, "Food Geography: How Food Access Effects Diet and Health" (PDF – 3 p)
	Rosser (1993), "Ignored, Overlooked, or Subsumed: Research on Lesbian Health and
	Health Care" (PDF)
W Oct 12	Case Study – The Politics of Breast Cancer + Exam Review
	Rothman (1998/2001), pp. 128-131; 143-160
Due – ODP 2	Breast Cancer Action, (2004) "What You Should Know About the Environment and Breast Cancer"
critical responses	(PDF – 1 p)
	Cordes (2009), "Rethink Pink NOW! Saner Solutions to Breast Cancer" (html – 4 p) (Pts 1 & 2)
	Breast Cancer Fund (2009). "Mammography Position Statement: Mammography Screening: Are We Asking the Wrong Question?" (PDF – 2 p)
	Broadwater (2010), "New Report Focuses on Hazards of Environmental Contamination" (PDF–12p)
	Saul (2010), "Earliest Steps to Find Breast Cancer Are Prone to Error" (html)
	Gaudillière (2006), "Science, Technology, and Globalization: Globalization and Regulation in the Biotech World: The Transatlantic Debates over Cancer Genes and Genetically Modified Crops" (PDF, pp. 252-258)
	Pollack (2010), "U.S. Says Genes Should Not Be Eligible for Patents" (html)
Week 5	EXAM 1
M Oct 17	
Module 3: Examini	ing the Politics of Scientific and Medical Knowledge Production Practices
W Oct 19	Gender and Knowledge Production Practices & Introducing Biological Determinism
	Wyer et al (2009). "Technologies Born of Difference: How Ideas about Women and Men Shape Science and Technology" (WST, pp. 157-164)
	Wayne (2000), "Walking a Tightrope: The Feminist Life of a <i>Drosophila</i> Biologist" (WST, pp. 84-91)
	Bleier (1984), "Sociobiology, Biological Determinism, and Human Behavior" (WST, pp. 185-203)
	"Bill Moyer Interview with Evelyn Fox Keller" (PDF – 4 p)
	Rosser (1989), "Re-visioning Clinical Research: Gender and the Ethics of Experimental Design" (PDF – 10 p)
	Recommended: Lewontin (1976), "Sociobiology - A Caricature of Darwinism" (PDF)
	Lowe (1978), "Sociobiology and Sexism" (PDF)
	Tuana (1988), "The Weaker Seed the Sexist Bias of Reproductive Theory" (PDF)
	Zita (1988), "The Premenstrual Syndrome: "Dis-easing" the Female Cycle" (PDF)

Spanier (1995), "Biological Determinism and Homosexuality" (PDF) Hausman (2000), "Do Boys Have to Be Boys? Gender, Narrativity, and the John/Joa Case" (PDF) Gowaty (2003), "Sexual Natures: How Feminism Changed Evolutionary Biology" (PD Lederman (2010), "The Genomic Revolution: Secrets of Life, Secrets of Death" (PDF Motor 24  Moct 24  Background Reading – Schiebinger (1999), "Biology" (HFCS, pp. 145-158)  Martin (1991), "The Egg and the Sperm: How Science has Constructed a Romance Based o Stereotypical Male-Female Roles" (PDF – 12 pages)  Schiebinger (1994), "Why Mammals are Called Mammals: Gender Politics in Eighteenth-Cer Natural History" (PDF)  Subramaniam (2001), "The Aliens Have Landed! Reflections on the Rhetoric of Biological Inv (WST, pp. 133-140)  Recommended: Keller (1992), "Gender and Science: An Update" (WST, pp. 245-254)  Stepan (1986), "Race and Gender: The Role of Analogy in Science" (PDF)  Biology & Gender Study Group (1988), "The Importance of Feminist Critique for Contemporary Cell Biology" (PDF)	n ntury vasion"
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Contemporary Cell Biology" (PDF)	(PDF)
	(PDF)
Upchurch & Fojtova (2009), "Women in the Brain: A History of Glial Cell Metaphors"	
W Oct 26 Scientific Racism and Scientific Anti-Racism	
Rothman (1998/2001), "Mapping the Past: The Macroeugenics of Race" (BOL, pp. 45-85)	
Omi & Winant (1986), "Racial Formations" (PDF – 9 p)	
Duster (2006), "Lessons from History: Why Race and Ethnicity Have Played A Major Role in Biomedical Research" (PDF – 10 p)	
"Interview with Richard Lewontin" (2003) (PDF – 11 p)	
American Anthropological Association Statement on "Race" and Intelligence (1994) (html)	
American Anthropological Association Statement on "Race" (1998) (html)	
Everding (1997), "Challenging 'The Bell Curve': College education halves black, white IQ sco	re gap"
Selected readings on Jim Watson's Oct 2007 comments about race	
1) Fury at DNA Pioneers Theory (PDF)	
2) Mortification of Jim Watson (PDF)	
Browse: http://www.understandingrace.org/	
Natural History Museum, "Chapter 9: Transfer and Exploitation of Knowledge" from Slavery a Natural World (PDF)	and the
Singleton (2010), "Henrietta Lacks: How a Black Woman's Cells Fueled Medical Progress" (h	ntml)
Recommended: Gould (1981), "American Polygeny and Craniometry Before Darwin" (PDF –	
Fausto-Sterling (1995). "Gender, Race, and Nation: The Comparative Anatomy of 'Hottentot' Women in Europe, 1815-1817" (PDF – 23 p)	-
Weasel (2004), "Feminist Intersections in Science: Race, Gender and Sexuality through Microscope" (PDF)	ugh the
Wise (2011), "Race, Intelligence and the Limits of Science: Reflections on the Moral Absurdity of 'Racial Realism'" (html)	

Module 4: Reproductive, Medical and Genetic Technologies			
Week 7 M Oct 31	The Feminist Case for Abortion Rights   Race, Class & Reproductive Politics   Prenatal Diagnosis   Feminist Questions about Selective Abortion  Shaw & Lee (2007). "Abortion" (PDF – 7 p)		

Silliman et al (2004), "Women of Color and Their Struggle for Reproductive Justice" (PDF – 7 p) Waller (2008), "LaBruzzo: Sterilization plan fights poverty" (html) Hines (2011), "The Racist Anti-Abortion Group That Criminalizes Black Motherhood" (html) Zoila Pérez (2011), "Past and Present Collide as the Black Anti-Abortion Movement Grows" (html) Rothman (1998/2001), "Writing the Body: The Genetics of Illness" (BOL, pp. 111-127) Rothman (1998/2001), "The Micro-Eugenics of Procreation" (BOL, pp. 173-192) Rapp (1988), "Chromosomes and Communication: The Discourse of Genetic Counseling" (PDF – 13 pages) Recommended: NASW, "Reproductive Health Disparities for Women of Color (PDF – 4 p) A. Davis (1981), "Racism, Birth Control, and Reproductive Rights" (PDF - 11 p) Woliver (1995), "Reproductive Technologies, Surrogacy Arrangements, and the Politics of Motherhood" (WST, pp. 361-369) Kapsalis (1997), "Mastering the Female Pelvis: Race and the Tools of Reproduction" (PDF) Layne (1997), "Breaking the Silence: An Agenda for a Feminist Discourse of Pregnancy Loss" (PDF) Lawrence (2000), "The Indian Health Service and the Sterilization of Native American Women" (PDF) Reagan (2000), "Crossing the Border for Abortions: California Activists, Mexican Clinics, and the Creation of a Feminist Health Agency in the 1960s" (PDF) Ludlow (2008), "Sometimes, It's a Child and a Choice: Toward an Embodied Abortion Praxis" (PDF) Independent Writing Assignment to be announced W Nov 2 Film Options: 1. CBS Reports (1965), "Abortion and the Law" http://www.cbsnews.com/video/watch/?id=3204142n 2. Jane: An Abortion Service (1996) 3. The Coat Hanger Project (2008) 4. Other films TBA Week 8 The Politics of Disability Rights, Sex Selection, Designer Babies & Assisted Reproductive **Technologies** M Nov 7 Rothman (1998/2001), "The Micro-Eugenics of Procreation" (BOL, pp. 193-218) Hubbard (1991), "Abortion and Disability" (PDF – 13 pages) Neumayr (2005), "The New Eugenics" (html) CLASS LEAD 5 Dorsey (2002), "The New Eugenics" (HTML) Alexander (2002), "The Remastered Race" (html) Levine (2002), "What Human Genetic Modification Means for Women" (PDF – 4 pages) Bhatia, Mallik & Dasgupta (2003), "Sex Selection: New Technologies, New Forms of Gender Discrimination" (HTML) Simoncelli (2003), "Pre-Implantation Genetic Diagnosis and Selection: From Disease Prevention to Customized Selection" (PDF – 4 pages) Sama-Resource Group for Women and Health (2008). "Assisted reproductive technologies: Autonomy or subjugation? A case study from India" (PDF) Carney (2010), "Inside India's Rent-A-Womb Business" (PDF – 10 p) Newport (2011), "Americans Prefer Boys to Girls, Just as They Did in 1941" (html) Padawer (2011), "The Two-Minus-One Pregnancy" (html) Tanner (2011), "Boy or girl? A simple test raises ethical concerns" (html) The Economist (2011), "Gendercide in India" (html)

	Fall 2011
	Recommended: Roberts (1997), "Race and the New Reproduction" (HTML)
	Garland-Thomson (2002), "Integrating Disability, Transforming Feminist Theory" (PDF)
Module 5: Revisiti	ng Race in a Genomic Age
W Nov 9	The BiDil Story and the Rise of Race-Based Pharmacogenics   Questioning the Impacts of Inclusion Reforms in Clinical Trials
Due – Take Home Exam (Exam #2);	Epstein (2004), "Race in Biomedical Research in the United States Bodily Differences and Collective Identities: the Politics of Gender and Race in Biomedical Research" (PDF – 17 p)
Due at the	Fullwiley (2008). "The Molecularization of Race" (PDF – 5 p)
beginning of class	Duster (2003). "Unlikely mix Race, biology and drugs" (HTML)
	Duster (2005), "Race and Reification in Science" (HTML)
	Kimberly (2005), "A Bitter Pill for Black Hearts" (html)
	Harmon (2003), "In DNA Era, New Worries About Prejudice" (PDF – 4 p)
	Wade (2004), "Race-based Medicine Continued " (PDF – 2 p)
	Johnston (2004), "Race and Biology: Changing Currents in Muddy Waters" (PDF – 6p)
	Craddock (2006), "Rethinking Race and Ethnicity in Health Disparities" (PDF – 4p)
	Terrell (2010), "Who's Afraid of a Little AIDS Vaccine?" (PDF – 3 p)
	Lewin (2010), "College Bound, DNA Swab in Hand" (PDF – 2 p)
	Recommended: Whittle & Inhorn (2001), "Rethinking Difference: A Feminist Reframing of Gender/Race/Class for the Improvement of Women's Health Research" (PDF)
	Long (2003), "Human Genetic Variation: The Mechanisms and Results of Microevolution" (PDF)
	Epstein (2008), "The Rise of 'Recruitmentology': Clinical Research, Racial Knowledge, and the Politics of Inclusion and Difference" (PDF)
	Fullwiley (2008), The Biological Construction of Race: 'Admixture' Technology and the New Genetic Medicine" (PDF)
	Kahn (2008), "Exploiting Race in Drug Development" (PDF – 18 p)
Week 9	Genetic Ancestry, Identity, and Group Membership
M Nov 14	Adelman (2003), "Race and Gene Studies: What Difference Does a Difference Make?" (html)
	Bolnick, et al (2007). "GENETICS: The Science and Business of Genetic Ancestry Testing" (PDF –
CLASS LEAD 6	2 p)
	Tallbear & Bolnick (2004) "Native American DNA" Tests: What are the Risks to Tribes?" (PDF – 4 p)
Due – Online	Anwar (2007). "Researchers caution against genetic ancestry testing" (PDF – 2 pages)
Dialogue Paper 3	Brown (2002). "Seminole Nation Divided by Race, Money" (PDF – 2 pages)
	Appleton (2009), "Blood Quantum" (html)
	Tallbear (2003), "DNA, Blood, and Racializing the Tribe" (PDF – 17 p)
	Dyer (2006), "DNA tests locate genetic branches on African-Americans' family trees" (html)
	Goffe (2009), "Americans seek their African roots" (html)
	Recommended: Miller (2005), "Seminoles and Africans under Seminole Law: Sources and

Module 6: (Re)imagining Science, Technology & Society			
W Nov 16	(Re)imagining Science? Feminist Epistemologies of Science		
	Schiebinger (1998). "Will Women Do Science Differently?" (HFCS, pp. 8-13)		
Due – ODP 3 critical responses	Wyer et al (2009), "The Next Generation: Bringing Feminist Perspectives into Science and Technology Studies" (WST, pp. 237-243)		

Nelson (2008). "Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry"

Discourses of Tribal Sovereignty and 'Black Indian' Entitlement" (PDF)

Harding (1991), "Feminist Standpoint Epistemology" (PDF – 11 p)
Haraway (1985), "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" (PDF)
Longino (1993), "Subjects, Power, Knowledge: Description and Prescription in Feminist Philosophies of Science" (PDF – 15 p)
Ioannidis (2005), "Why Most Published Research Findings Are False" (PDF – 6p)
Recommended: Campbell (2009), "Reconstructing Science and Technology Studies Views from Feminist Standpoint Theory" (PDF)
Houle (2009), "Making Strange Deconstruction and Feminist Standpoint Theory" (PDF)

Week 10	(Re)imagining Science? Examples of Feminist or Sustainable Sciences
M Nov 21	Schiebinger (1997), "Creating Sustainable Science" (PDF – 16 pages)
	Schiebinger (1999), "Physics" (HFCS, pp. 159-180)
	Bug (2003), "Has Feminism Changed Physics?" (PDF – 14 p)
	Schiebinger (1999), "Primatology, Archaeology, and Human Origins" (HFCS, pp. 126-144)
	Fedigan (2001), "The Paradox of Feminist Primatology" (WST, pp. 256-267)
	Conkey (2003), "Has Feminism Changed Archaeology?" (PDF – 11 p)
	Recommended: Phillips & Hausebeck (2000), "Just Beneath the Surface: Rereading Geology, Rescripting the Knowledge-Power Nexus" (PDF)
	Belcastro & Moran (2003), "Interpretations of Feminist Philosophy of Science by Feminist Physical Scientists" (PDF)
	Roy (2004), "Feminist Theory in Science: Working toward a Practical Transformation" (PDF)
W Nov 23	No Class – Thanksgiving Holiday
Week 11	(Re)imagining Technology? Feminist & Anti-Racist Scholar/Activists Rethink Technological Progress
M Nov 28	Wyer et al (2009), "Reproducible Insights" (pp. 301-305)
	L. Marx (1987), "Does improved technology mean progress?" (PDF – 10 p)
	Riley et al (2009), "Feminisms in Engineering Education: Transformative Possibilities" (PDF – 14 p)
	Interview with Vandana Shiva (2003), "What Would Democracy Look Like?"
	Loftus (2003), "A New Era" (PDF – 3 p)
	Selingo (2006), "May I Help You?" (html)
	ABET 2000 Criteria (1/2 page) (read Criterion 3)
	(Browse) Engineers Without Borders Website <a href="http://www.ewb-usa.org/">http://www.ewb-usa.org/</a>
	SET-DEV (2011), "Knowledge Swaraj: An Indian Manifesto on Science and Technology" (PDF)
	Recommended: Perry (2000), "Engendering Environmental Thinking: A Feminist Analysis of the Present Crisis" (WST, pp. 312-320)
	Miller at al (2000), "A Desire to Help Others: Goals of High-Achieving Female Science Undergraduates" (PDF)
W Nov 30	(Re)imagining Scientific & Technical Decision-Making Practices
Due – Book Review	Weasel (2001), "Laboratories Without Walls: The Science Shop as a Model for Feminist Community Science in Action" (PDF – 14 p)
	Leach & Scoones (2005), "The Slow Race" (PDF - pp. 52-73)
	Sclove (1995), "Town Meetings on Technology" (HTML)
	Wilderman (2007), "Models of Community Engagement: Design Models from the Field" (PDF)
Week 12	See the Cal Poly Fall 2011 Final Exam Schedule for scheduling details

**Professor:** Erika Lorraine Milam

Office: 2149 Taliaferro Hall

**Office Hrs:** M 1:30-2:30pm, T 2:00-3:00pm,

or by appointment

Telephone: 301.405.4302 E-mail: milam@umd.edu

(preferable means of contact)

Class Meetings: T/Th 9:30-10:45am, TLF 1101



Dr. Marie Stopes in her laboratory (1932)

Course Description: How have women served both as subject to and producers of scientific research? How has science constructed our visions of masculinity and femininity? What has the influence of feminism been on the ways we analyze and think about the practice, theories, and history of science? How has our understanding of gender and self changed as a result of changing scientific theories? This class explores answers to these questions through a series of thematic readings grouped into two large categories: the scientific construction of gender, and the gendered construction of science (and scientists).

**Course Goals:** This class is designed to help you develop a set of analytical tools with which to interrogate the cultural history of gender and science.

### Course materials:

All readings will be made available on the class Blackboard site, with the exception of one book: Michel Foucault, *History of Sexuality, Vol. 1* (1976) ISBN: 9780679724698

Any reprint edition of this book is acceptable.

**Structure of the Class:** On Thursdays, I will lecture about the social, political, and scientific context for the week's historical readings—feel free to ask questions at any time during lecture. The following Tuesday, we will discuss the readings assigned for that week. Each discussion will build from the readings, lecture, and discussion questions distributed the previous week.

Because this course revolves in good part around discussion, its success depends on you having read the material carefully and being willing to talk about it. We will read both primary sources (scientific writings by participants at the time) and secondary sources (writings by historians and scientists reflecting on and analyzing what happened after the fact).

• Each week I will provide a set of reading questions for the material. You will turn in a reaction paper that addresses these questions 3 times over the course of the semester. I have divided the class into three groups (X, Y, and Z), and the weeks you are to turn in reaction papers are noted on the syllabus. Reaction papers should be about 750-1000 words (3-4 pages) and are due Mondays by 6pm to <a href="mailto:milam@umd.edu">milam@umd.edu</a>.

- In addition to turning in the weekly writing assignments, you will be expected to participate in the Tuesday discussion.
- There will be one critical essay assignment, 1500-2000 words (about 6-8 double spaced pages in Times New Roman 12 point font).
- You will also write a ~12-page research paper over the course of the semester. An annotated bibliography and statement of topic is due about two-thirds of the way through the semester. Your final paper is due on the last day of class.

#### **Grades:**

Grades will be based on a combination of reading responses (20%), discussion (20%), and critical essays assignments (60%)

Weekly reading responses	20 pts
Participation in discussions	20 pts
Critical Essay	20 pts
Topic & Annotated Bibliography	15 pts
Research paper	25 pts

# **Grading Criteria:**

Participation in discussions—

The extent to which you actively participate in discussion, either by contributing useful comments or asking good questions, will form the basis of your discussion grade.

- A You are engaged in the course discussion each week and reliably contribute at least one question or comment per class that concretely relates back to the questions and issues raised in the readings.
- B You are usually engaged in the course discussions and frequently contribute comments in class, most of which are related to the questions and issue raised in the readings.
- C You are occasionally engaged in the course discussions. Although you sometimes have onpoint ideas to say, at other times your contributions are tangential to the larger questions raised each week in class.
- D You are infrequently engaged in the course discussion.
- F You act aggressively bored by class.

#### Reading Responses—

Please see the "Reading Response Guidelines" available on Blackboard for further details.

- A You provided a succinct encapsulation of authors' main narratives and arguments, and further took the time to reflect on whether (and on what basis) the authors' analytical framework, narrative, and conclusions are justified and/or useful ways of thinking about the questions raised by the readings.
- B You provided a succinct encapsulation of the authors' main narratives and arguments, and began to articulate a personal "reaction" to the papers (you were found them persuasive or unpersuasive) but had difficulty explaining the basis for your reaction.
- C You summarized the main narrative of the readings for the week, but had difficulty teasing out the authors' arguments about why the central narrative is important and differs from what others have said in the past.
- D You address only a portion of the readings in your paper or have largely misunderstood the main narrative for the week.

F – You address only a portion of the readings in your paper and have largely misunderstood the main narrative for the week.

# Critical Essays—

More information about the specifics of each critical essay will be forthcoming during the semester. In general, however, your critical essays will be evaluated according to the following criteria:

Is the essay well informed?

Do you have a well-defined argument you want to make (your thesis)?

Is the logic and development of your argument sound?

Is there a serious consideration of counter-arguments?

How is your writing style?

Have you appropriately documented your sources?

# Academic Integrity and Honor Pledge:

The University has approved a Code of Academic Integrity (<a href="http://www.shc.umd.edu/code.html">http://www.shc.umd.edu/code.html</a>) which prohibits students from cheating on exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers, facilitating academic dishonesty, submitting fraudulent documents, and forging signatures. Plagiarism policy: all quotations taken from other authors, including from the Internet, must be indicated by quotation marks and referenced. Paraphrasing must be referenced as well.

The following University of Maryland Honor Pledge, approved by the University Senate, should be handwritten and signed on the front page of all papers, projects or other academic assignments submitted for evaluation in this course: "I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination."

#### Disabilities, Religious Holidays, Absences, Late Policy:

If you have a documented disability and require special accommodations, please contact the instructor for the course within the first two weeks of class. If I do not hear from you within the first two weeks, I will assume that you do not have a documented disability and do not require special accommodations. Students who seek special accommodations due to disabilities must set up an appointment with the Disability Support Services in the Counseling Center (Shoemaker 0126), 301.314.7682. For more information, consult the DSS website: <a href="http://www.counseling.umd.edu/DSS/">http://www.counseling.umd.edu/DSS/</a>

Religious observance, athletic events, and other extra-curricular activities: Please inform the professor of any *intended absences* at the beginning of the semester. The University System of Maryland policy provides that students not be penalized because of observances of religious beliefs, but rather shall be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment missed due to individual participation in religious observances. It is your responsibility to inform the instructor at the beginning of the semester if you are going to miss any assignments due to religious observances. If I do not hear from you during the first two weeks of class, I will assume that you will not be absent from class due to religious observances, athletic events, or any other scheduled activity.

If for any family or medical reason you find it absolutely necessary to miss an in-class examination, you must contact me *before* the examination and have me consent to your absence if you wish to take a make-up exam.

If the University of Maryland officially delays or closes the university due to inclement weather, I will make an announcement via Blackboard explaining how the lecture schedule will be adjusted. If class does not meet on a day in which an assignment is due, that assignment will be due during the next scheduled class period.

In all other situations, late assignments will receive a 1/3 letter-grade deduction (e.g. a B becomes a B-) for each 24 hours they are late. After one week, the assignment will receive a failing grade. You must complete *all* assignments to be considered for a passing grade.

# **Email Policy:**

Please do not send me email-messages regarding general issues such as assignments or deadlines. The classroom is the proper place to raise these issues and to discuss them together. I will answer emails only if they are signed and clearly addressed to me. I will endeavor to answer emails within twenty-four hours.

# Writing:

All papers should adhere to the Chicago style of citations and references as outlined in Diana Hacker, *A Pocket Style Manual*, 5<sup>th</sup> ed. (New York: St. Martin's Press, 2009).

The University of Maryland Writing Center is located in 1205 Tawes Hall. At the Writing Center, trained consultants can assist you in thinking through how to construct your essays and provide feedback on the clarity of your writing and argumentation. Although some assistance can be provided on a walk-in basis, they strongly urge you to make an appointment. You can make an appointment online or by phone: <a href="www.english.umd.edu/writingcenter">www.english.umd.edu/writingcenter</a> (available 24/7) or 301.405.3785 (during hours when they are normally open).

#### **Course Evaluation:**

As a professor, I need your feedback in order to improve this class. Therefore, I very strongly encourage you to evaluate my teaching by using the University of Maryland's online evaluation tool. You will be alerted about when you can access CourseEvalUM (<a href="www.courseevalum.umd.edu">www.courseevalum.umd.edu</a>) via your official University e-mail account.

#### **Final Caveat:**

This syllabus may be subject to change. Students will be notified in advance of important changes that could affect grading, assignments, etc. Please check the class homepage on Blackboard periodically for any updates.

# **COURSE SCHEDULE**

For each week, **REQUIRED** readings are listed first, "Additional Suggestions" are readings that you may wish to pursue if you find the readings for the week especially fascinating or to provide further context for the required readings.

(Aug 30) Introductions

Week 1 (Sept 1, 6) BioPower (X)

Michel Foucault, History of Sexuality, Vol. 1 (1976).



René Magritte, The Treachery of Images, 1928-1929

#### Part I. THE SCIENTIFIC CONSTRUCTION OF GENDER

# Week 2 (Sept 8, 13) Hybridities in Nature (Y)

Julia Douthwaite, "Wild Children: Establishing the Boundaries of Nature and Science," in *The Wild Girl, the Natural Man, and the Monster: Dangerous Experiments in the Age of Enlightenment* (Chicago, 2002): 11-69.

Alice Domurat Dreger, "Hermaphrodites in Love: The Truth of the Gonads," in *Hermaphrodites and the Medical Invention of Sex* (Cambridge, MA: Harvard University Press, 1998): 110-38.



Additional Suggestions

Joan Cadden, "Feminine and Masculine Types," in *Meanings of Sex Difference in the Middle Ages: Medicine, Science, and Culture* (Cambridge, 1993): 169-227.

Lorraine Daston and Katherine Park, "Monsters: A Case Study," in *Wonders and the Order of Nature* (Zone, 1998): 173-214.

Susan Greenhalgh and Jiali Li, "Engendering Reproductive Policy and Practice in Peasant China: For a Feminist Demography of Reproduction," Signs: Journal of Women in Culture and Society 20, no. 3 (1995): 601-41.

Ludmilla Jordanova, Sexual Visions: Images of Gender in Science and Medicine Between the Eighteenth and Twentieth Centuries (University of Wisconsin Press, 1989).

Lisa Handwerker, "The Hen that Can't Lay an Egg (Bu Xia Dan de Mu Ji): Conceptions of Female Infertility in Modern China," in *Deviant Bodies*, ed. Jennifer Terry and Jacqueline Urla (Indiana, 1995): 358-86.

Londa Schiebinger, "Gender and Natural History," in *Cultures of Natural History* ed. Nicholas Jardine, James Secord, and Emma Spary (Cambridge, 1996): 163-77.

Jennifer Terry, "Anxious Slippages Between 'Us' and 'Them:' A Brief History of the Scientific Search for Homosexual Bodies," in *Deviant Bodies*, ed. Jennifer Terry and Jacqueline Urla (Indiana, 1995): 129-69.

# Week 3 (Sept 15, 20) Bodies Gone Awry (Z)

- Warwick Anderson, "The Trespass Speaks: White Masculinity and Colonial Breakdown," The American Historical Review 102, no. 5 (1997): 1343-70.
- Elizabeth Lunbeck, "Hysteria: The Revolt of the Good Girl," in *The Psychiatric Persuasion: Knowledge*, Gender, and Power in Modern America (Princeton, 1994): 209-28.
- Ellen Moers, "Female Gothic: The Monster's Mother," New York Review of Books 21, no. 4 (March 21, 1974).

### Additional Suggestions

Modernity & Madness, an online exhibit at the Wellcome Institute for the History of Medicine: www.wellcomecollection.org/whats-on/exhibitions/madness--modernity.aspx

Sigmund Freud, Dora: An Analysis of a Case of Hysteria (1905).

- Carol Groneman, "Nymphomania: The Historical Construction of Female Sexuality," in Deviant Bodies, ed. Jennifer Terry and Jacqueline Urla (Indiana, 1995): 219-49.
- Philippa Levine, "Public Health, Venereal Disease, and Colonial Medicine in the later Nineteenth Century," in Sex, Sin, and Suffering: Venereal Disease and European Society Since 1870 (Routledge, 2001): 160-72.
- Elizabeth Lunbeck, "Modern Manhood, Dissolute and Respectable," in *The Psychiatric Persuasion:* Knowledge, Gender, and Power in Modern America (Princeton, 1994): 229-55.

Mary Shelley, Frankenstein: Or, the Modern Prometheus (1818).

# Week 4 (Sept 22, 27) The Science of Love (X)

Harry Harlow, "Nature of Love," American Psychologist 13 (1958): 673-85.

Sarah Igo, "The Private Lives of the Public," in The Averaged American: Surveys, Citizens, and the Making of a Mass Public (Harvard University Press, 2007): 234-80.

Alfred Charles Kinsey, Wardell B. Pomeroy, and Clyde Eugene Martin, "Interviewing" in Sexual Behavior of the Human Male (W.B. Saunders, 1948): 35-62.



Sisters Read Review of Kinsey Report, 1953

## Additional Suggestions

- Deborah Blum, "The Perfect Mother" and "Chains of Love," in Love at Goon Park: Harry Harlow and the Science of Affection (NY: Berkeley Books, 2002): 143-206.
- Kenneth Dover, "Nature and Society," in *Greek Homosexuality* (Harvard, 1989 [1978]): 60-110.
- Wendy Kline, "A Marriage is not Complete without Children: Positive Eugenics, 1930-1960," in Building a Better Race: Gender, Sexuality, and Eugenics from the Turn of the Century to the Baby Boom (California, 2001): 124-56.
- Miriam Reumann, "Much the Same Desires as Men': Sexual Behavior in the Human Female," in American Sexual Character: Sex, Gender, and National Identity in the Kinsey Reports (California, 2005): 86-127.
- Angelique Richardson, "Science and Love," in Love and Eugenics in the Late Nineteenth Century: Rational Reproduction and the New Woman (Oxford, 2003): 78-94.

- Cynthia Eagle Russett, "Up and Down the Phyletic Ladder," in Sexual Science: the Victorian Construction of Womanhood (Harvard, 1989): 49-77.
- Diane B. Paul, "From Eugenics to Human Heredity," *Controlling Human Heredity: 1865 to the Present* (Amherst: Humanities Books, 1998): 115-36.

# Week 5 (Sept 29, Oct 4) Post-War Consumption and the Human Body (Y)

- Jacqueline Urla and Alan C. Swedlund, "The Anthropometry of Barbie: Unsettling Ideals of the Feminine Body in Popular Culture," in *Deviant Bodies*, ed. Jennifer Terry and Jacqueline Urla (Indiana, 1995): 277-313. See also: <a href="https://www.youtube.com/watch?v=iYhCn0jf46U">www.youtube.com/watch?v=iYhCn0jf46U</a>
- Judith Houck, "Feminine Forever: Robert A. Wilson and the Hormonal Revolution, 1963-1980," in *Hot and Bothered: Women, Medicine, and Menopause in Modern America* (Harvard, 2006): 152-87.
- David Serlin, "Christine Jorgensen and the Cold War Closet," in Replaceable You: Engineering the Body in Postwar America (Chicago, 2004): 159-90.

# Additional Suggestions

- Anne Balsamo, "On the Cutting Edge: Cosmetic Surgery and the Technological Production of the Gendered Body," *Camera Obscura* 28 (1992): 206-37.
- Ruth Schwartz Cowan, "From Virginia Dare to Virginia Slims: Women and Technology in American Life," *Technology and Culture* 20 (1979): 51-63.
- Mary Douglas, "The Two Bodies," in *Natural Symbols: Explorations in Cosmology* (Routledge, [1970] 1996): 69-87.
- Barbara Duden, "Toward a History of the Body," in Woman Beneath the Skin: A Doctor's Patients in Eighteenth-Century Germany (Harvard, 1998): 1-49.
- Nicolas Rasmussen, "A Bromide for the Atomic Age," in On Speed: The Many Lives of Amphetamines (New York University Press, 2008): 113-47.

### Critical Essay 1 will be distributed on Thursday, Oct. 6 and is due on Thursday, Oct. 13

# Week 6 (Oct 6, 11) Primate Cultures, Masculine and Feminine Natures

- Note:: Lecture will include excerpts from *Miss Goodall and the Wild Chimpanzees* (National Geographic Specials, 1965) and Frederick Wiseman's *Primate* (Zipporah Films, 1974).
- Jane Goodall, "Life and Death at Gombe," *National Geographic Magazine* (May 1979): 592-621.
- Elaine Morgan, "Women and the Future," in Robert Bundy, ed. Images of the Future: The Twenty-First Century and Beyond (Prometheus Books, 1976): 143-51.
- Susan Sperling, "The Troop Trope: Baboon Behavior as a Model System in the Postwar Period," in Angela Creager, Elizabeth Lunbeck, and Norton Wise, eds. *Science Without Laws: Model Systems, Cases, Exemplary Narratives* (Duke, 2007): 73-89.



Jane Goodall, 1972

Additional Suggestions

Richard Dawkins, "Introduction" and "Battle of the sexes," in *The Selfish Gene* (Oxford, 2006 [1976]): 1-11, 140-65.

Robin Fox, "The evolution of human sexual behavior," The New York Times, March 24, 1968.

Donna Haraway, "Women's Place is in the Jungle" in *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (Routledge, 1989): 279-303.

Alistair Hardy, "Was Man More Aquatic in the Past," New Scientist 7/174 (17 March 1960): 642-45.

Sarah Blaffer Hrdy, "Motherhood as a Minefield," and "Devising better lullabies," in *Mother Nature: Maternal Instincts and How They Shape the Human Species* (Ballantine, 1999): 3-26 and 532-41.

Elaine Morgan, The Descent of Woman (Souvenir Press, 1972).

Sherry B. Ortner, "Is Female to Male as Nature is to Culture?" in M. Z. Rosaldo and L. Lamphere (eds), *Woman, Culture, and Society* (Stanford University Press, 1974): 68-87.

Susan Sperling, "Baboons with Briefcases vs. Langurs in Lipstick: Feminism and Functionalism in Primate Studies," in *Gender at the Crossroads of Knowledge: Feminist Anthropology in the Postmodern Era*, ed. Micaela di Leonardo (University of California Press, 1991): 204-34.

Richard Wrangham and Dale Peterson, "A Question of Temperament" in *Demonic Males: Apes and the Origins of Human Violence* (Houghton Mifflin Harcourt, 1997): 108-26.



# Week 7 (Oct 13, 18) Animal is to Human as ...

Jon Mooallem, "Can Animals Be Gay?" New York Times (29 Mar 2010).

Amanda Rees, "Higamous, Hogamous, Woman Monogamous," Feminist Theory 1 (2000): 365-70.

Marlene Zuk, "Soccer, Adaptation, and Orgasms," Sexual Selections: What We Can and Can't Learn About Sex from Animals (California, 2002): 139-52.

**Black-Browed Albatrosses Courting** 

Additional Suggestions

Sarah Blaffer Hrdy, "Preface," in The Woman that Never Evolved (Harvard, 1999 [1981]): xiii-xxxi.

Sarah Blaffer Hrdy, "Will the Real Pleistocene Family Please Step Forward?" in *Mothers and Others: Evolutionary Origins of Mutual Understanding* (Harvard, 2009): 143-74.

Elizabeth A. Lloyd, "Bias," Case of the Female Orgasm: Bias in the Science of Evolution (Harvard, 2005): 220-57.

Geoffrey Miller, "Courtship in the Pleistocene," in *The Mating Mind: How Sexual Choice Shaped the Evolution of Human Nature* (Random House, 2000): 177-223.

Matt Ridley, "Sexing the Mind," in Red Queen: Sex and the Evolution of Human Behavior (Perennial Books, 2000 [1993]): 245-276.

Randy Thornhill and Craig T. Palmer, "Why do Men Rape?" in *A Natural History of Rape: Biological Bases of Sexual Coercion* (MIT Press, 2000): 53-85. See also, <a href="http://history-of-rape.blogspot.com/">http://history-of-rape.blogspot.com/</a>

# Week 8 (Oct 20, 25) Gender in a Digital World (Z)



Sherry Turkle, "TinySex and Gender Trouble," in *Life on the Screen: Identity in the Age of the Internet* (Simon and Schuster, 1995): 210-32.

Peter Ludlow and Mark Wallace, "Cyber Me, Baby!': Sex, Love, and Software in the Virtual World," in *The Second Life Herald: The Virtual Tabloid that Witnessed the Dawn of the Metaverse* (MIT, 2009): 127-44.

Helen McLure, "The Wild, Wild Web: The Mythic American West and the Electronic Frontier," *The Western Historical Quarterly* 31/4 (Winter, 2000): 457-76.

Additional Suggestions

Martin Campbell-Kelly and William Aspray, "From the World Brain to the World Wide Web," in *Computer: A History of the Information Machine* (Basic Books, 1996): 283-300.

Amanda Fernbach, "The Fetishization of Masculinity in Science Fiction: The Cyborg and the Console Cowboy," *Science Fiction Studies* 27 (2000): 234-55.

William Gibson, Neuromancer (Ace, 1984).

Howard Rheingold, "Télématique and Messageries Roses: A Tale of Two Virtual Communities," in The Virtual Community: Homesteading on the Electronic Frontier (MIT, 2000): 231-54.

Janet Vertesi, "Pygmalion's Legacy: Cyborg Women in Science Fiction," in Margaret Grebowicz, ed. *SciFi in the Mind's Eye: Reading Science Through Science Fiction* (Open Court, 2007): 73-86.

## Week 9 (Oct 27, Nov 1) Dissection & Death (X)

Rebecca Skloot, *The Immortal Life of Henrietta Lacks* (Crown, 2010): excerpt.

Judith Walkowitz, "Science and the Séance: Transgressions of Gender and Genre," and "Jack the Ripper" in *City of Dreadful Delight: Narratives of Sexual Danger in late-Victorian London* (Chicago, 1992): 171-228.

Additional Suggestions

Elisabeth Bronfen, "Bodies on display," in *Over Her Dead Body: Death, Femininity and the Aesthetic* (Manchester University Press, 1992): 95-109.

Anne Fausto-Sterling, "Gender, Race, and Nation: The Comparative Anatomy of 'Hottentot' Women in Europe, 1815-1817," in Feminism and the Body, ed. Londa Schiebinger (Oxford, 2000): 203-33.

Katherine Park, "Dissecting the Female Body: From Women's Secrets to the Secrets of Nature," in *Attending to Early Modern Women*, ed. Adele Seeff and Jane Donawerth (Delaware, 2000): 29-47.

Jonathan Sawday, "Royal Science," *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture,* by (Routledge, 1995): 230-70.

Londa Schiebinger, "Skeletons in the Closet: The First Illustrations of the Female Skeleton in Eighteenth-Century Taxonomy," in *Feminism and the Body*, ed. Londa Schiebinger (Oxford, 2000): 25-57.

Vesalius, De humani corporis fabrica (1543)



# Part II. THE GENDERED CONSTRUCTION OF SCIENCE (AND SCIENTISTS)



# Week 10 (Nov 3, 8) Self-Fashioning Masculinity in Science (Y)

Janet Browne, "I Could Have Retched all Night: Charles Darwin and His Body," in *Science Incarnate: Historical Embodiments of Natural Knowledge*, ed. Christopher Lawrence and Steven Shapin (Chicago, 1998): 240-87.

Robert A. Nye, "Medicine and Science as Masculine 'Fields of Honor," *Osiris* Vol. 12 (1997): 60-79.

"Reading Sports" 1887

Andrew Warwick, "Exercising the Student Body: Mathematics, Manliness, and Athleticism," in *Masters of Theory: Cambridge and the Rise of Mathematical Physics* (Chicago, 2003): 176-226.

# Additional Suggestions

Peter Brown, "Sexuality and Society: Augustine" and "Epilogue," in *The Body and Society: Men, Women, and Sexual Renunciation in Early Christianity* (Columbia University Press, 1988): 387-447.

Gail Bederman, "Theodore Roosevelt: Manhood, Nature, and 'Civilization," in *Manliness & Civilization: a Cultural History of Gender and Race in the United States, 1880-1917* (Chicago, 1996): 170-216.

Susan Bordo, "The Cartesian Masculinisation of Thought," Signs 11, no. 3 (1986): 439-56.

Donna Haraway, "Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, NYC, 1908-36," in *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (Routledge, 1989): 26-58.

Ruth Mazo Karras, "Separating the Men from the Goats: Masculinity, Civilization, and Identity Formation in the Medieval University," in *The Animal-Human Boundary*, ed. Angela N. H. Creager and William Chester Jordan (University of Rochester Press, 2002): 50-76.

Sally Gregory Kohlstedt, "Nature by Design: Masculinity and Animal Display in Nineteenth-Century America," in *Figuring it Out: Science, Gender, and Visual Culture*, ed. Ann B. Shteir and Bernard Lightman (Dartmouth College Press, 2006): 110-39.

Gregg Mitman, "Hunting with the Camera," in Reel Nature: America's Romance with Wildlife on Film (Harvard, 1999): 5-25.

Michael Robinson "Dying Like Men: Adolphus Greely," in *The Coldest Crucible: Antarctic Exploration and American Culture* (Chicago 2006): 83-106.

Adam Rome, "Political Hermaphrodites': Gender and Environmental Reform in Progressive America," *Environmental History* (July 2006): www.historycooperative.org/journals/eh/11.3/rome.html

Sharon Traweek, "Pilgrim's Progress: Male Tales Told During a Life in Physics," in *Beamtimes and Lifetimes: The World of High Energy Physics* (Harvard, 1992): 74-105.

Research Paper Topics and Annotated Bibliographies are due on Thursday, Nov. 10

### Line of Students at Microscopes, c. 1930



# Week 11 (Nov 10, 15) Science and Homosociality

Evelyn Fox Keller, "The Anomaly of a Woman in Physics," in *Women, Science and Technology: A Reader in Feminist Science Studies*, ed. Mary Wyer (Routledge, 2001): 9-16.

Margaret W. Rossiter, "The Matthew Matilda Effect in Science," Social Studies of Science 23, no. 2 (1993): 325-41.

James Watson, *The Double Helix: A Personal Account of the Discovery of DNA*, ed. Gunther S. Stent (Norton Critical Series, 1980).

Additional Suggestions

Robert K. Merton, "The Matthew Effect in Science," Science 159, no. 3810 (1968): 56-63.

Carolyn Merchant, "Nature as Female" in *Death of Nature: Women, Ecology, and the Scientific Revolution* (Harper, 1980): 1-41.

Michelle Murphy, "Building Ladies into the Office Machine," in Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers (Duke, 2006): 35-56.

David Noble, "The Scientific Restoration," in A World Without Women: The Christian Clerical Culture of Western Science (Knopf, 1992): 205-243.

Margaret W. Rossiter, "Which Science? Which Women?" Osiris 12 (1997): 169-185.

Londa Schiebinger, "The Exclusion of Women and the Structure of Knowledge," in *The Mind Has No Sex? Women in the Origins of Modern Science* (Harvard, 1989): 265-27.

# Week 12 (Nov 17, 22) A Woman's Perspective? (Z)

Evelyn Fox Keller, "A Feeling for the Organism," A Feeling for the Organism: The Life and Work of Barbara McClintock (W. H. Freeman, 1983): 197-208.

Nathaniel Comfort, "Rebellion and Iconoclasm in the Life and Science of Barbara McClintock," in *Rebels, Mavericks, and Heretics in Biology,* ed. Oren Harman and Michal Dietrich (Yale University Press, 2008): 137-154.

Naomi Oreskes, "Objectivity or Heroism? On the Invisibility of Women in Science," *Osiris* 11 (1996): 87-113.

Barbara McClintock, 1983

# Additional Suggestions

Roberta Bivins, "Sex Cells: Gender and the Language of Bacterial Genetics," *Journal of the History of Biology* 33, no. 1 (2000): 113-39.

Lorraine Code, "Images of Expertise: Women, Science, and the Politics of Representation," in Figuring it Out: Science, Gender, and Visual Culture, ed. Ann B. Shteir and Bernard Lightman (Dartmouth, 2006): 289-314.

Anne Fausto-Sterling, "Sexing the Brain: How Biologists Make a Difference," in Sexing the Body: Gender Politics and the Construction of Sexuality (Basic, 2000): 115-45.

Evelyn Fox Keller and Christine R. Grontkowski, "The Mind's Eye" in *Discovering Reality*, ed. Sandra Harding and Merrill Hintikka (D. Reidel, 1983): 207-24.



- Sandra Harding, "Women's Standpoints on Nature: What Makes Them Possible?" *Osiris*, Vol. 12, Women, Gender, and Science: New Directions (1997): 186-200.
- Emily Martin, "The Egg and the Sperm: How Science has Constructed a Romance Based on Stereotypical Male-Female Roles," *Signs* 16, no. 3 (1991): 485-501.

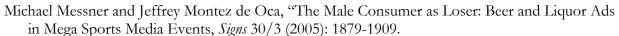
# Week 13 (Nov 29, Dec 1) Informal Science, or Are We Looking in the Wrong Place?

Hanna Rosin, "The End of Men," *The Atlantic* (July/August 2010), available online: www.theatlantic.com/magazine/archive/2010/07/the-end-of-men/8135/

Edward Bernays, Ernest Dichter, Alexander King, Norman Mailer, Herbert Mayes, Ashley Montagu, Theodore Reik, and Mort Sahl, "The Playboy Panel: The Womanization of America," *Playboy* (June 1962): 43-50, 133-44.

# Additional Suggestions

- Ruth Schwartz Cowan, "The Postwar Years," in More Work For Mother: The Ironies of Household Technology from the Open Hearth to the Microwave (Basic Books, 1983): 192-216.
- Sally Gregory Kohlstedt, "Parlors, Primers, and Public Schooling: Education for Science in Nineteenth-Century America," *Isis* 81/3 (1990): 424-45.
- Sally Gregory Kohlstedt, "Nature, Not Books: Scientists and the Origins of the Nature-Study Movement in the 1890s," *Isis* 96/3 (2005): 324-52.



- Regina Morantz-Sanchez, "Bringing Science into the Home: Women Enter the Medical Profession," in Sympathy and Science: Women Physicians in American Medicine (North Carolina, 2000 [1985]): 47-63.
- Ruth Oldenziel, "Man the Maker, Woman the Consumer: The Consumption Junction Revisited," in Feminism in Twentieth Century Science, Technology and Medicine, ed. Angela Creager, Liz Lunbeck, and Londa Schiebinger (Chicago, 2001): 128-148.
- Helena M. Pycior, "Marie Curie's 'Anti-Natural Path': Time Only for Science and Family," in *Uneasy Careers and Intimate Lives: Women in Science, 1789-1979*, ed. Pnina Abir-Am and Dorinda Outram (Rutgers, 1987): 191-215.
- Londa Schiebinger, "Maria Winkelmann at the Berlin Academy," Isis 78 (1987): 174-200.
- Londa Schiebinger, "Science & Private Life," in Has Feminism Changed Science? (Harvard, 1999): 92-103.
- Ann B. Shteir, "Botany in the Breakfast Room: Women and Early Nineteenth-Century British Plant Study," in *Uneasy Careers and Intimate Lives: Women in Science, 1789-1979*, ed. Pnina Abir-Am and Dorinda Outram (Rutgers, 1987): 31-44.
- Mary Terrall, "Salon, Academy and Boudoir: Generation and Desire in Maupertuis's Science of Life," *Isis* 87 (1996): 217-229.
- Steve Tuttle, "Ad Men: The Most Interesting Trend in the World," *Newsweek* (Sept 21, 2010): www.newsweek.com/2010/09/21/ad-men-the-most-interesting-trend-in-the-world.all.html
- Laura Ulrich, A Midwife's Tale: the Life of Martha Ballard, Based on her Diary, 1785-1812 (Vintage, 1990).



# Week 14 (Dec 6, 8) Conclusions: Women and the Final Frontier

Geoffrey C. Bunn, "The Lie Detector, 'Wonder Woman' and Liberty: the Life and Work of William Moulton Marston," *History of the Human Sciences* 10 (1997): 91-119.

Carl Sagan, Contact (Simon & Schuster, 1985): 3-38.

Wonder Woman Sensation #10 (Oct. 1942), reprinted in Wonder Woman Archives, Vol. 1 (DC Archive Editions, 1998): 198-211.

"The Law Breaker's League" Sensation Comics #46

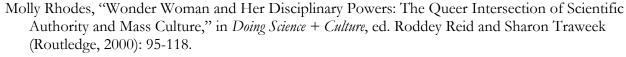
## Additional Suggestions

Joyce Chaplin, "Gender and the Artificial Indian Body," in *Subject Matter:* Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676 (Harvard, 2001): 243-79.

Eugenie Clark, "Kwajalein: the Poisonous and the Poisons" and "Guam: Whiskey and Raw Fish," in *Lady with a Spear* (Harper and Row, 1951): 69-99.

Gary Kroll, "Eugenie Clark and Postwar Ocean Ichythology: Gender, Oceanic Natural History, and the Domestication of the Ocean Frontier," in *America's Ocean Wilderness: a Cultural History of Twentieth-Century Exploration* (University of Kansas Press, 2008): 124-51.

Betty Ann Kevles, "Astronauts and Astronettes," in *Almost Heaven: The History of Women in Space* (Basic, 2003): 1-18.



Roger Sabin, "Something for the Girls," in *Comics, Comix & Graphic Novels: A History of Comic Art* (Phaidon, 1996): 80-91.

Final Research Papers due Friday, Dec 9<sup>th</sup> by midnight (the last day of class)



# LB 336: Gender and Evolution

T/Th: 5.00-6.50pm in C101 Holmes
Dr. Georgina M. Montgomery
montg165@msu.edu
25B West Holmes Hall

Office Hours: W 11.45-12.45 and by appointment

**Course Description:** The history of evolutionary thinking has been shaped by intellectual, material and cultural contexts. Issues of gender, in intersection with other factors such as race, form part of these contexts. Nevertheless, gender is often unexplored or underexplored when considering the history of evolution. For example, the contributions of women to evolutionary thinking regularly go un-highlighted and questions of masculinity and sexuality are pushed to the periphery of discussions of evolutionary thinking. In contrast, this class centers the contributions of women and questions of gender to reveal how such issues shaped evolutionary thinking and the consequences of evolutionary thinking for ideas of masculinity and femininity.

This class also explores how the history of science can be displayed to share scholarly research. Specifically, we will look at the use of museum displays and digital media as ways of providing access to historical sources and scholarly research. The insights we gain from analyzing how research is displayed in these forums will be applied to our final projects.

# **Course Objectives:**

This class will develop your writing, verbal, and analytical skills by demanding:

- thoughtful and critical reading of assigned materials
- formation of strong arguments effectively supported by historical evidence drawn from class materials
- formation of strong arguments supported by historical evidence drawn from independent, original, research of primary and secondary sources
- ability to work in a team to create and communicate knowledge

Of course this class will also broaden and deepen your understanding of the history of evolution, especially in respect to women's history and issues of gender. Each of the assigned readings and assignments aims to fulfill one or more of the above learning objectives.

**Academic Honesty:** Your own arguments and ideas are valuable. Your assignments must be your own work. Use of primary and secondary sources, including quotes and paraphrasing, must be appropriately cited. **Any form of cheating or plagiarism will not be tolerated in this class.** In accordance to MSU's policy, any academic dishonesty will be reported to both the Dean **and** the university and will thereby become a **permanent** entry on your academic record.

More information is available under the 'Academic Honesty' link on the Briggs website. It is your responsibility to be familiar with these policies and those in the MSU student handbook. If you have questions or concerns, speak to Prof. Montgomery BEFORE submitting any assignment. Once an assignment has been submitted, I have no choice but to follow formal channels if an academic dishonesty issues occurs.

# Peer Assisted Learning – Learning Teams

In this class you will be in learning teams of 4-5 peers. The composition of the groups will be determined using a software called team maker. The teams will work together on the assigned readings and on the final projects. Any problems with your group must be reported to Dr. Montgomery right away.

This is how it will work – Before each class, half of the team will read one of the assigned readings and the other half will read the second assigned reading. Each student will write an abstract-like summary of the article they read for class, with their name and date on the top of the page. Each class will begin with time for the team to identify two or more connections between the readings and write these down under your abstracts. One copy of the summary/connections sheets will be handed to Dr. Montgomery and will count towards your participation grade. The group will keep the other copy. You can use these sheets during the midterm examination. The rest of the class will be spent in large group discussion, activities, film etc and your participation in this portion of the class will also impact your participation grade.

# **Assignments**

**Participation:** Everyone gets the first week of classes to get used to the class and get to know one another without the need to participate for credit. However, it is important to realize that an effective seminar depends on you participating in class discussion and coming to class prepared to discuss the assigned materials. Participation is making meaningful, thoughtful, contributions to your learning team discussions and large class discussion and activities. Thus, repeating points made by others or comments that do not demonstrate a thoughtful reading of the assigned material will not count towards your participation points. Equally, simply attending class will not gain you points.

Starting on January 18, I will be recording your participation for each class meeting that requires reading and for participation in the peer review class. Each class

marked with a \* is worth 1% and the class debate is worth 3%. The learning team reading summaries and connections handed in during each class will serve as "proof" that you have thoughtfully read the assigned material. You may also use these sheets during the midterm examination. Note: These points really add up during the semester so you must ensure you do the reading for each and every class and come to class ready to participate. It is also your responsibility to keep up to date about what your participation score is during the semester. Worth 20%.

**Darwin Correspondence Project Exercise**: This exercise will expose you to digital archives – an easy, accessible way to get primary sources – and develop your skills at synthesizing sources of evidence. You should write a 2 page (double-spaced) response to the discussion questions on the website. More details will be provided on the assignment handout. Worth 3%.

'Reform' Darwinism and the Woman Question Paper: This 5 page (double-spaced) paper will engage with the relevant primary and secondary sources assigned in class. Points will be deducted for writing over the page limit. You will have the opportunity to have your paper peer reviewed. More details will be provided on the assignment handout. Worth 15%

**Midterm Exam**: This examination will be close-book with the exception of your learning team reading sheets prepared during our class meetings. The exam will consist of short answer questions (a few lines to a short paragraph) and short essay questions. Note: You will be given several questions ahead of time from which the short *essay* questions will be selected. The exam will take place in the regular classroom during regular class time. More details will be provided in the two in-class, student-led, reviews. Worth 20%.

**Museum Field Trip Response Paper:** This 2 page paper (double spaced) must synthesize the Kohlstedt reading, MSU museum tour and curator Val Berryman's talk. The paper must consider the role of gender in museum displays AND provide an original design (in words or as an illustration) for an exhibit on gender and evolution. More details will be provided on the assignment handout. Worth 5%

**Review of Women in Science Digital Collections:** This 2 page paper will evaluate the format, search engine, and types of sources of a range of women in science digital collections. You will be provided with a website with links to a number of women in science digital collections from which you should choose four. More details will be provided on the assignment handout. Worth 3 %.

**Final Group Project – Displaying Histories:** This project will be completed in groups of 4-5 (your learning teams). This project must demonstrate research skills in regard to the use and analysis of primary AND secondary sources and must directly connect to key topics from the class. For example, you may choose to do a biography of one or more female researcher(s) who worked on evolutionary issues during the Victorian or modern

period, or you may choose to focus on a controversial topic related to gender and evolutionary issues. Whatever your group decides, you must see Dr. Montgomery before moving forward with your research.

Options for the format for the final project include: a digital archive exhibit featuring primary sources with text providing both context and analysis (using a website creation program), a museum exhibit, a blog engaging with a number of primary and secondary sources, or a youtube-like history documentary / role-playing activity on film. Of course, these projects must be of a professional and scholarly quality and must include cited quotes, evidence and a bibliography.

Do you have other great ideas? Run them by Dr. Montgomery to determine if they will work as a final group project for this class. Remember they should be digital / visual / audio-visual in some way.

Please note that, regardless of what format you use, you will need to provide evidence that each group member contributed to the final product. This may be provided by: clearly articulating who has done what when you meet with Dr. Montgomery late in the semester, providing Dr. Montgomery with a journal chronicling your work, and/or or individual authorship of sections of the final project (being mindful that the overall project should be cohesive with smooth transitions and overall structure). Any problems with your group must be reported to Dr. Montgomery right away. Worth 25%

**Final Student Group Presentation:** This 10-minute presentation should share with the class 1) the topic of your final group project; 2) the evidence you are engaging with; 3) how this evidence demonstrates your argument; 4) how and why you will be communicating this research with digital / visual / audio-visual media. The presentation may be PowerPoint, may be a tour of the website or blog you are creating, or may be a role-playing activity, or other format approved by Dr. Montgomery. Points will be deducted for going over the allotted 10 minutes. Worth 7%.

**Student Feedback for Student Presentations:** We are a learning community so you have a responsibility to help your peers by providing feedback when they present. What holes do you see in their argument? What suggestions do you have for how they present their final project? Requires attending and providing feedback at *both* student presentation classes. Worth 2%

Note: The Chicago Manual of Style should be used for *all* citations in *all* written assignments. Go to the following website for more info on this style of citation: http://writing.wisc.edu/Handbook/DocChicago.html

## **Grade Points and Percentages**

4.0 = 92% to 100%

3.5 = 86% to 91%

3.0 = 80% to 85%

Please refer to the last page of the syllabus

2.5 = 74% to 79% to see the grading rubric that will be used 2.0 = 68% to 73% for all written assignments
1.5 = 62% to 67%
1.0 = 56% to 61%
0 = less than 56%

# Schedule of Topics, Readings, and Assignments

(Subject to Change)

Tuesday January 11: Introductions and Reviewing Syllabus and Class Expectations

Thursday January 13: The Power of Words: What Do We Mean By "Gender and Evolution"?

# Gender and Evolution in the Victorian Era

# Tuesday January 18: An Introduction to Gender Issues\*

Reading: Theories of Gender and Race" in Londa Schiebinger, *Nature's Body: Gender in the Making of Modern Science* (New Brunswick: Rutgers University Press, 2006); and Ruth Hubbard "Science, Facts and Feminism" in Mary Wyer et al, eds., *Women, Science and Technology: A Reader in Feminist Science Studies* ((New York: Routledge, 2001), 153-160 (ANGEL)

## Thursday January 20: An Introduction to Darwin\*

Reading: Julia Voss, "Monkeys, Apes and Evolutionary Theory: From human descent to King Kong" in Diana Donald and Jane Munro, eds., *Endless Forms: Charles Darwin, Natural Science and the Visual Arts* (Cambridge: Yale University Press, 2009), 215-237; and John Beatty and Piers Hale, "*Water Babies*: An Evolutionary Parable" in *Endeavour* vol. 32, No. 4 (1998): 141-146 (ANGEL)

## Tuesday January 25: An Introduction to Darwin\*

Reading: Janet Browne, "Looking at Darwin: Portraits and the Making of An Icon" ISIS 100 (2009): 542-570; and Constance Clark, "You are Here: Missing Links, Chains of Being and the Language of Cartoons" ISIS 100 (2009): 571-589 (ANGEL)

# Thursday January 27: Evolutionary Depictions of Men and Women Before and During Darwin's Time\*

Reading: Londa Schriebinger. "Gendered Ape" in Marina Benjamin, ed., A Question of Identity: Women, Science and Literature (New Brunswick: Rutgers University Press, 1993); and Jeanette Eileen Jones, "'Gorilla Trails in Paradise:' Carl Akeley, Mary Bradley and the American Search for the Missing Link," The Journal of American Culture 29, no. 3 (2006): 321-336 (ANGEL)

# Tuesday February 1: Evolutionary Depictions of Men and Women Before and During Darwin's Time\*

Reading: Lindsay B. Churchill, "What Is It? Difference, Darwin and the Victorian Freak Show" in Jeanette Eileen Jones and Patrick B. Sharp, eds., *Darwin in Atlantic Cultures: Evolutionary Visions of Race, Gender and Sexuality* (New York, Routledge, 2010); and Janet Browne and Sharon Messenger, "Victorian Spectacle: Julia Pastrana, the Bearded and Hairy Woman," *Endeavour* 27, no. 4 (2003): 155-159 (ANGEL)

# Thursday February 3: Women and the Study of Evolution / How did Darwin Regard Women?\*

Reading – TO BE DONE BY ALL TEAM MEMBERS: Explore gender and Darwin website including listening to the BBC 4 clip (13 mins long), reading the gender letter sets and consider the discussion questions on the website.

http://www.darwinproject.ac.uk/darwin-and-gender

Assignment due: Darwin Correspondence Project Exercise. (This exercise is part of us asking what is the significance of what and how historical information is presented and using this to inform your own final projects). See assignment section above and the relevant assignment handout for details.

# Tuesday February 8: Women and the Study of Evolution / How did Darwin Regard Women?\*

Reading: Joy Harvey, "Darwin's Angels: The Women Correspondents of Charles Darwin," *Intellectual History Review* 19, no. 2 (2009): 197-210; and Evelleen Richards, "Darwin and the Descent of Woman" in D. Oldroyd and I. Langham, eds., *The Wider Domain of Evolutionary Thinking* (Boston: Kluwer Press, 1983), 57-111 (ANGEL)

# Thursday February 10: 'Reform' Darwinism and the Woman Question: Focusing on Secondary Sources\*

Reading: Erika Milam, "Beauty and the Beast: Darwin, Wallace and the Animal-Human Boundary" in Looking for a Few Good Females: Female Choice in Evolutionary Biology (Baltimore: The University of Johns Hopkins Unversity Press, 2010); and Griet Vandermassen, Marysa Demoor and Johan Braeckman, "Close Encounters with a New Species: Darwin's Clash with the Deminists at the End of the Nineteenth Century" in Anne-Julia Zwierlein, Unmapped Countries: Biological Visions in Nineteenth Century Literature and Culture (London: Anthem Press, 2005) (ANGEL)

# Tuesday February 15: 'Reform' Darwinism and the Woman Question: Focusing on Secondary Sources\*

Reading: Rosemary Jann, "Revising the Descent of Woman: Eliza Burt Gamble" in Barbara Gates and Ann B. Shteir, eds., *Natural Eloquence: Women Reinscribe Science* (Madison: University of Wisconsin Press, 1997); and Penelope Deutscher, "The Descent of Man and the Evolution of Woman" *Hypatia* 19, no. 2 (2004): 35-55 (ANGEL)

## Thursday February 17: 'Reform' Darwinism and the Woman Question: Focusing on Primary Sources\*

Reading – TO BE DONE BY ALL TEAM MEMBERS: Danielle Peck's biographical essay on Eliza Burt Gamble on

http://womeninscience.history.msu.edu/Biography/C-4A-2/eliza-burt-gamble/ And excerpts from Eliza Gamble, *The Evolution of Woman* and Charlotte Perkins Gilman, *Women and Economics* (ANGEL)

Tuesday February 22: 'Reform' Darwinism and the Woman Question – Peer Review of 'Reform' Darwinism and the Woman Question Papers\*

Thursday February 24: Review in Preparation for Midterm Exam # 1
Assignment due: 'Reform' Darwinism and the Woman Question Paper. See assignment section above and relevant assignment handout for details.

Tuesday March 1: Review in Preparation for Midterm Exam # 2

Thursday March 3: In-Class Exam Consisting of Short Answer Questions and Short Essay Questions

March 7-11: NO CLASS - SPRING BREAK

## **Gender and Evolution in Modern Times**

Tuesday March 15: Class Field Trip to the MSU museum. Use the Kohlstedt reading to inform your viewing of the exhibits. The tour will be accompanied by a talk by curator Val Berryman about how to design an effective museum exhibit. (This exercise is part of us asking what is the significance of what and how historical information is presented and using this to inform your own final projects).

Reading – TO BE DONE BY ALL TEAM MEMBERS: Sally Gregory Kohlstedt, "Nature by Design: Masculinity and Animal Display in Nineteenth-Century America" in Ann B. Shteir and Bernard Lightman, eds., Figuring It Out: Science, Gender and Visual Culture (Dartmouth, 2006) (ANGEL)

Thursday March 17: Seeing an Example of HPS Research on Women in Science NO CLASS: In place of class, you may choose to see Dr. Marsha Richmond present on the history of women in genetics at 3-4.30pm in 340 Morrill Hall (OPTIONAL)

## Tuesday March 22: Transitioning into Modern Period and Forming Groups and Brainstorming Ideas for Final Group Projects\*

Reading: Patricia Adair Gowaty, "Introduction: Darwinian Feminists and Feminist Evolutionists;" and Anne Fausto-Sterling, "Feminism and Behavioral Evolution: A

Taxonomy" in Patricia Adair Gowaty, ed., Feminism and Evolutionary Biology (New York, Chapman and Hall, 1997) (ANGEL)

Assignment due: Museum field trip response paper. See assignment section above and relevant assignment handout for details.

## Thursday March 24: Courting Controversy in Human Society - The Wild Man V. The Coy Female\*

Reading: "Male and Female" in Robert Wright, *The Moral Animal* (New York: Vintage Books, 1994), 33—54; Scott Morris, "Darwin and the Double Standard" in *Playboy*; and Ruth Bleier "Sociobiology, Biological Determinism and Human Behavior" Mary Wyer et al, eds., *Women, Science and Technology: A Reader in Feminist Science Studies* (New York: Routledge, 2001), 175-193 – ALL TEAM MEMBERS SHOULD READ THE BLEIER CHAPTER (ANGEL)

## Tuesday March 29: Courting Controversy in Human Society - The Wild Man V. The Coy Female\*

Reading: Sarah Hrdy, "Empathy, Polyandry and the Myth of the Coy Female" in Janet Kourany, ed., *The Gender of Science* (Upper Saddle River N.J: Prentice Hall, 2002); and Kimberly Hamlin, "The Birds and the Bees: Darwin's Evolutionary Approach to Sexuality" in Jeanette Eileen Jones and Patrick B. Sharp, eds., *Darwin in Atlantic Cultures: Evolutionary Visions of Race, Gender and Sexuality* (New York, Routledge, 2010) (ANGEL)

## Thursday March 31: Courting Controversy in Human Society - The Wild Man V. The Coy Female\*

Reading – TO BE DONE BY ALL TEAM MEMBERS: Emily Martin, "The Egg and the Sperm: How Science has Constructed a Romance based on Stereotypical Male-Female Roles" Signs 16, no. 3 (1991) (ANGEL); AND your learning team is responsible for bringing examples of depictions of masculinity and femininity in biology textbooks and/or science magazines, TV shows, documentaries to class.

## Tuesday April 5: Class Debate – What role should evolutionary frameworks play in our understanding of human sexuality and courtship?\*\*

Assignment due: Review of Women in Science Digital Collections (Part of us asking what is the significance of what and how historical information is presented and using this to inform your own final projects). See assignment section above and relevant assignment handout for details.

## Thursday April 7: The F-Word - As Used by Modern Evolutionary Biologists\*

Reading: Sue Rosser, "Possible Implications of Feminist Theories for the Study of Evolution" in Patricia Adair Gowaty, ed., *Feminism and Evolutionary Biology* (New York, Chapman and Hall, 1997); and Helen Longino "Can There be a Feminist Science?" in Mary Wyer et al, eds., *Women, Science and Technology: A Reader in Feminist Science Studies* ((New York: Routledge, 2001), 216-222 (ANGEL)

### Tuesday April 12: The F-Word - As Used by Modern Evolutionary Biologists\*

Reading – TO BE DONE BY ALL TEAM MEMBERS: Caitilyn Allen, "Inextricably Entwined: Politics, Biology and Gender-Dimorphic Behavior" in Patricia Adair Gowaty, ed., Feminism and Evolutionary Biology (New York, Chapman and Hall, 1997) (ANGEL)

## Thursday April 14: Class Time for Working on Group Projects

#### Tuesday April 19: Finalizing Final Group Projects

In place of class your group should make an appointment to see Dr. Montgomery to discuss your progress regarding the final project

### **Thursday April 21: Finalizing Final Group Projects**

In place of class your group should make an appointment to see Dr. Montgomery to discuss your progress regarding the final project

Tuesday April 26: CLASS CONFERENCE ~ Student Group Presentations, coffee and treats

Thursday April 29: CLASS CONFERENCE ~ Student Group Presentations, coffee and treats

# Final Projects Must be Handed to me in C101 before or during our Finals Exam Period: Tuesday May 3, 5.45-7.45pm

### How to Succeed in the Class

Do the reading. This means spending time and thought on the reading, making notes, and coming to class ready to talk about the reading. The MSU student handbook suggests you spend 2 hours outside of class for every credit your class is worth. This class is worth 4 credits.

Spend time and thought on the writing assignments. This means making outlines, drafts, and seeking support from the HPS LA's, MSU writing center, and from me.

Tell me if you are struggling to read the material critically, understand class content and concepts, or write a well-argued paper. You can talk to me during office hours, by appointment, or by email.

A word about email ~ you MUST say who you are writing to (Dr. Montgomery) and who you are. You MUST also use your MSU email account. This is to maintain your privacy (anyone can claim to be you if emailing from a hotmail or yahoo account) and to maintain good manners when emailing your professor.

*In the classroom,* we will be discussing class reading and topics in large and small groups. Come to class reading to participate, learn, and have fun!

And finally, as always at LBC, respect and integrity are central to how we treat one another.

## Goals for Lyman Briggs College Tier I and Tier II Writing Courses

Above all, recognizing that writing is re-writing.

Recognizing that its thesis is *the* major element of your essay; thus, you should distinguish between the major and minor parts of an analysis or argument, and you should make the thesis the most important part.

Addressing the fundamental questions, "How do you know what you know?" and "Why do you feel what you feel?"—and being able to distinguish those questions from the simpler ones of "What do you know?" and "What do you feel?"

Accepting constructive criticism from peers, teachers, and yourself—and giving it tactfully in return.

Accepting that words really do matter.

Gauging your intended audience, and writing specifically to it. Different papers have different audiences; you're never writing only to the professor.

Recognizing the differences between assertion, evidence, and analysis.

Recognizing that concession is not a weakness, and refutation is not a requirement.

Recognizing the importance of effective introductions and meaningful conclusions.

Recognizing the differences between paraphrasing, quoting, and plagiarizing; that is, knowing **why** and **when** to document, not just how to do it.

Mastering the basic rules of grammar, syntax, usage, and punctuation.

Writing with a sense of purpose, confidence, humor, joy, and wisdom

Knowing how to find the MSU Main Library, how to want to go through its doors, and how to find key information inside it. Accepting that not all good (and reliable) resources can (yet) be found via your computer keyboard.

Differentiating between peer-reviewed and public-domain resources and between primary and secondary resources.

Evaluating the reliability of all resources. Be skeptical! Be thorough!

### Some of the Many FREE Resources at MSU

HPS LA's (Learning Assistants) are available to help you with editing your papers: See schedule in HPS notice board by E-184

The Writing Center: http://writing.msu.edu/forum
The Counseling Center: http://www.couns.msu.edu/
Resource Center for Persons with Disabilities: http://www.rcpd.msu.edu/

## DEPAUL UNIVERSITY SCHOOL FOR NEW LEARNING

## **LLS 455 Valuing Human Differences**

3 credits – Spring 2011

**Meets**: Thursdays, 5:45 to 9:00 p.m., March 31 to May 5, 2011 (6 sessions)

**Location**: Loop Campus, Lewis Center 1504

**Faculty**: Dr. Donald L. Opitz, Ph.D.

Office: 1453 Daley Building, 14 E. Jackson Blvd. **Hours**: Before and after class and by appointment

Phone: 312-362-6426 Email: dopitz@depaul.edu

## **Course Description**

We often hear that we live in an increasingly global society and that the U.S. is a "melting pot." Behind these sayings is a rich diversity among individuals who, nevertheless, must live and work together toward common goals. Yet, how often do we reflect upon our *values* of individual differences and their impact on how we interact with others? In what ways might such reflection widen our capacity to live and work effectively within social microcosms of a larger, pluralistic society? This course challenges you to engage and develop three sets of liberal learning skills through examination of the socioeconomics and psychology of human differences and of our values of those differences: facility in self-assessment and self-managed learning, facility in applying values-based decision-making, and facility in interpersonal relations. In pursuing these outcomes, you will be asked to build upon prior learning experiences, integrate new perspectives, and apply your understandings in discussion, writing and case-study analysis.

### **About the Faculty**

Dr. Opitz is Assistant Professor in the School for New Learning. He researches the history of nineteenth-century British science and culture and topics in teaching and learning. He is an advisory board member of DePaul's Lesbian, Gay, Bisexual and Transgender Studies Program.

### **Required Course Materials**

Paula S. Rothenberg, ed., *Race, Class, and Gender in the United States*, 8th edn., Worth Publishers, 2010, ISBN: 1-4292-1788-X. Retail \$60.95. One copy is on reserve at the Loop Library Circulation Desk, 10th floor DePaul Center, call no. 305.800973 R11852010.

Sandy Schuman, ed., *Creating a Culture of Collaboration: The International Association of Facilitators Handbook*, Jossey-Bass, 2006, ISBN: 978-0-7879-8116-7. Available as a free eBook to DePaul students at 24x7, http://library.depaul.edu/Find/resourceList.aspx?s=89

Readings on DePaul Libraries eReserves, http://library.depaul.edu/Find/CourseReserves.aspx

Handouts distributed in class and on the course site, http://d2l.depaul.edu

## **Learning Outcomes**

Upon satisfactory completion of the course, students will have demonstrated the following outcomes:

- Explain several key sociological and psychological perspectives on human differences, particularly constructions of race, class, and gender
- Reflect upon one's own identity in relation to social constructs
- Identify and prioritize one's values in relation to others in particular contexts
- Analyze authentic cases of individual and organizational behavior and problem-solve challenges and opportunities
- Apply strategies in achieving effective communication and collaboration in working toward common objectives

## **Liberal Learning Skills**

## 1. Facility in self-assessment & self-managed learning.

- reflecting critically on one's experience
- assessing the quality of one's work including consideration of feedback from others
- adapting to varied learning situations based on awareness of one's learning processes
- assuming responsibility for setting and achieving one's learning goals
- identifying and using varied learning resources
- functioning as a proactive participant and collaborator in learning with both members of the group and instructors/mentors

### 2. Facility in applying values-based decision-making.

- understanding values that inform personal and professional behavior
- engaging in the processes by which ethical frameworks are formulated
- incorporating value considerations within both personal and professional decisionmaking
- evaluating outcomes of systematic inquiry with respect to the values they reflect

### 3. Facility in interpersonal relations.

- moving easily between the roles of leader and participant in groups
- assessing both interactions among others and one's own interaction with others
- recognizing the "complementarity" of individual differences and working with them

## **Assignments and Assessment**

Detailed instructions will be provided on separate handouts to be distributed in class.

Assignment	Description	<b>Learning Outcomes</b>	Points
Seminar participation	Each seminar session will consist of discussion and collaborative learning activities.	Facility in self-assessment and self-managed learning  Facility in applying values-based decisionmaking  Facility in interpersonal relations	
Short Reflection Papers	Due in sessions 2, 3, 4, and 5, these essays integrate personal narrative, reflection, and analysis. The minimum word requirement for each paper is 500 words. A unique question will be posed for each paper relating to the session's topic. You should utilize ideas from the readings in formulating your responses.	Facility in self-assessment and self-managed learning  Facility in applying values-based decision-making	400
Case Study Analysis	Due in the final class session, you will develop, analyze, and present an authentic case involving a clash of human differences within a specific organizational context. Your analysis will identify the role of values as well as proposed solutions for resolving the conflict.	Facility in self-assessment and self-managed learning  Facility in applying values-based decision-making  Facility in interpersonal relations	200
		<b>Total Points:</b>	1000

## **Grading**

The following distribution of total points will be used for assignment of final course grades:

	A 930-1000	A- 900-929
B+ 870-899	В 830-869	B- 800-829
C+ 770-799	C 730-769	C- 700-729
D+ 670-699	D 650-669	F Below 650

The following University grading standards will be in effect:

- A Accomplished the stated objectives of the course in an EXCELLENT manner
- **B** Accomplished the stated objectives of the course in a VERY GOOD manner
- C Accomplished the stated objectives of the course in a SATISFACTORY manner
- **D** Accomplished the stated objectives of the course in a POOR manner
- F Did NOT accomplish the stated objectives of the course

### **Policy on Incompletes**

An Incomplete ("IN") grade may be issued to a student who has completed a satisfactory record of work, but for unusual or unforeseeable circumstances not encountered by other students in the class and acceptable to the instructor, is prevented from completing the course requirements by the end of the term. In order to qualify for the IN, a student must have regularly attended class and must have completed three-fourths of assignments. The student must request this grade from the instructor by submitting the form, "Contract for the Issuance of an Incomplete (IN) Grade," available on the SNL Web site. At the end of the second quarter (excluding summer) following the term in which the incomplete grade was assigned, a remaining IN grade will automatically convert to an F grade. Ordinarily no incomplete grade may be completed after the grace period has expired. Instructors may not change IN grades after the end of the grace period without the SNL Exceptions Committee's permission.

### **Academic Integrity Policy**

Violations of academic integrity include but are not limited to the following categories: cheating, plagiarism, fabrication, falsification or sabotage of research data, destruction or misuse of the University's academic resources, alteration or falsification of academic records, and academic misconduct. Conduct that is punishable under the Policy may, at the instructor's discretion, result in sanctions that include a grade of F for the assignment or the entire course and do not preclude SNL or the University from taking further action, including dismissal and/or criminal or civil prosecution. See <a href="http://sr.depaul.edu/catalog/catalogfiles/Current/Undergraduate%20Student%20Handbook/pg18.html">http://sr.depaul.edu/catalog/catalogfiles/Current/Undergraduate%20Student%20Handbook/pg18.html</a>.

#### **Plagiarism**

Plagiarism is a major violation of academic integrity involving the presentation of the work of another as one's own. Plagiarism includes but is not limited to the following:

- The direct copying of any source, such as written and verbal material, computer files, audio disks, video programs or musical scores, whether published or unpublished, in whole or part, without proper acknowledgment that it is someone else's.
- Copying of any source in whole or part with only minor changes in wording or syntax, even with acknowledgment.
- Submitting as one's own work a report, examination paper, computer file, lab report or other assignment that has been prepared by someone else. This includes research papers purchased from any other person or agency.
- The paraphrasing of another's work or ideas without proper acknowledgment.

## **Workload Expectations**

For satisfactory completion of this course, students in this class are expected to spend at least 2 hours involved in outside class preparation for every hour spent in class. For a three-hour class period, that translates to 6 hours of outside work each week.

#### **Resources for Student Writers**

DePaul University's Writing Centers offer resources for student writers through on-site and online services. Visit the Loop Writing Center in 1620 Lewis Center, call 312-362-6726, email <a href="wcenter@depaul.edu">wcenter@depaul.edu</a>, or go to <a href="http://condor.depaul.edu/~writing/">http://condor.depaul.edu/~writing/</a>. Writing resources tailored for SNL students are also available at <a href="http://snl.depaul.edu/writing/index.html">http://snl.depaul.edu/writing/index.html</a>.

## **Disability Accommodations**

Any student needing an accommodation in this course due to a documented disability is asked to bring this to the instructor's attention at the beginning of the course. Needs will be addressed in cooperation with the Office of Students with Disabilities, 773-325-7290 or 773-325-7296 (TTY); or the Productive Learning Strategies Program (PLuS), 773-325-1677.

#### **Chronic Illness Initiative**

The Chronic Illness Initiative (CII) provides access to higher education for students disabled by chronic illnesses that unpredictably increase and decrease in severity such as chronic fatigue syndrome, rheumatoid arthritis, lupus or illnesses requiring frequent hospitalizations. At the School for New Learning, staff and faculty are compassionate and committed to helping CII students achieve their educational goals. Contact CII at <a href="CII@depaul.edu">CII@depaul.edu</a>.

## **DePaul Code of Student Responsibility**

The Code outlines the minimum acceptable level of conduct expected of every student of DePaul University, including respectful classroom behavior. DePaul condemns any form of harassment, discrimination, and/or assault behavior and any such conduct is subject to University disciplinary sanctions. See <a href="http://studentaffairs.depaul.edu/handbook/index.html">http://studentaffairs.depaul.edu/handbook/index.html</a>.

## Course Schedule (subject to change with advance notice)

**Abbreviations**: RCG = *Race*, *Class*, *and Gender in the United States* (required text)

CCC = *Creating a Culture of Collaboration* (eBook on 24x7)

eRes = DePaul Libraries eReserves

Class Session	Topic	Reading Due	Assignment Due
3/31	Overview	None	Personal profile interviews (complete in class)
4/7	Social construction of difference	Omi & Winant (in RCG: I.1) Brodkin (RCG: I.4) Lorber (RCG: I.5) Hubbard (RCG: I.6) Miller (RCG: I.11)	Short Reflection Paper 1
4/14	Discrimination in everyday life	U.S. Commission (RCG: IV.1) Paul, Where Bias Begins (eRes) Other Selections (RCG: IV, TBD)	Short Reflection Paper 2
4/21	Socioeconomics of difference	Sklar (RCG: V.1) Johnston (RCG: V.2) McKissak, Jr. (RCG: V.7) Meizhu Lui (RCG: V.9 & 10) Conniff (RCG: V.11) Portes (RCG: V.18)	Short Reflection Paper 3
4/28	Stereotypes, values and personal accountability	Snyder (RCG: VIII.1) Mohr (RCG: VIII.2) Hesse-Biber (RCG: VIII.4) Ryan (RCG: VIII.11) Bushe (CCC: Ch. 8) (eBook) Reiss (eRes)	Short Reflection Paper 4
5/5	<ul><li>Student case-study and</li><li>Self-assessments due</li></ul>	alyses and presentations	

## **Required Readings – Full Citations**

- Brodkin, K. (2010). How Jews Became White. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Bushe, G. R. (2006). Sense Making and the Problems of Learning from Experience Barriers and Requirements for Creating Cultures of Collaboration. In *Creating a Culture of Collaboration: The International Association of Facilitators Handbook*. Ed. S. Schulman. San Francisco, CA: Jossey-Bass.
- Conniff, R. (2010). Women Losing Ground. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Hesse-Biber, S. (2010). Am I Thin Enough Yet? In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Hubbard, R. (2010). The Social Construction of Sexuality. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Johnston, D. C. (2010). Income Gap is Widening. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Lorber, J. (2010). "Night to His Day": The Social Construction of Gender. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Lui, M. & Others (2010). The Economic Reality of Being Asian American. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Lui, M. & Others (2010). The Economic Reality of Being Latino/a in the U.S. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- McKissak, Jr., F. (2010). Post-Racial? Not Yet. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Miller, J. B. (2010). Domination and Subordination. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Mohr, R. D. (2010). Anti-Gay Stereotypes. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Omi, M., & Winant, H. (2010). Racial Formations. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Paul, A. M. (1998). Where Bias Begins: The Truth about Stereotypes. *Psychology Today* 31(3): 52-56.

- Portes, A. (2010). Immigration's Aftermath. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Reiss, I. L. (2006). Know Your Author. In *An Insider's View of Sexual Science since Kinsey*. Lanham, MD: Rowman and Littlefield.
- Ryan, W. (2010). Blaming the Victim. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Sklar, H. (2010). Imagine a Country 2009. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- Snyder, M. (2010). Self-Fulfilling Stereotypes. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.
- U. S. Commission on Civil Rights. (2010). The Problem: Discrimination. In *Race, Class, and Gender in the United States*. Ed. P. S. Rothenberg. New York: Worth Publishers.

## THE SCIENCE OF SEXUAL ORIENTATION

SNC 193: Liberal Studies Scientific Inquiry (non-SNL) (4 cr. hrs.)

SW 193: Scientific World, S2X competence\* (SNL) (2 cr. hrs.)

\*additional competence may be negotiated with instructor

IN 307: Advanced Elective Seminar, E1, E2 competencies (SNL) (4 cr. hrs.)

**Meets:** Thursdays, 6:00 – 9:00 p.m., Sept. 8 through Nov. 10

**Location:** Loop Campus, TBA Faculty: Donald L. Opitz, Ph.D.

Office: 1431 Daley Building, 14 E. Jackson Blvd.

**Hours:** Thursdays 5:00 – 6:00 p.m. and by appointment

Phone: 312-362-6426 Email: dopitz@depaul.edu

### **Course Description**

This course will engage you in scientific inquiry on the nature of sexual orientation. You will be challenged to master the scientific content of leading programs of research on twins, brain and other anatomical structures, hormones, genetic linkages, birth-order, and animal behavior through assigned readings, lectures, and multimedia resources. Moreover, you will also engage in the scientific process through a collaborative research project concerning an aspect of sexual orientation that leads you through the steps of stating a question, designing a study, collecting and analyzing data, and interpreting the results. You will also develop skills in identifying the limits to particular forms of scientific inquiry by recognizing the constraints of methods, sources of bias, reliability of results, and certainty of conclusions. This course will encourage you to place the modern research within ethical and social contexts in which to make judgments about the potential relevance and impacts of scientific knowledge about sexual orientation.

### **Learning Experience**

This course will consist of seminar discussions, lectures, student-led presentations, and collaborative activities. Critical analysis of readings, engagement with multimedia resources, and explanatory, scientific writing will also be emphasized.

### **Prerequisites**

All sections: LSP 120 / LL 205 Quantitative Reasoning

IN 307 section only: LL 300 Research Seminar

#### **Course Materials**

Required readings include the book, Simon LeVay, *Gay, Straight, and the Reason Why: The Science of Sexual Orientation* (Oxford University Press, 2011), ISBN 978-0-19-973767-3, and articles at DePaul Libraries' eReserve: <a href="http://library.depaul.edu/Find/CourseReserves.aspx">http://library.depaul.edu/Find/CourseReserves.aspx</a>. See the required and supplemental readings list for details.

### **Learning Outcomes**

Students who satisfactorily complete this course will have demonstrated their ability to:

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- Understand and appreciate the interrelationships among science, technology, and math within sexual orientation research (SI, E1).
- Understand and appreciate the role of science in society and in their lives through consideration of the ethical and social impacts of research on sexual orientation (SI, E2).
- Understand the major principles guiding modern scientific thought and demonstrate a mastery of the science content knowledge concerning the nature of sexual orientation (SI, S2X).
- Understand the nature of science, technology, and mathematics by critically analyzing the methods, results, and conclusions in studies of sexual orientation (SI, S2X).
- Know that science, technology, and math serve as mechanisms of inquiry into the nature of sexual orientation among humans and animals (SI, S2X).

In addition to these outcomes, students will develop their skills in collaboration, explanatory writing, critical inquiry, and ethical thinking.

## **Assignments and Assessment**

Detailed instructions and rubrics will be provided separately.

Due	Assignment and Description			
		ALL STUDENTS		
Each class	Class Participation (See Includes seminar discus discussions, and in-class	ssions, small-group and pa	ired discussions, D2L	200
To be assigned  Class Discussion Leadership Assigned discussion leaders (one or two per class) will raise questions for engaging the class in discussion on the session's topic.				100
Nov. 3 class & Oral Presentations on Projects Nov. 10 class Brief in-class oral presentations on students' projects using PowerPoint.			100	
Sep. 29 & Nov. 17	·			400
	SNC 193 STUDENTS	IN 307 STUDENTS	SW 193 STUDENTS	
Nov. 3 class	Experimental Study Project Stage I: identify research questions and select research design. Stage II: describe data. Stage III: full report.	Analytical Essay Project Either an integrative, expository essay or ethical analysis on one of the course topics, utilizing course texts.	Experiential Learning Project Report on a site visit, scientist interview, film viewing, review of a website, or other experiential activity. (Select from a list.)	200
Total				1000

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#### **Policy on Late Work**

Any missed assignment or work submitted late will merit no credit unless an arrangement was negotiated with the instructor prior to the due date. Unforeseen, documented emergencies are exceptions. All negotiated late submissions are subject to a grade reduction of 5% for each weekday that elapses following the due date, until the date of submission.

## **Policy on Attendance**

DePaul University anticipates that all students will attend all class meetings of this course. Attendance is <u>essential</u> to success in this class. If an emergency or extenuating circumstance necessitates an absence, students must inform the instructor as soon as possible. <u>NO CREDIT</u> CAN BE AWARDED FOR ASSIGNMENTS MISSED DUE TO AN UNEXCUSED ABSENCE.

### Grading

The total points possible are:

100	Discussion leadership
100	Oral presentation on project
200	Class participation
200	Project
200	Midterm Examination
200	Final Examinaton
1000	Total

To assign grades, the following grading scale and University grading standards will be used. (Any partial points will be rounded up to the nearest whole point.)

A+	n/a	B+	870-899	C+	770-789	D+	670-699	F	0-649
Α	930-1000	В	830-869	С	730-769	D	650-669		
A-	900-929	B-	790-829	C-	700-729	D-	n/a		

The following University grading standards will be used in assessing students' work:

- A Accomplished the stated objectives of the course in an EXCELLENT manner
- **B** Accomplished the stated objectives of the course in a VERY GOOD manner
- C Accomplished the stated objectives of the course in a SATISFACTORY manner
- **D** Accomplished the stated objectives of the course in a POOR manner
- F Did NOT accomplish the stated objectives of the course
- PA Passing achievement in a pass/fail course. (Grades A through C-.) Students who take this course pass/fail must request this option from the instructor by the end of the second week of the term. Students who request pass/fail grading cannot revert to A-F grading.
- **W** Automatically recorded when the student's withdrawal is processed after the deadline to withdraw without penalty, but within the stipulated period.

## Policy on Incompletes

An Incomplete (IN) grade may be issued to a student who has completed a satisfactory record of work (typically at least three-quarters of the assigned work), but for unusual or unforeseeable circumstances not encountered by other students in the class and acceptable to the instructor, is unable to complete the course requirements by the end of the term. The student must request this grade from the instructor. At the end of the second quarter (excluding summer) following the term in which the incomplete grade was assigned, a remaining IN grade will automatically

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convert to an F grade. Ordinarily no incomplete grade may be completed after the grace period has expired. Instructors may not change IN grades after the end of the grace period without the college Exceptions Committee's permission.

## **Academic Integrity Policy**

Violations of academic integrity include but are not limited to the following categories: cheating, plagiarism, fabrication, falsification or sabotage of research data, destruction or misuse of the University's academic resources, alteration or falsification of academic records, and academic misconduct. Conduct that is punishable under the Policy may, at the instructor's discretion, result in sanctions that include a grade of F for the assignment or the entire course and do not preclude further University action, including dismissal and/or criminal or civil prosecution.

## **Plagiarism**

Plagiarism is a major violation of academic integrity involving the presentation of the work of another as one's own. Plagiarism includes but is not limited to the following:

- The direct copying of any source, such as written and verbal material, computer files, audio disks, video programs or musical scores, whether published or unpublished, in whole or part, without proper acknowledgment that it is someone else's.
- Copying of any source in whole or part with only minor changes in wording or syntax, even with acknowledgment.
- Submitting as one's own work a report, examination paper, computer file, lab report or other assignment that has been prepared by someone else. This includes research papers purchased from any other person or agency.
- The paraphrasing of another's work or ideas without proper acknowledgment.

## **Workload Expectations**

For satisfactory completion of this course, students in this class are expected to spend <u>at least</u> 2 hours involved in outside class preparation for every hour spent in class.

#### **Resources for Student Writers**

The DePaul University Center for Writing-Based Learning offers resources for student writers through on-site and online services. See <a href="http://condor.depaul.edu/~writing/">http://condor.depaul.edu/~writing/</a>.

#### **Disability Accommodations**

Any student needing an accommodation in this course due to a documented disability is asked to bring this to the instructor's attention. Needs will be addressed in cooperation with the Office of Students with Disabilities, <a href="http://studentaffairs.depaul.edu/studentswithdisabilities/">http://studentaffairs.depaul.edu/studentswithdisabilities/</a>, or the Productive Learning Strategies Program (PLuS), <a href="http://studentaffairs.depaul.edu/plus/">http://studentaffairs.depaul.edu/plus/</a>.

#### **Chronic Illness Initiative**

The Chronic Illness Initiative (CII) provides access to higher education for students disabled by chronic illnesses that unpredictably increase and decrease in severity such as chronic fatigue syndrome, rheumatoid arthritis, lupus or illnesses requiring frequent hospitalizations. For further information, see CII@depaul.edu.

#### **DePaul Code of Student Responsibility**

The Code outlines the minimum acceptable level of conduct expected of every student of DePaul University, including respectful classroom behavior. DePaul condemns any form of harassment, discrimination, and/or assault behavior and any such conduct is subject to University disciplinary sanctions. For the complete code, see the student handbook online at. <a href="http://sr.depaul.edu/catalog/catalogfiles/Current/Undergraduate%20Student%20Handbook/pg50.html">http://sr.depaul.edu/catalog/catalogfiles/Current/Undergraduate%20Student%20Handbook/pg50.html</a>

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	CLASS SCHEDULE			
Class	Topic and Description	Readings Due	Assignment Due	
9/8	Overview: What is the science of sexual orientation?	Recommended: • Soble, 2006, I: 468-76		
9/15	<b>Definitions, Methods, Theories</b> From psychoanalytical theories to learning theories to biological studies	Required:  • LeVay, Ch. 1-3  • Griffitt & Hatfield Recommended:  • Herek, et al., 1991  • Sell, 1997  • Kinsey, 1948, Ch. 21	Responses to discussion questions (see D2L)	
9/22	Childhood, Adult Development Behavioral differences among children and adults, especially gender-variant or gender non- conforming traits.	Required: • LeVay, Ch. 4-5	Responses to discussion questions	
9/29	The Role of Sex Hormones Research on hormones and different developmental stages. Hormonal theories. Anatomical "markers" in correlation studies.	Required: • LeVay, Ch. 6	<ul> <li>Take-Home Midterm Exam (due in D2L)</li> <li>Responses to discussion questions</li> </ul>	
10/6	The Role of Genes Studies of twins and siblings. Family lineages. Genome scans and genetic linkages.	Required: • LeVay, Ch. 7 Recommended: • Hamer/Copeland, 1994	Stage 1 of Project (D2L)     Responses to discussion questions	
10/13	Brain and Anatomical Studies Structural and functional differences among humans and animals. The hypothalamus and brain activity studies. Pheromone studies. Body differences.	Required: • LeVay, Ch. 8-9 Recommended: • LeVay, 1996, 5-7	Responses to discussion questions	
10/20	The Older Brother Effect Birth order among brothers and correlations with sexual orientation. Experimental results and hypothesized causes.	Required: • LeVay, Ch. 10 Recommended: • Blanchard, 2001	<ul><li>Stage 2 of Project (D2L)</li><li>Responses to discussion questions</li></ul>	
10/27	Assessment and Critiques  Making sense of the main lines of research and future directions.  Critiques and debates.	Required:  • LeVay, Ch. 11 Recommended:  • Byne, 1994  • LeVay & Hammer, 1994	Responses to discussion questions	
11/3	Ethical Arguments, Pro and Con Ethics of the pursuit of research. Ethical arguments pro and con for potential uses of sciencein manipulating human sexual orientation.	Required: • Stein, 1999, Ch. 9 • Greenberg & Bailey Recommended: • Murphy, 1997	<ul> <li>Stage 3 of Project (D2L)</li> <li>Responses to discussion questions</li> <li>Project presentations</li> </ul>	
11/10	Student Project Presentations	No reading required	Project Presentations	
11/17	NO CLASS MEETING	- Final Take-Home Examination	ons Due in D2L	

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#### **Required Readings List:**

- LeVay, S. (2011). *Gay, Straight, and the Reason Why: The Science of Sexual Orientation.*Oxford: Oxford University Press.
- Greenberg, A. S. and Bailey, J. M. (2001). Parental Selection of Children's Sexual Orientation. *Archives of Sexual Behavior* 30(4), 423-37.
- Griffitt, W. and Hatfield, E. (1985). Methods and Issues in Sex Research. Pp. 6-13 in *Human Sexual Behavior*. Glenview, IL: Scott, Foresman & Co.
- Stein, E. (1999). Chapter 9 in *The Mismeasure of Desire: The Science, Theory, and Ethics of Sexual Orientation*. New York: Oxford University.

## **Recommended Readings List:**

- Blanchard, R. (2001). Fraternal Birth Order and the Maternal Immune Hypothesis of Male Homosexuality. *Hormones and Behavior, 40*, 105-114.
- Byne, W. (1994). The Biological Evidence Challenged. Scientific American(May), 50-55.
- Hamer, D., & Copeland, P. (1994). The Science of Desire: The Search for the Gay Gene and the Biology of Behavior. New York: Simon & Schuster.
- Herek, G. M., Kimmel, D. C., Amaro, H., & Melton, G. B. (1991). Avoiding Heterosexist Bias in Psychological Research. *American Psychologist, 46*(9), 957-963.
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). Sexual Behavior in the Human Male. Philadelphia: W. B. Saunders.
- LeVay, S. (1996). Queer Science: The Use and Abuse of Research into Homosexuality. Cambridge, MA: MIT Press.
- LeVay, S., & Hamer, D. H. (1994). Evidence for a Biological Influence in Male Homosexuality. *Scientific American*(May), 44-49.
- Murphy, T. (1997). *Gay Science: The Ethics of Sexual Orientation Research*. New York: Columbia University.
- Sell, R. L. (1997). Defining and Measuring Sexual Orientation: A Review. *Archives of Sexual Behavior*, *26*(6), 643-658.
- Soble, A. (Ed.). (2006). Sex from Plato to Paglia: A Philosophical Encyclopedia. Westport, CT: Greenwood Press.

### **Further Readings List:**

- Bagemihl, B. (1999). *Biological Exuberance: Animal Homosexuality and Natural Diversity*. New York: St. Martin's Press.
- Bailey, J. M. (2000). Genetic and Environmental Influences on Sexual Orientation and Its Correlates in an Australian Twin Sample. *Journal of Personality and Social Psychology*, 78(7), 524-536.
- Bailey, J. M., & Pillard, R. C. (1991). A Genetic-Study of Male Sexual Orientation. *Archives of General Psychiatry*, 48(12), 1089-1096.
- Bayer, R. (1987). *Homosexuality and American Psychiatry: The Politics of Diagnosis*. Princeton: Princeton University.
- Blanchard, R. (1997). Birth Order and Sibling Sex Ration in Homosexual versus Heterosexual Males and Females. *Annual Review of Sex Research*, *8*, 27-67.
- Brookey, R. A. (2002). *Reinventing the Male Homosexual: The Rhetoric and Power of the Gay Gene*. Bloomington, IN: Indiana University.
- Bullough, V. L. (1994). Science in the Bedroom: A History of Sex Research. New York: Basic Books.

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- Chivers, M. L. (2005). Leading Comment: A Brief Review and Discussion of Sex Differences in the Specificity of Sexual Arousal. *Sexual and Relationship Therapy*, *4*, 377-390.
- Davidson, A. I. (1987). Sex and the Emergence of Sexuality. Critical Inquiry, 14(1), 16-48.
- Diamond, L. M. (2008). Sexual Fluidity: Understanding Women's Love and Desire. Cambridge, MA: Harvard University.
- Dreger, A. D. (1998). *Hermaphrodites and the Medical Invention of Sex.* Cambridge, MA: Harvard University.
- Ellis, H. (1896). Sexual Inversion in Men. Alienist and Neurologist, 17, 115-150.
- Ellis, H., & Symonds, J. A. (1897). Sexual Inversion. London: Wilson & Macmillan.
- Epstein, S. (1996). *Impure Science: AIDS, Activism, and the Politics of Knowledge*. Berkeley: University of California.
- Fausto-Sterling, A. (1999). Sexing the Body: How Biologists Construct Human Sexuality. New York: Basic Books.
- Foucault, M. (1976). A History of Sexuality. New York: Random House.
- Gonsiorek, J. C., & Weinrich, J. D. (Eds.). (1991). *Homosexuality: Research Implications for Public Policy*. Newbury Park, CA: Sage Publications.
- Greenberg, D. F. (1988). The Construction of Homosexuality. Chicago: University of Chicago.
- Hamer, D. H., Hu, S., Magnusson, V. L., Hu, N., & Pattatucci, A. M. L. (1993). A Linkage between DNA Markers on the X Chromosomes and Male Sexual Orientation. *Science*, 261(July 16), 321-327.
- Hu, S., Pattatucci, A. M. L., Patterson, C., Li, L., Pulker, D. W., Cherney, S. S., et al. (1995). Linkage between Sexual Orientation and Chromosome Xq28 in Males but Not in Females. *Nature Genetics*, *11*, 248-256.
- Jones, J. H. (1997). Alfred C. Kinsey: A Public/Private Life. New York: W. W. Norton.
- Kallman, F. J. (1952). Twin and Sibship Studies of Overt Male Sexuality. *American Journal of Human Genetics*, *4*, 136-146.
- Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). Sexual Behavior in the Human Female. Philadelphia: W. B. Saunders.
- Klassen, A. D., Williams, C. J., & Levitt, E. E. (1989). Sex and Morality in the U. S.: An Empirical Inquiry under the Auspices of the Kinsey Institute. Middleton, CT: Wesleyan University.
- Koertge, N. (Ed.). (1981). *The Nature and Causes of Homosexuality: A Philosophic and Scientific Inquiry*. New York: Haworth Press.
- Lacqueur, T. (1990). *Making Sex: Body and Gender from the Greeks to Freud.* Cambridge, MA: Harvard University.
- LeVay, S. (1991). A Difference in Hypothalamic Structure between Heterosexual and Homosexual Men. *Science*, *253*, 1034-1037.
- Lloyd, E. A. (2005). *The Case of the Female Orgasm: Bias in the Science of Evolution*. Cambridge, MA: Harvard University Press.
- McKnight, J. (1997). Straight Science? Homosexuality, Evolution and Adaptation. New York: Routledge.
- McWhirter, D. P., Sanders, S. A., & Reinisch, J. M. (Eds.). (1990). *Homosexuality/ Heterosexuality: Concepts of Sexual Orientation*. New York: Oxford University.
- Meyerowitz, J. (2002). *How Sex Changed: A History of Transsexuality in the United States*. Cambridge, MA: Harvard University.
- Mondimore, F. M. (1996). A Natural History of Homosexuality. Baltimore, MD: Johns Hopkins University.
- Mustanski, B. S., Chivers, M. L., & Bailey, M. J. (2002). A Critical Review of Recent Research on Human Sexual Orientation. *Annual Review of Sex Research*, *13*(2), 89-140.
- Reiss, I. L. (1993). The Future of Sex Research and the Meaning of Science. *The Journal of Sex Research, 30*(1), 3-11.

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- Reiss, I. L. (2006). *An Insider's View of Sexual Science since Kinsey*. Lanham, MD: Rowman & Littlefield.
- Robinson, P. (1976). The Modernization of Sex: Havelock Ellis, Alfred Kinsey, and William Masters and Virginia Johnson. New York: Harper & Row.
- Rosario, V. (2002). Homosexuality and Science: A Guide to the Debates. Santa Barbara: ABC-CLIO.
- Rosario, V. (2002b). Science and Sexual Identity. *Journal of the History of Medicine and Allied Sciences*, *57*, 79-85.
- Rosario, V. (Ed.). (1997). Science and Homosexualities. New York: Routledge.
- Rosenthal, A. M., Sylva, D., Safron, A., & Bailey, J. M. (2011). Sexual Arousal Patterns of Bisexual Men Revisited. *Biological Psychology*. In press.
- Roughgarden, J. (2009). Evolution's Rainbow: Diversity, Gender and Sexual Identity in Nature and People. 2nd edn. Berkeley: University of California.
- Russett, C. E. (1989). Sexual Science: The Victorian Construction of Womanhood. Cambridge, MA: Harvard University.
- Schüklenk, U., & Ristow, M. (1996). The Ethics of Research into the Cause(s) of Homosexuality. *Journal of Homosexuality*, *31*(3), 5-30.
- Schüklenk, U., Stein, E., Kerin, J., & Byrne, W. (1997). The Ethics of Genetic Research on Sexual Orientation. *The Hastings Center Report, 27*(4), 6-13.
- Soble, A. (Ed.). (2006). Sex from Plato to Paglia: A Philosophical Encyclopedia. Westport, CT: Greenwood Press.
- Sommer, V., & Vasey, P. L. (Eds.). (2006). *Homosexual Behaviour in Animals: An Evolutionary Perspective*. Cambridge: Cambridge University.
- Stein, E. (1999). *The Mismeasure of Desire: The Science, Theory, and Ethics of Sexual Orientation*. New York: Oxford University.
- Stein, E. (Ed.). (1992). Forms of Desire: Sexual Orientation and the Social Constructionist Controversy (2nd ed.). New York: Routledge.
- Stoller, R. J., & Herdt, G. H. (1985). Theories of Origins of Male Homosexuality: A Cross-Cultural Look. *Archives of General Psychiatry*, *42*(4), 399-404.
- Terry, J. (2000). 'Unnatural Acts' in Nature: The Scientific Fascination with Queer Animals. *GLQ: A Journal of Gay & Lesbian Studies*, *6*(2), 151-193.

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## **History of Medicine and Public Health: Women's Health**

HIST 398/ WMNS491/ AFAM491 (Fall 2011) -- Virginia Commonwealth University

Meeting Time/Place: Thursdays 4-6:40PM at Franklin Street Gym 0331

Instructor: Dr. Karen A. Rader ("Dr. Rader" or "Professor Rader" is fine)
Office: 916 W. Franklin Street ("Millhiser House"), Room #201
Office Hours: Tues/Thurs 10-11AM and by appointment (please email!)

**E-Mail:** karader@vcu.edu

**Phone:** (804) 828-9642 (STS Admin. Assistant: Wanda Clary, 828-8427)

## **COURSE DESCRIPTION:**

The question of "who creates medical knowledge?" impacts women's lived experiences from birth to death, but it also permeates the broader social history of health in America. By using the framework of a women's life spectrum as a lens on this history, this class will seek to illuminate how and why women's history and women's health are so intertwined. Central to our discussions will be an analysis of the interplay among race, ethnicity, class, and gender in shaping particular health care outcomes. Some questions we will explore include: How has gender shaped the construction of medical knowledge and the framing of women's health and illness in U.S. History, from the late 18<sup>th</sup> century to the present? How have women participated in health care in both paid and unpaid capacities? What are the political, economic and social factors affecting women as providers and as recipients of health care? What do the lessons of women's history, social history, and cultural history tell us about how contemporary patients and policy-makers can define health and illness, and organize health care as a means of empowerment?

### **REQUIRED BOOKS AND MATERIALS:**

The following books have been ordered at the VCU Bookstore, but are also available on reserve at the Cabell Library and through many used book and on-line retailers. If you do not choose to buy through the VCU Bookstore, *please make sure that you have the correct edition* of the required texts.

Brumberg, Joan Jacobs. *The Body Project: An Intimate History of American Girls*. Vintage, 1998

Gilman, Charlotte Perkins. *The Yellow Wallpaper: And Other Stories* . Dover Press, 1997.

Leavitt, Judith Walzer, ed. *Women and Health in America: Historical Readings*. U. of Wisc. Press, 1999 [second edition] [Abbreviated in the syllabus as "<u>W&HinAm</u>"]

Marie Jenkins Schwartz, *Birthing a Slave: Motherhood and Medicine in the Antebellum South* (Harvard UP, 2006)

Ulrich, Laurel Thatcher. A Midwife's Tale. Vintage, 1990.

Plus **REQUIRED ARTICLES** (**Abbreviated in the syllabus below as "PDFs"**): These will be available two ways: (1) through Blackboard (as PDF files that you can download and/or print).

## Plus **REQUIRED FILM/VIDEO MATERIAL** (See syllabus for details).

### **GRADING and EVALUATION:**

You will be evaluated on the following criteria, each weighted as indicated.

- Participation
  - Attendance and Discussion (one lowest grade dropped)
     Thought Pieces (8@ 3.75% of grade each for total of)
     30%
- Larger Written Assignments (3@20% each for total of) 60% There will be four equally weighted assignments during the semester. These include:
  - o Take-home Midterm exam
  - o Historical book review of Ulrich, A Midwife's Tale
  - o Legislative/policy analysis
  - o Take-home Final Exam

0

The lowest of these four grades will be dropped for purposed of your evaluation. As a result *NO MAKE-UP EXAMS WILL BE GIVEN and NO LATE ASSIGNMENTS WILL BE ACCEPTED FOR ANY REASON.* 

Grades will be assigned according to the following traditional scale of points earned:

A (far above average) = 90-100 % B (above average) = 80-89 % C (average) = 70-79 % D (below average) = 60-69 %

F (unacceptable) = 59% and below

Any student may raise concerns about grading with the instructor at any time, but please try to do so as soon as possible when such concerns arise. If a student would like an individual grade reevaluated, s/he must put his/her concerns in writing and give that statement, along with the graded assignment in question, back to the instructor – who will respond (in writing, by your VCU e-mail) within one week.

## General ASSIGNMENT DESCRIPTIONS, POLICIES, and OBJECTIVES:

Because the instructor seeks for students to achieve historical understanding and critical thinking with regard to the subject matter of this course, students should expect that most classes will be some combination of lecture/presentations, exercises, and discussion – and they should come prepared to participate actively.

Participation: To facilitate the achievement of historical understanding and critical thinking, as well as to increase students' level of comfort with writing as a tool for learning, students will be asked to submit a short one page (250-300 word) thought-piece most Thursdays (see detailed description at the end of this syllabus, p. 13: "What is a Thought-Piece?"). Thought pieces are to be turned into the instructor in hard copy only (no electronic copies will be accepted) at the beginning of class in which they are due (each on is marked on syllabus). There will be no thought pieces assigned the last week of class, and none due in weeks when you have other written assignments due.

Thought pieces will be evaluated on a 1-10 scale and returned to you the following Tuesday. You will have <u>NINE regular opportunities</u> (and one extra credit opportunity) to write a thought piece during the semester, and your <u>single lowest thought piece grade will be dropped at the end of the semester</u>. As a result, <u>NO LATE THOUGHT PIECES</u> <u>WILL BE ACCEPTED FOR ANY REASON.</u>

**Exams**: The midterm and final exams will be take-home essay exams.

### GENERAL CLASS AND VCU POLICIES:

### **General VCU and Class Policies:**

### VCU Statement on Safety

What to know and do to be prepared for emergencies at VCU:

- Sign up to receive VCU text messaging alerts ( $\underline{www.vcu.edu/alert/notify}$ ). Keep your information up-to-date.
- Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in on-campus classrooms.
- Listen for and follow instructions from VCU or other designated authorities.
- Know where to go for additional emergency information ( www.vcu.edu/alert ).
- Know the emergency phone number for the VCU Police (828-1234). Report suspicious activities and objects.

## VCU Honor System and Academic Integrity Policy

Virginia Commonwealth University recognizes that honesty, truth, and integrity are values central to its mission as an institution of higher education. The Honor System is built on the idea that a person's honor is his/her most cherished attribute. A foundation of honor is essential to a community devoted to learning. Within this community, respect and harmony must coexist. The Honor System is the policy of VCU that defines the highest standards of conduct in academic affairs. The Honor System in its entirety can be reviewed on the Web at <a href="http://www.provost.vcu.edu/pdfs/Honor\_system\_policy.pdf">http://www.provost.vcu.edu/pdfs/Honor\_system\_policy.pdf</a> or it can be found in the 2011-12 VCU Insider at <a href="http://www.students.vcu.edu/insider.html">http://www.students.vcu.edu/insider.html</a>.

All students in this class must know and abide by the VCU Honor Code. In particular <u>plagiarism will not be tolerated</u>. There are two kinds of plagiarism: unintentional (poorly cited documentation for sources you have consulted or used in your work) and intentional (use of another's prose with the intention of passing it off as your own). Unintentional plagiarism should not happen, if you follow proper citation and documentation procedures (if you have any specific questions about how to do this, consult with me); if it does, you will be penalized within the framework for overall academic evaluation. Intentional plagiarism will be reported to the Dean's Office.

## Attendance and Participation Policies

Absences: Attendance Grades will be posted about every 4-5 weeks (dates for posting listed on syllabus). To request reconsideration of an attendance grade, you must contact the instructor in writing not more than one week after each attendance grade is posted.

- O Students are responsible for all material listed on the syllabus, including all readings, films, and lectures. <u>If a student misses class or adds the class late</u>, s/he is still responsible for all material listed on the syllabus.
- o Latenesses of more than fifteen (15) minutes will be counted as absences.
- o If we have any weather related absences, we will resume work as planned (including any tests or paper deadlines) the following class period.

## Classroom and Discussion Etiquette

- Student conduct will be governed by the expectations described in "Student Conduct in the Classroom" (see http://www.students.vcu.edu/docs/policy\_student\_conduct.pdf)
- Students are encouraged to share their opinions and ideas based on the historical material we will be discussing; however, deliberately harmful comments based on race, nationality, religion, sexual orientation, gender, or physical ability will not be tolerated. We are all individuals with our own passions and interests, but we are also members of an academic community -- so the tone of all collective discussions must remain scholarly and academic.
- Show courtesy to your instructor and your classmates by arriving on time and leaving only when the class has ended; <u>also</u>, <u>turn off any cell phones</u>, <u>beepers</u>, <u>or pagers for the duration of class – and do not 'surf the net' or text message during class!</u>
- o Any student whose behavior is judged (for these, or any other reasons) by the instructor to be discourteous or disruptive will be asked to leave the classroom
- o Taping and/or digital recording of class sessions is not permitted.

### Communications Policies:

- o It will be necessary for the instructor to e-mail you (individually and collectively) from time to time. For these purposes it will be assumed that each student uses his/her VCU student e-mail account. Please make a habit of checking this student e-mail account regularly, or if you have another e-mail address you use more regularly, please make arrangements with the Computer Help Desk (library basement) to forward your VCU e-mails to you at this address.
- E-mail is the most effective way to communicate with the instructor outside of class or office hours you can usually expect a response within several hours (barring the period between 8PM and 8AM, and weekends).
   But please do not send e-mails which make requests and simply presume that these requests will be fulfilled or approved. It is your sole

responsibility to check your e-mail in a timely fashion in order to get the instructor's response.

<u>Disability Policy:</u> The Americans with Disabilities Act of 1990 requires Virginia Commonwealth University to provide a 'reasonable accommodation' to any individual who advises us of a physical or mental disability. Any student who wishes to discuss reasonable accommodations for a disability, visible or invisible, should contact me <u>within the first three weeks</u> of class so that we can meet and make all the necessary arrangements with the Coordinator of the VCU Office of Disability Support Services (ODSS). ODSS is can be reached by phone: 828-2253.

<u>Religious Observances Policy:</u> As per VCU policy, a student desiring to observe a religious holiday of special importance must provide advance <u>written notification by the end of the second week of classes</u>. The student remains responsible for any written material missed.

<u>Technology Policy</u>: Blackboard is an integral technology and your successful use of it will be vital for this class. *You are responsible for working out any issues of access to Blackboard*: for help with this contact Technology Support Services (<a href="www.ts.vcu.edu/helpdesk">www.ts.vcu.edu/helpdesk</a> or (804) 828-2227)

### Extra Credit Policy:

There will also be several <u>extra credit opportunities</u> during the semester through attending STS and related academic lectures and writing a 2-page summary/reflection of what you saw/heard. The instructor will post a list of these opportunities on the Bb (under COURSE INFORMATION) and will consider making other VCU academic lectures and/or community events extra credit assignments by student request. In order to add a non-listed event, the instructor must receive your request in writing AT LEAST 3 DAYS before the date of the event/lecture.

Extra credit assignments must be turned in as typed, double spaced, hard copy (either in class or in the instructor's office), and are due by 4:30PM no more than TEN DAYS after the lecture/event itself takes place. *NO late extra credit assignments will be accepted.* 

With regard to evaluation, students can submit NO MORE THAN THREE extra credit assignments, and extra credit assignments can ONLY be used to replace lowest THOUGH PIECE GRADES. Extra credit will be graded on a 1-10 scale and returned to you as time permits (\*all\* regular grading/evaluation takes precedence for the instructor over extra credit assignment).

## COURSE SCHEDULE (SUBJECT TO CHANGE – CHECK Bb for Updates) WEEK ONE: Thurs 8/25

## **INTRODUCTION: Defining Women's Health**

Review Course Syllabus; General Discussion of Course and Learning Objectives

(PDF – mounted on Bb and handed out in class, 8/20) Excerpt from the 1971 Edition of *Our Bodies, Ourselves* by the Boston Woman's Health Collective

In-Class EXERCISE: Reading Primary Sources – Instructor will bring *OB*, *OS editions*: 1973 (pamphlet), 1976, 1982, 1984, 1998 – most from the VCU librarues

Plus mini-lecture on the following (to be read for the exam):

(PDF) Sheryl Ruzek, "Transforming Doctor Patient Relationships," *Journal of Health Services Research Policy*, July 2007, 12 (3): 181-82.

(PDF) Wendy Kline, "Please Include this in your book": Readers Respond to Our Bodies, Our Selves, Bulletin of the History of Medicine, 2005, 79: 81–110

(PDF)Kathy Davis, "World Traveller: Translating *Our Bodies, Ourselves*," *European Journal of Women's Studies*, 2002, 9 (3); 223–247.

## UNIT #1 -- PUBERTY

**WEEK TWO: Thurs 9/1** 

FILMS (23 minutes, shown in class): *Personal Hygiene for Boys; For Girls* (1923-24 – United States Public Health Service)

(PDF) Clarke, Edward H. Part II, "Chiefly Physiological," Sex in Education; or, a fair chance for the girls. 1873. Arno Press, 1972.

(PDF) Wayman, Agnes. *Education through Physical Fitness*. Philadelphia: Lea and Fibiger, 1928, p. 118-25.

W&HinAm: -- Margaret Lowe, "From Robust Appetites to Calorie Counting: Dieting Among Smith College Students in the 1920s"

(PDF) Lears, T.J. Jackson. "American Advertising and the Reconstruction of the Body, 1880-1930," in Kathryn Glover, ed., *Fitness in American Culture*. Amherst: U. Mass, 1989, p.47-68.

### **THOUGHT PIECE #1 DUE**

**WEEK THREE: Thurs 9/8** 

Brumberg, *The Body Project* (all) plus (PDF) Arthur Kleinman, *Illness Narratives* (1988), Chapters 1-2.

## **THOUGHT PIECE #2 DUE**

## UNIT #2 -- SEXUALITY

#### READING:

Gilman, *The Yellow Wallpaper* (you are required to read the title short story only)

W&HinAm, read the following chapters:

- --Diane Price Herndl, "The Invisible (Invalid) Woman: African American Women, Illness, and Nineteenth Century Narrative:
- --Elizabeth Lunbeck, "'A New Generation of Women:' Progressive Psychiatrists and the Hypersexual Female"
- --Elaine Abelson, "The Invention of Kleptomania"

(PDF) Dreger, Alice. "Doubtful Sex: The Fate of Hermaphrodites in Victorian Medicine," *Victorian Studies*, Spring 1995, Vol. 38, Issue 3, p. 335+

## THOUGHT PIECE #3 DUE

**WEEK FIVE: Tues 9/22** 

WEEK FOUR: Thurs 9/15

## **UNIT #3 -- FERTILITY, CONTRACEPTION, and ABORTION**

W&HinAM, Chapters 13, 15, and 16:

- --Linda Gordon, "Voluntary Motherhood: The Beginnings of Feminist Birth Control Ideas in the United States"
- --Jessie M. Roderique, "The Black Community and the Birth Control Movement" W&HinAM, Chapter 16:
- --Andrea Tone, "Contraceptive Consumers: Gender and the Political Economy of Birth Control in the 1930s"

(PDF) Gladwell, Malcolm. "John Rock's Error," New Yorker, 13 March 2000, p. 52-63.

## **THOUGHT PIECE #4 DUE**

**WEEK SIX: Thurs 9/29** 

W&HinAM, read the following chapters:

- --Leslie Reagan, "'About to Meet Her Maker:' Women, Doctors, Dying Declarations and the State's Investigation of Abortion in Chicago, 1867-1940"
- ----Judith Walzer Leavitt, "Under the Shadow of Maternity..."

(PDF) Alice Walker, "The Abortion," pp 1-14 in *Coming to Terms: A Literary Response to Abortion*, Linda Ebersole and Richard Peabody, eds. (CUNY/New Press, 1994)

### **Book Review Assignment Distributed**

### **THOUGHT PIECE #5 DUE**

**WEEK SEVEN: Tues 10/6** 

## UNIT #6 -- CHILDBIRTH AND MOTHERHOOD

W&HinAM, read the following chapters:

- -- Judith Walzer Leavitt, "Under the Shadow of Maternity..."
- --Carolyn Leonard Carson, "And the Results Showed Promise...Physicians, Childbirth, and Southern Black Migrant Women, 1916-1930"

Plus Schwartz, Birthing a Slave (all)

## Midterm exam distributed THOUGHT PIECE #6 DUE

WEEK EIGHT: Thurs 10/13

FILM (Shown in Class): *A Midwife's Tale* (1997, Filmmakers' Collaborative/PBS Home Video)

## MIDTERM EXAM DUE by 5PM (submit via Bb); No Thought Piece This Week

WEEK NINE: Thurs 10/20

No Class -- VCU STUDY DAY

WEEK TEN: Thurs10/27

### **UNIT #7 -- WOMEN AS HEALTHCARE PROVIDERS**

W&HinAM, read the following chapters:

(Nurses and Doctors)

- --Susan Reverby, "'Neither for the Drawing Room or the Kitchen:' Private Duty Nursing in Boston, 1873-1920"
- --Darlene Clark Hine, "'They Shall Mount Up with Wings as Eagles:' Historical Images of Black Nurses, 1890-1950
- -- Mary Roth Walsh, "Feminist Showplace"
- -- Regina Morantz-Sanchez, "The Gendering of Empathic Expertise: How Women Physicians Became More Empathetic Than Men"
- --Kinberley Jensen, "Uncle Sam's Loyal Nieces"

### THOUGHT PIECE #7 DUE

**WEEK ELEVEN: Thurs 11/3** 

FILM (Shown in Class): Typhoid Mary – The Most Dangerous Woman in American (NOVA/PBS, 2004)

Attendance Grade #2 Posted to Bb by the end of this week

Historical Book Review of Ulrich, A Midwife's Tale due by 5PM on 11/3 (Submit on Bb) (No thought piece due this week)

WEEK TWELVE: Thurs 11/10

(Midwives)

W&HinAM, read the following chapters:

- -- Charlotte Borst, "The Training and Practice of Midwives"
- --Susan Smith, "White Nurses, Black Midwives, and Public Health"

(Family Caregiving)

--Emily Abel, "A 'Terrible and Exhausting Struggle:' Family Caregiving During the Transformation of Medicine"

(PDF) Excerpt from Carol Levine, *Always on Call: When Illness Turns Families Into Caregivers* (United Hospital Fund, 2000). Chapters 2, 6, and 7

### Legislative Policy Assignment distributed

#### THOUGHT PIECE #8 DUE

## **UNIT #9 -- MENOPAUSE**

**WEEK THIRTEEN: Thurs 11/17** 

- (PDF's) Wilson, Robert A. Chapters from *Feminine Forever* (NY: Evans, 1966), chapters 1 ("A Woman's Right to be Feminine") and 2 ("Must Women Tolerate Castration") (pages 24-54, inclusive).
- (PDF) J.A. Houck, "What do these women want?": Feminist responses to *Feminine Forever*,1963-1980," in *Bulletin of the History of Medicine*, 2003 Spring;77(1):103-32 (on Web Board)
- (PDF) Watkins, Elizabeth Siegel. 'Doctor, are you trying to Kill Me?' Ambivalence about the patient package insert for estrogen. *Bulletin of the History of Medicine* 76:1 (2002) 84-104.
- (PDF) Eve Agee, "Menopause and the Transmission of Women's Knowledge: African American and WhiteWomen's Perspectives," *Medical Anthropology Quarterly*, New Series, Vol. 14, No. 1 (Mar., 2000), pp. 73-95.

### **THOUGHT PIECE #9 DUE**

**WEEK Fourteen: Thurs 11/24** 

\*\*NO CLASS 11/26: THANKSGIVING BREAK\*\*

<u>Conclusion -- CONTEMPORARY POLICY ISSUES AND UNDERSTANDINGS</u> <u>OF WOMEN'S HEALTH</u>

WEEK FIFTEEN: Thurs 12/1 (Breast Cancer)

## **Legislative/Policy Assignment Due: Discuss and Share Results**

(Grades for this assignment will be posted by Monday 12/7 at noon) Come to class prepared to talk 2-4 minutes about your findings!

(PDF) Ehrenreich, Barbara. "Welcome to Cancerland: A mammogram leads to a cult of pink kitsch," *Harper's Magazine*, November 2001.

(PDF) Boehmer, Ulrike, *The Personal and the Political: Women's Activism in Response to the Breast Cancer and AIDS epidemics*. Albany: SUNY, 2000. Chapter 4, "The Personal and the Political, pp. 57-95.

Final Exam distributed Attendance Grade #3 posted on Blackboard this week (No thought piece due this week)

WEEK SIXTEEN 12/8 (What does it mean to be a woman?)

Two essays from D. Kleinman, et. al., *Controversies in Science and Technology* (New Rochelle, NY: Mary Ann Liebert Inc. Publishers, 2008):

- (PDF) Alice Dreger, "Sex Beyond Karotype" (Chapter 23, p. 481-492)
- (PDF) Christina Matta, "Ambiguous Bodies and Deviant Sexualities: Hermaphrodites, Homosexuality, and Surgery in the US, 1850-1904" (Chapter 24, p. 493-504)

Plus the film: "Southern Comfort" (dir. Kate Davis, 2001)

EXTRA CREDIT THOUGHT PIECE OPPORTUNITY (optional); due in class

FINAL EXAM DUE (Submit via Bb) due by Friday 12/9 at 5PM

## What is a Thought Piece? Adapted from A.R. Marshall, Brandon University (CA)

• A thought piece is a short (250-300 word) writing assignment that thoughtfully poses and answers a question (or at most, two questions) in relation to class materials (which are the readings, as well as lectures/discussions/presentations). Ideally, it is a vehicle for students to write critically and think analytically – but in a less formal style than would be required in a thesis-driven traditional essay assignment.

## **Some Guidelines:**

- Thought pieces must address the readings assigned on the week that they are due, and they must engage one of the subjects or themes of the class broadly defined (if you're having trouble discerning these, look at the unit titles and sub-titles on the syllabus, or the chapter/article titles). You must focus your ideas using the course materials assigned: do not use material from other books or sources except to introduce questions or probe ideas from those materials). \*\*Do not go to the library or consult web sites in order to do research for your thought pieces.\*\*

  The ideas should come directly from you!
- The more detail you provide to explain the points of your interpretation and to analyze the material you have been given, the better your writing will be. Begin the process of writing a thought piece by asking yourself as many questions as possible about the materials (what, why, when, how, who). These questions will help you decide how to deepen your analysis. Then revise, clarify and explore your ideas as you write.

### The **formal requirements** are simple:

- You may write your thought piece either from a first person (i.e., "I think...") or third-person (i.e. "This flaw in the author's argument suggests...") perspective
- You should refer to the class materials you are referencing specifically (i.e. by author's name, quick in-text page number if applicable), but do not use formal citations.
- You must type/word process and double-space your text, as well as use coherent English sentences.

### Please try to avoid **common problems:**

- Do not use your thought piece to write a story.
- If you wish to present an opinion, make sure that you argue it: do not use the thought piece simply to declare it through a series of statements
- Do not write your thought piece by copying class notes or reading quotes verbatim.
- Keep in mind that grammatical and spelling rules still apply.

## HistSci 138. Sex, Gender, and Evolution

Prof. Sarah Richardson srichard@fas.harvard.edu

#### **Course Description:**

Evolutionary theories of sex and gender and central controversies in human evolutionary biology from Darwin to the present. Topics include debates over the theory of sexual selection and the evolutionary basis of monogamy, sexual preference, physical attraction, rape, maternal instinct, and sex differences in cognition. Readings: primary texts and historical, philosophical, and feminist analyses.

#### Texts:

Required texts (marked [T] on the syllabus) are available for purchase at the Harvard Coop. Additional required readings (marked [E] on the syllabus) are available via the course website.

- 1. Londa Schiebinger. *Nature's Body: Gender in the Making of Modern Science*. Boston: Beacon Press, 1993.
- 2. Cynthia Russett. *Sexual Science: The Victorian Construction of Womanhood.* Cambridge: Harvard University Press, 1989.
- 3. Diane Paul. Controlling Human Heredity, 1865 to the Present. Amherst, N.Y.: Humanities Books, 1995.
- 4. Martha McCaughey. The Caveman Mystique. N.Y.: Routledge, 2008.
- 5. Joan Roughgarden. *Evolution's Rainbow: Diversity, Gender, and Sexuality in Nature and People*. Berkeley: University of California Press, 2004.

#### **Course Requirements:**

This course requires 100-200 pages of reading/week, regular attendance, participation in a weekly discussion section, 3 entries on the class blog, and completion of three 5-7 pp. analytical papers or multimedia essays. There will be five essay assignments, corresponding to the units of the course. Pick the three assignments that most interest you and turn them in by the required dates. *Students taking the class for graduate credit should see the professor for graduate student requirements.* 

#### **Grading:**

Attendance, participation, and preparation	20%
Essay 1	20%
Essay 2	20%
Essay 3	20%
Blog contributions	20%

## **Course Schedule:**

Part 1. Gender and Evolution in History and Culture: Major Themes

January 25	Course Overview and Opening Lecture No reading
January 27	Clan of the Cavemen: Gender, Evolution, and Human Origins
	[E] Berman, "Bad Hair Days in the Paleolithic: Modern (Re)Constructions of the Cave Man"
	[E] Clark, "The Caveman and the Strenuous Life"
	[E] "The New Cavemen Lifestyle," New York Times
February 1	"Women Consorting with Chimpanzees": Gender, Evolution, and Human-Animal Relations
	[T] Nature's Body, Chapter 2 and 3, "Why Mammals are Called Mammals" and "The Gendered Ape"
	[E] Haraway, "Apes in Eden, Apes in Space: Mothering as a Scientist for National Geographic"
February 3	"The Woman Who Never Evolved": Males as the "Species Type" in Evolutionary Science and Popular Culture
	[T] Nature's Body, Chapters 4 and 5, "The Anatomy of Difference" and "Theories of Gender and Race"
	[E] Zihlman, "The Paleolithic Glass Ceiling: Women in Human Evolution"
February 8	Darwin's Beard: The Voyage of the Beagle, Masculinity, and Biology
	[T] Nature's Body, Chapter 6, "Who Should Do Science?"
	[E] Gapps, "Charles Darwin as an Icon"
	[E] Endersby, "Sympathetic Science: Charles Darwin, Joseph Hooker, and the Passions of Victorian Naturalists"

Essay 1 is due on Monday, February 14, 12 midnight in your dropbox

## Part 2. Darwin and sexual politics

Victorian Sexual Science
[T] Sexual Science, Chapters 1 and 2, "How to Tell the Girls from the Boys" and "Up and Down the Phyletic Ladder"
Coy Women and Promiscuous Men: Darwin's Theory of Sexual Selection
[T] Sexual Science, Chapter 3, "Hairy Men and Beautiful Women"
[E] Jann, "Darwin and the Anthropologists: Sexual Selection and Its Discontents"
[E] Darwin, <i>The Descent of Man and Selection in Relation to Sex</i> , Chapter 8 and 19, "Principles of Sexual Selection" and "Secondary Sexual Characters of Man"
Feminism and Darwin's Theories
[T] Sexual Science, Chapter 5, "The Physiological Division of Labor"
[E] Ayala, "Victorian Science and the 'Genius' of Woman"
[E] Deutscher, "The Descent of Man and the Evolution of Woman"
Darwin Correspondence Project: Darwin and Gender Class Workshop
[E] Letters from the Darwin Correspondence Project
Guest Lecture: Miranda Mollendorf, Hybrid Selves: Botanical Bodies and Imperial Aesthetics from the 17th-19th centuries
[T] Nature's Body, Chapter 1, "The Private Lives of Plants"
[E] Browne, "Botany for Gentlemen: Erasmus Darwin and The Loves of the Plants"
[E] Darwin, Erasmus. <i>Loves of the Plants</i> (London: J. Johnson, 1791), preface and canto 1, pp. 1-16.

Essay 2 is due on Monday, February 28, 12 midnight in your dropbox Blog entry 1 is due February 28 at midnight.

## Part 3. Eugenics, evolution, and reproductive politics

March 1	A Threat to the Race: Evolution, Eugenics, and Reproductive Politics
	[T] Controlling Human Heredity, Chapters 1-3, "What is Eugenics?," "Evolutionary Anxieties," and "From Soft to Hard Heredity"
	[E] Survey the Cold Spring Harbor Eugenics Archives: <a href="http://www.eugenicsarchive.org/eugenics">http://www.eugenicsarchive.org/eugenics</a>
	[E] Galton's "Hereditary Talent and Character" (1865)
	[E] Pearson's "On Breeding Good Stock" (1903)
March 3	Birth Control, Sterilization, and Normative Mothering: The Complex Politics of Gender and Eugenics
	[T] Controlling Human Heredity, Chapters 4-6, "The Menace of the Moron," "Eugenic Solutions," and "Whose Country Is This?"
	[E] Lovett, "Nostalgia, Modernism, and the Family Ideal"
March 8	WWII, Nazis, and the Denouement of Eugenics
	[T] Controlling Human Heredity, Chapter 7, "From Eugenics to Human Genetics"
	[E] Proctor, "Lives Not Worth Living"
	[E] Kay, "'Social Control': Rockefeller Foundation's Agenda in the Human Sciences, 1913-1933."
March 10	Yummy Mummies and Birthrate Politics: Evolutionary and Eugenic discourses in Reproductive Politics Today
	[E] Duster, "Eugenics by the Back Door"
	[E] Roberts, Introduction to Killing the Black Body: Race, Reproduction, and the Meaning of Liberty
	[E] Oliver, "Motherhood, Sexuality, and Pregnant Embodiment"

Essay 3 is due on Monday, March 21, 12 midnight in your dropbox

Part 4. Sociobiology and evolutionary psychology

March 22	E.O. Wilson's Sociobiology: From Animal Behavior to Human Nature
	[E] Wilson, "Man: From Sociobiology to Sociology"
	[E] Segerstrale, "The Storm over Sociobiology"
	[E] Kitcher, "What is Sociobiology?"
March 24	From Sociobiology to Evolutionary Psychology: The Birth of a Discipline and a New Science of Gender Difference
	[E] Trivers, "Parent-Offspring Conflict"
	[E] Barash, "Sexism: Strategies of Reproduction"
	[E] Pinker, "Gender," pp. 337-359 only
March 29	"The Determined Patriarchy": The Politics of Feminism and Evolutionary Psychology
	[T] Caveman Mystique, Introduction and Chapter 1, "Welcome Back to the Caveman Times" and "Sperm Wars, Sex Wars, and Science Wars"
	[E] Herrnstein-Smith, "Super Natural Science: The Claims of Evolutionary Psychology"
	[E] Fausto-Sterling, "Feminism and Behavioral Evolution: A Taxonomy"
March 31	Maxim Magazine and the Academy: Gender and Evolutionary Psychology in Popular and Scientific Contexts
	[T] Caveman Mystique, Chapters 2 and 3, "The Theory of Evolution as a Moral Answer for Men" and "Evolution, Popular Culture, and the Embodied Ethos of Male Sexuality"

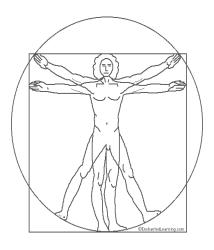
Blog entry 2 is due March 31 at midnight Essay 4 is due on Monday, April 4, 12 midnight in your dropbox

Part 5. Contemporary debates and controversies

April 5	Breasts, Orgasms, and Birth Canals: Evolutionary Theories of Female Anatomy and Physiology		
	[T] <i>Evolution's Rainbow</i> , Chapters 2-4, "Sex versus Gender," "Sex within Bodies," and "Sex Roles"		
	[E] Barash and Lipton, "Breasts and Other Curves"		
	[E] Lloyd, "The Case of the Female Orgasm"		
April 7	Prairie Voles and Dating Games: Evolutionary Theories of Monogamy		
	[T] Evolution's Rainbow, Chapters 5-7, "Two-Gender Families," "Multiple-Gender Families," and "Female Choice"		
	[E] Diamond, "Wrong Time for Love: The Evolution of Recreational Sex"		
	[E] Buss, "What Women Want"		
	[E] "Student Surveys Contradict Claims of Evolved Sex Differences"		
	[E] Baker, "Shopping Around for Genes" {Skim}		
April 12	Squaring the Pink Triangle: Evolutionary Theories of Homosexuality		
	[T] Evolution's Rainbow, Chapter 8 and 14, "Same-Sex Sexuality" and "Sexual Orientation"		
	[T] Caveman Mystique, Chapter 4, "Homo Sexual: Perverting Evolutionary Stories of Male Sexuality"		
April 14	Mother Nature and Infanticidal Apes: Evolutionary Theories of Parental instinct		
	[E] Diamond, "What Are Men Good For?: The Evolution of Men's Roles"		
	[E] Hrdy, "A New View of Mothers"		
April 19	Scorpionflies and 30-Year-Old Virgins: Evolutionary Theories of Rape		
	[E] Thornhill and Palmer, "Why do Men Rape?"		
	[E] Coyne, "Of Vice and Men: A Case Study in Evolutionary Psychology"		

April 21	NO CLASS			
April 26	Closing Lecture: Knowledge Politics, Ethics, and Evolutionary Theories of Gender			
	[T] Evolution's Rainbow, Chapter 9, "The Theory of Evolution"			
	[E] Gowaty, "Sexual Natures: How Feminism Changed Evolutionary Biology"			

Essay 5 is due on Friday, April 29, 12 midnight in your dropbox



#### WS 290A

## INTRODUCTION TO THE BIOLOGY OF DIFFERENCE" SPRING 2011

Banu Subramaniam

Classes on: Mon & Wed: 11:15-12:05, Tobin 304 **Discussions, Friday 11:15-12:05 & 12:20-1:10 p.m.**Office Hours: M, W: 2-3; and by appointment, Bartlett 231

email: banu@wost.umass.edu

**Teaching Assistant: Cordelia Sand** 

Office Hours: Wed 1 p.m. Bartlett 208C; and by appointment

email: cordelia@westelcom.com

#### I. COURSE DESCRIPTION

How do we account for the many similarities and differences within and between human populations? Axes of human "difference"—sex, gender, race, class, sexuality, religion, nationality etc. — have profound consequences. These differences shape not only group affiliation and identity but are often correlated with colonial and national histories, with organization of societies such as socioeconomic status, professions, work mobility, as well as stereotypes about personal traits and behaviors. Debates around questions of nature and nurture have raged on for several centuries. The biological sciences have been very important in the history of differences. Scientists have contributed to bolster claims that differences are determined by our biology — such as research on sex and racial differences, notions of the "gay" gene, math abilities, spatial ability etc. Conversely, scientists have also contributed to critiquing claims of difference — claims of the existence of "race" and racial differences, claims about differences amongst sexes, genders and sexualities. How do we weigh these claims and counterclaims?

In this course, we will explore both popular and academic writings - their understandings, debates and critiques of "difference." We examine these categories systematically to evaluate claims of difference. We will begin with a historical overview of biological studies on "difference" to trace the differing understandings of the "body" and the relationship of the body with identity, behavior and intellectual and social capacity. We will then examine contemporary knowledge on differences of sex, gender, race, class, and sexuality. We will use several case studies to explore how scientific and experimental knowledge is produced. What is good data? How do we "know" what we know? The course will take up a range of claims about difference, their purpose and their consequences to examine what these studies of "difference" can tell us – exploring both what they tell us and what they do not. Using literature from biology, women's studies, and science studies, we will examine the biological and cultural contexts for our understanding of "difference." The course will give students the tools to analyze scientific studies, to understand the relationship of nature and culture, science and society, biology and politics.

### II. COURSE READINGS

*Middlesex*, by Jeffrey Eugenides, Picador, 2007, Available at *Food for Thought Books*, *North Pleasant Street*, *Amherst* 

*E-Reserves:* Articles available online through library electronic reserves. Enter —Subramaniam as instructor or Womensst290A in listed courses and enter the password: biology

*SPARK:* We will use SPARK throughout the course. Surprise extra credit assignments, news and information and discussion questions will be posted on SPARK throughout the course. Once you register for the course, you will automatically be added to the course on SPARK. You will use your OIT

username and password to sign into the course SPARK and access course information. Please contact OIT if you have any problems. Every student needs to be familiar with the site and check it regularly (https://spark.oit.umass.edu/webct/entryPageIns.dowebct). Many important announcements and assignments will be posted there and you are responsible for this information.

### III. COURSE REQUIREMENTS

- You must be registered for <u>both</u> the lecture and discussion section. Attendance at <u>BOTH</u> is required and mandatory.
- Reading assignments must be completed by the class period for which they were assigned.
- You are responsible for knowing when assignments are due and handing them in on time. Dates of major writing assignments are in this syllabus. But other assignments will be given in your discussion sections. Absence from these sections on the day the assignment is due is no excuse for not handing in the assignment on time. It is each student's responsibility to find out about assignments from someone in your discussion group or from your Teaching Assistant.
- For an absence to count as excused, you must submit an official certification as well as a 2-page summary on the week's readings.
- Discussion sections will provide the opportunity to talk critically and analyze issues and topics. You will be expected to have completed and thought about all of the readings for each class.
- Videos and guest lectures are part of the class material and students are responsible for knowing the material.

We will follow all university policies on issues of Academic Honesty, Grading, Attendance, Examinations, and Absences due to Religious Observance.

### **Written Assignments and Exams**

- Midterm Exam: One midterm exam on March 11 in discussion section
- Two short exercises/writing assignments (3-4 pages) due Feb 18 and April 1 in discussion section
- News clippings: This course deals with materials that are very relevant to our times. We encourage you to bring newspaper articles/clippings, stories for the news program, radio and television programs, the movies as well as conversations with friends and family. We will begin each class with such connections. You should post these on the discussion board on SPARK. During the semester each student must present at least 2 relevant links before the midterm and two after the midterm. In addition you should comment on someone else's posting at least twice before and after
- Final project: A final project and presentation (Topic due March 4, Outline, April 8, Paper- May 2)
- Discussion groups are integral part of the class. Attendance and participation in discussion sections are factored into the final grade. Two unexcused absences or more will result in your grade being marked down. Non-attendance will result in an "F." If you have an excused absence, you must submit a two-page reflection paper based on the readings assigned for that week. The paper is due the next class day.
- Extra Credit Events: Throughout the semester we will post extra credit events. Attend an event and write a 1-2 page summary of the event for 2% extra credit.

### <u>Grading</u>

Final grades will be computed as follows:		
Discussion section (attendance and participation)		20%
Midterm Exam		20%
Final Project and Presentation		20%
Written assignments (2 assignments- 15% each)		30%
Online Discussion board (5% posting; 5% comment)		10%
Extra Credit (2% per event)	Upto	6%

### **Discussion Sections**

Discussions sections on Friday are not optional or add-ons. They are designed to be an integral part of the course and to provide an opportunity to clarify issues in your readings, films and lectures. We expect you to have *completed and thought about* all of the readings for that week and to be ready to engage in meaningful dialogue. In addition to their strictly academic function, sections are also places where students may talk about the ways in which the topics we address in this course may have touched their lives. **Attendance and participation in discussion groups will be 20% of the course grade.** 

### **Academic Honesty**

Academic dishonesty, in any form, will not be tolerated and you are responsible for educating yourself about the University's official policy on academic honesty. Following is a summary - you can read it in full at http://www.umass.edu/dean\_students/rights/acad\_honest.htm

If an instructor finds that a student has violated the University's Academic Honesty Policy, the instructor has the right to lower the student's grade, or even to fail the student for the course. Students have the right to appeal such a grade penalty by an instructor. The University Academic Honesty Board, which must be notified by instructors of any grade penalty, reviews all student appeals. The Board may sustain or recommend modification of the penalty given by the faculty member, or may recommend sanctions exceeding those originally given, such as suspension or expulsion from the University. The Board may also recommend sanctions for offenders who have committed multiple violations of the Academic Honesty Policy but who have not appealed the faculty members' decisions.

### **Accommodation Policy Statement**

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for al students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), Learning Disabilities Support Services (LDSS), or Psychological Disabilities Services (PDS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements. http://www.umass.edu/senate/guide/GRAD\_COUNCIL\_COURSE\_APPROVAL\_GUIDE.pdf

### **Ground Rules**

Despite the size of this class, we are concerned about the quality of your experience. To that end, we will try to foster as much active participation in the course as is possible. Lectures will include time for questions as they arise, and discussion sections have been designed to continue the dialogue. Make use of office hours to continue class discussions, clarify confusions or to discuss any other problems you are having with the course. Because of the class size and the nature of the subject matter, it is necessary to set some ground rules:

- This class is **50 minutes** and we expect you to remain for the entire period. Late comers and those who begin to pack 5 minutes before the class period disrupt the class for everyone.
- Make up exams will only be given to students who have an exam conflict, a medical or unavoidable excuse. Ignorance of this rule will not constitute a valid excuse.

#### IV: SCHEDULE

### Week 1: Introduction and Background

### Wednesday, January 19:

- [Web] Gloria Steinem, "If Men Could Menstruate." Ms. Magazine, October 1978 (handout) http://www.haverford.edu/psych/ddavis/p109g/steinem.menstruate.html
- [E-Reserves] Lois Gould, "X: A Fabulous Child's Story," In *Women's voices, Feminist Visions*, Susan M. Shaw and Janet Lee, eds. Mayfield 2001. 119-121

### Week 2: Difference: Why? What? How? Who?

### Monday, January 24:

- [E-Reserves] Lynda Birke, "In Pursuit of Difference: Scientific Studies of Women and Men," In *Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch eds., Routledge, 2001, 309-322.
- [E-Reserves] Maxine Baca Zinn and Bonnie Thornton Dill, "Theorizing Difference from Multiracial Feminism" In *Through the Prism of Difference*, Allyn and Bacon, 1997, 23-29.
- [E-Reserves] Sandra Bem "Transforming the Debate on Sexual Inequality: From Biological Difference to Institutionalized Androcentrism," *In Lectures on the Psychology of Women*, Joan C. Chrisler, Carla Golden, Particia D. Rozee eds., Mc-Graw Hill, 3<sup>rd</sup> edition, 3-15.

### Wednesday, January 26:

- [E-Reserves] Teresa L. Arnott & Julie A. Matthaei, "Race, Class, Gender and Women's Works: A Conceptual Framework" in *Race, Gender and Work: A Multi-cultural Economic History of Women in the United States.*, Teresa Amott & Julie Mattaei eds., 1996, Boston: South End Press. 11-28.
- [E-Reserves] Audre Lorde, "Age, Race, Class, and Sex: Women Redefining Difference," In *Sister Outsider*, The Crossing Press, 1984, 114-123.
- [Web] Anne Fausto-Sterling, "The Five Sexes: Why males and females are not enough." *The Sciences* 33(2): 20-25, 1994: <a href="http://www.neiu.edu/~lsfuller/fivesexes.htm">http://www.neiu.edu/~lsfuller/fivesexes.htm</a>
- [Web] Anne Fausto-Sterling, "The Five Sexes Revisited" *The Sciences*, Jul/Aug2000: <a href="http://www.neiu.edu/~lsfuller/5sexesrevisited.htm">http://www.neiu.edu/~lsfuller/5sexesrevisited.htm</a>

### Week 3: Binaries/Dualisms: Nature/Culture, Science/Society, Biological/Social

### Monday, January 31:

- [E-Reserves] Anne Fausto Sterling, "Dueling Dualisms," In *Sexing the Body: Gender Politics and the Construction of Sexuality*, Basic Books (November 22, 2000), 1-29.
- [SPARK] Jonathan Marks, "Race: Past, Present, Future," In Revisiting Race in a Genomic Era," Barbara Koenig, Sandra Soo-Jin Lee and Sarah Richardson eds., Rutgers Univ. Press 2008: 21-38.

### Wednesday, February 2:

- [Web]: Eugenics Archive: <a href="http://www.eugenicsarchive.org/eugenics/">http://www.eugenicsarchive.org/eugenics/</a>
- [Web] Jonathan Marks, "A Feckless Quest for the Basketball Gene," NYT, April 8, 2000 http://www.uncc.edu/jmarks/pubs/feckless.html
- [E-Reserves] Jonathan Kahn, "Ethnic Drugs," *In* Ronald Munson's *Intervention and Reflection: Basic Issues in Medical Ethics*, 8<sup>th</sup> edition, 2008: 241-42.

### Week 4: Biological Determinism/Social Constructionism

### Monday, February 7:

• [SPARK] Lisa Eliot, "Under the Pink or Blue Blankie," In *Pink Brain, Blue Brain*, Mariner2009, 55-102

### Wednesday, February 9:

- [E-Reserves] Ruth Bleier, "Sociobiology, Biological Determinism and Human Behavior," In *Science and Gender: A Critique of Biology and Its Theories on Women*, Pergamon Press, 1984, 15-48.
- [SPARK] Kimberley Tallbear, "DNA, Blood, and Racializing the Tribe," *Wicazo Sa Review*, Volume 18, Number 1, Spring 2003, pp. 81-107

### Week 5: Good Science/Bad Science?

### Monday, February 14:

- [E-Reserves] National Academy of Sciences, "Methods and Values in Science", In *Racial Economy of Science*, Sandra Harding ed., Indiana University Press, 1993.
- [SPARK] Cordelia Fine," *Delusions of Gender: How Our Minds, Society and Neurosexism Create Difference*," Norton, 2010: 3-39

### Wednesday, February 16:

- [E-Reserves] Richard Lewontin, "Parts and Wholes: Causes and Effects." In *The Triple Helix: Gene, Organism and Environment*, Harvard University Press, 2001.
- [E-Reserves] Ruth Hubbard, "Science, Facts and Feminism," In *Women, Science and Technology*, Mary Wyer *et al* eds., Routledge, 2001, 153-160.
- [E-Reserves] Garland Allen, "Science Misapplied: The Eugenics Age Revisited." Technology Review 29, Aug/Sep 1996.

### Friday, February 18: Writing Assignment 1 due

### Week 6: Intersectionality: Race, Gender, Race, Class, Sexuality, Nation

## Monday, February 21– Columbus Day – HOLIDAY Tuesday, February 22:

- [E-Reserves] Patricia Hill Collins, "Toward a New Vision: Race, Class, and Gender as Categories of Analysis and Connection," In *Women's voices, Feminist Visions*, Susan M. Shaw and Janet Lee, eds. Mayfield2001., 119-121.
- [E-Reserves] Michael Omi and Horward Winant, "Racial Formation," In *Racial Formation in the United States: From the 1960's to 1990's*. Routledge, 1994., 53-76.
- [E-Reserves] Anne Fausto Sterling, "Gender, Race, and Nation." In *Deviant Bodies*, Jennifer Terry and Jacqueline Urla eds., Indiana University Press, 1995, 19-42.
- "Finally Buried With Honor in Her Native Land." New York Times, August 10, 2002.

### Wednesday, February 23:

- [E-Reserves] Alice Dreger, "Sex Typing in Sport," *Hastings Center Report* 40, no. 2 (2010): 22-24.
- [SPARK] Michael Kenny, A Question of Blood, Race, and Politics, *Journal of the History of Medicine and Allied Sciences*, Volume 61, Number 4, October 2006, 456-491.

### **Week 7: The Body: Our Changing Conceptions – General Frameworks**

### Monday, February 28:

- [E-Reserves] Gerald Tortora and Sandra Grabowski, "An Introduction to the Human Body," In Principles of Anatomy and Physiology, 10<sup>th</sup> ed., John Wiley & Sons, 2003. 1-11.
- [E-Reserves] Londa Schiebinger, "The Anatomy of Difference: Fixing Racial and Sexual Types." In *Nature's Body: Gender in the Making of Modern Science*, Beacon Press, 1993. 115-142.
- [E-Reserves] George W. Stocking, The Turn-of-the-Century Concept of Race," *Modernism/Modernity* 1.1, 1994, 4-16.

### Wednesday, March 2:

- [E-Reserves] Nancy Leys Stepan, "Race and Gender: The Role of Analogy in Science." *The Racial Economy of Science: Toward A Democratic Future*. Indiana Univ. Press, 1993. 359-376.
- [E-Reserves] Jennifer Terry, "Modernity and the Vexing Presence of Homosexuals," In *An American Obsession: Science, Medicine and Homosexuality in Modern Society*, Chicago UP, 27-39.

Resource: http://www.pbs.org/race/000\_General/000\_00-Home.htm

Friday, March 4 – Topic for Final Project is due

### Week 8: Sexualities

### Monday, March 7:

- [E-Reserves] Gerard Tortora and Sandra Grabowski, "Reproductive System," Principles of Anatomy and Physiology, Wily, 2003: 1028-1046.
- [SPARK] Alice Dreger and April Herndon, "Progress and Politics in the Intersex Rights Movement: Feminist Theory in Action, GLQ: A Journal of Lesbian and Gay Studies, Volume 15, Number 2, 2009, pp. 199-224

### Wednesday, March 9:

• Film, *Is It a Boy or a Girl?* 

Friday, March 11 - Midterm Exam (material up to March 4)

### ©©©©©©© SPRING BREAK: MARCH 14-20 ©©©©©©

#### Week 9: MiddleSex

Monday, March 21: Discussion of the novel Middlesex

Wednesday, March 23: Discussion of Middlesex continued.

[SPARK] James Schiff, "A Conversation with Jeffrey Eugenides," *The Missouri Review*, Volume 29, Number 3, Fall 2006, pp. 100-119

[SPARK] Debra Shostak, "Theory Uncompromised by Practicality": Hybridity in Jeffrey Eugenides' Middlesex, *Contemporary Literature*, Volume 49, Number 3, Fall 2008, pp. 383-412

### Week 10: Changing Conceptions of the Body: Brain

### Monday, March 27:

- [E-Reserves] Gerald Tortora and Sandra Grabowski, "Brain," In *Principles of Anatomy and Physiology*, 10<sup>th</sup> ed., John Wiley & Sons, 2003. 452-457.
- [SPARK] Rebecca Jordan Young, "Making Sense of Brain Organization Studies," In *Brain Storm:* The Flaws in the Science of Sex Differences, Harvard University Press, 2010: 41-64.
- [Web] Stephen Jay Gould, "The Geometer of Race," *Discover*, November, 1994 http://www.greeninformation.org/The%20Geometer%20of%20Race.htm

### Wednesday, March 29:

- [E-Reserves] Anne Fausto-Sterling, 1992. "Homosexual Brains" from: "Sex and the Single Brain." Addendum to the Second Edition, *Myths of Gender: Biological Theories About Women and Men*, Rev. Ed. NY: Basic, pp. 245-259.
- [E-Reserves] Stephen Jay Gould, "American Polygeny and Craniometry before Darwin: Blacks and Indians as Separate, Inferior Species," *The Racial Economy of Science: Toward A Democratic Future*. Indiana Univ. Press, 1993. 84-115.

Thursday, March 31, 4pm, Speaker, Rebecca Jordan Young, author of Brain Storms.

Friday, April 1 – Writing Assignment 2 is due

### Week 11: Reproduction – Past, Present, Future

#### Monday, April 4:

- [E-Reserves] Gerard Tortora and Sandra Grabowski, "Reproductive System," Principles of Anatomy and Physiology, Wily, 2003: 1012-1027.
- [E-Reserves] Dorothy Roberts, "Introduction," In Killing the *Black Body: Race, Reproduction, and the Meaning of Liberty*, Pantheon Books, 1997.
- [E-Reserves] Barbara Ehrenreich and Deirdre English," Science and the Ascent of the Experts," In For Her Own Good: 150 Years of Expert's Advice to Women. Anchor Press, 1978: 69-98.

### Wednesday, April 6:

- [Web] Ruth Hubbard and Stuart Newman, "Yuppie Eugenics," *Z Mag*, March 2002, http://www.zmag.org/ZMag/articles/march02hubbard-newman.htm
- [E-Reserves] Richard Hayes, "The Science and Politics of Genetically Modified Humans" *World Watch*, July/August 2002, 11-12.
- [E-Reserves] Judith Levine, "What Human Genetic Modification Means for Women," World Watch, July/August 2002.
- [SPARK] Silja Samerski, "Genetic Counseling and the Fiction of Choice: Taught Self-Determination as a New Technique of Social Engineering." *Signs*, Vol 32, No 4, 2009: 735-761.

### Friday, April 8 – Outline for Final Project is due

### **Week 12: Genes and Difference**

### Monday, April 11:

- [E-Reserves] Ruth Hubbard and Elijah Wald, "A Brief Look at Genetics" 39-57 and "Inherited Tendencies: Behaviors." (108-117.) In *Exploding the Gene Myth*, Beacon Press, 1997.
- [Web] Larry Adelman, "Race and Gene Studies: What Differences Make a Difference?" http://www.pbs.org/race/000 About/002 04-background-01-02.htm

### Wednesday, April 13:

- [Web] Richard Lewontin, "The DNA Era," *GeneWatch: Council for Responsible Genetics*, http://www.mindfully.org/GE/2003/DNA-Era-Lewontin1jul03.htm
- [SPARK] Jonathan Dupré, "What Genes Are and Why There Are No Genes for Race," *In Revisiting Race in a Genomic Era*," Barbara Koenig, Sandra Soo-Jin Lee and Sarah Richardson eds., Rutgers Univ. Press 2008: 39-58.

### Week 13 & 14: Student Presentations

Monday, April 18: Patriot's Day - HOLIDAY

Wednesday, April 20 & April 25 & April 27

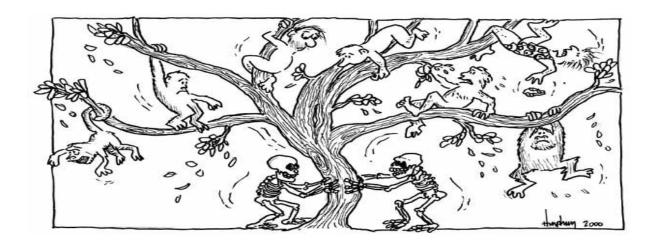
Presentation of Final Projects

### Week 15: Conclusion: What should we do with "difference?"

### Monday, May 2:

• [E-Reserves] Philomena Essed and David Theo Goldberg, "Cloning Cultures: the Social Injustices of Sameness," *Ethnic and Racial Studies*, Vol. 25, No. 6, 2002, 1066-1082.

### Final Project is due



### HISTORY 281:

# HISTORICAL PERSPECTIVES ON WOMEN, HEALTH, AND SEXUALITY Wilson 112

### T, R, 11-12:15 (SPRING 2010)

Professor Arleen Tuchman

Benson 110

#13

arleen.m.tuchman@vanderbilt.edu

Ph. (32)2-8151 or (32)2-2575

Office hours:

Tuesdays, 2-3:30pm and by appointment

TA: Frances Kolb

T.A.: Angela Sutton

3<sup>rd</sup> fl. Buttrick, Carrel #325

4<sup>th</sup> fl. Buttrick, Carrel

<u>frances.b.kolb@vanderbilt.edu</u> angela.c.sutton@vanderbilt.edu

Office hours: Office hours:

Mondays, 1-3 Wednesdays, 10-11 Wednesdays, 4-5 Thursdays, 10-11 and by appointment and by appointment

### COURSE DESCRIPTION

This course introduces students to the history of women, health, and sexuality in the United States from the late 18<sup>th</sup> century to the recent past. We will explore how medical ideas about women's health, nature, and sexuality have changed over time; women's experiences as patients; and women's experiences as health-care providers, especially as midwives, nurses, and physicians. The format of the course is lecture/discussion.

### GRADING AND DUE DATES

Class participation and attendance	5%	Every class
Brief analyses of readings	15%	Throughout semester
Paper #1	25%	February 11
Selection of topic for final research paper	no grade	March 2
Paper #2	25%	March 22
Description of research question for final paper	no gr	rade March 26
Final research paper	30%	April 16

### Class participation and attendance

You are expected to attend class regularly and participate in classroom activities, which include large and small group discussions, as well as short presentations. We will circulate attendance sheets during every class. Each student may miss two classes during the semester without penalty.

### **Brief analyses of readings**

On a regular basis, you will be asked to prepare short (1 page) written responses to questions based on the

readings. It is your responsibility to check OAK before every class to see whether there is a writing assignment.

### Two papers

For two of the three monographs we will be reading this semester (Brumberg, Schoen), you will be asked to write a 5-page paper. A detailed assignment will be distributed several weeks before the papers are due.

### Final research paper

An 8-10 page research paper analyzing one of the following sources. (Additional sources may be added during the course of the semester.)

Edward Clarke, Sex in Education (1875)

Available at: http://www.gutenberg.org/files/18504/18504-h/18504-h.htm

Margaret Sanger, The Woman and the New Race (1920)

Available at: <a href="http://books.google.com/books?id=AywKAAAAIAAJ&dq=margaret+sanger">http://books.google.com/books?id=AywKAAAAIAAJ&dq=margaret+sanger</a>

+woman+and+the+new

 $\underline{+race\&printsec=frontcover\&source=bn\&hl=en\&ei=Zsg4S9f1G46Ytge10pmjBg\&sa=X\&oi=bn&hl=en\&oi=bn&hl=en\&oi=$ 

ook result&ct=result&resnum=4&ved=0CBcQ6AEwAw#v=onepage&q=&f=false

Martha Ballard's diary (1785-1812)

Available at: <a href="http://dohistory.org/diary/index.html">http://dohistory.org/diary/index.html</a>

You may also write this paper on a topic of your choice, but you must get my approval by March 2.

### POLICIES AND PENALTIES

<u>Late assignments</u>: Any paper handed in late will be lowered one grade per day. In other words, a B will drop to a B- after the first day, to a C+ after the second day, etc. This applies to all written work. If you are having difficulty with the material in this course, do not wait until the end of the semester to come see me or your TA. It is possible to learn how to write good papers, and we are willing to help you do so.

<u>Vanderbilt's Honor Code governs all work in this course. If you have any questions, please ask</u> me--not another student--for clarification.

### **REQUIRED TEXTS**

- M Charlotte Perkins Gilman, The Yellow Wallpaper
- Joan Jacobs Brumberg, Fasting Girls. The Emergence of Anorexia Nervosa as a Modern Disease
- Janet Golden, Message in a Bottle. The Making of Fetal Alcohol Syndrome
- Johanna Schoen, Choice & Coercion. Birth Control, Sterilization, and Abortion in Public Health and Welfare
- Course documents (CD) Access through OAK
- E-Reserve material (ER) Access through OAK

### SCHEDULE OF LECTURES AND READINGS

#### Introduction

1/14 Introduction to the course

### **Discovering Sexual Difference**

1/19 Anatomy

Schiebinger, "Skeletons in the Closet" (CD)

1/21 Physiology

- 1. Beecher, Letters to the People on Health and Happiness (1856) (CD)
- 2. Clarke, Sex in Education, Parts I & II (1875) (CD)
- 1/26 Medical theories
  - 1. Smith-Rosenberg, Rosenberg, "The Female Animal" (CD)
  - 2. Martin, The Woman in the Body, pp.27-53 (ER)

### **Gendered Experience of Disease**

1/28 Infectious disease

Rothman, Living in the Shadow of Death, pp.76-88, 105-127 (ER)

2/2 Cancer

Burney, "A Mastectomy" (1811) (CD)

2/4 Mental illness

Gilman, The Yellow Wallpaper (1892)

2/9 Anorexia nervosa

Brumberg, Fasting Girls

2/11 Anorexia nervosa

- 1. Brumberg, Fasting Girls
- 2. O'Connor, Van Esterik, "De-Medicalizing Anorexia" (CD)
- 2/15 First paper due (note that this is a Monday)

Please drop off your paper in the History Department office no later than 3pm.

### **Treating Disease**

- 2/16 Internal medicine
  - 1. Wood, "The Fashionable Diseases" (CD)
  - 2. Morantz, "The Perils of Feminist History" (CD)
- 2/18 Surgery

### **Medicalizing Sexualities**

- 2/23 Normative sexuality
  - 1. Hellerstein, Victorian Women, pp.174-82 (ER)
  - 2. Degler, "What Ought to Be and What Was" (CD)
- 2/25 Same-sex relationships

Smith-Rosenberg, "The Female World of Love and Ritual" (CD)

- 3/2 Prostitution
  - 1. Dall, "Open letter in The Liberator (1850) (CD)
  - 2. Rolfe, "Biological Aspects of Prostitution" (1937) (ER)

### Submit topic for research paper

### **Family Planning**

- 3/4 Voluntary Motherhood
  - 1. Toner, "Abortion in its Medical and Moral Aspects" (1860/61) (CD)
  - 2. Sanger, Woman and the New Race, pp.1-8, 72-84, 93-100, 118-129, 226-234 (1920)

(ER)

3. Schoen, Choice and Coercion, Introduction and Chapter One

### **SPRING BREAK**

3/16 Abortion before Roe v. Wade

Schoen, Choice and Coercion, Chapters Two and Three

3/18 Reproductive politics in the 20<sup>th</sup> century Finish Schoen, Choice and Coercion

3/22 Second paper due (note that this is a Monday)

Please drop off your paper in the History Department office no later than 3pm.

### **Health-Care Practitioners**

- 3/23 History of childbirth
- 3/25 Midwifery (clips from film)
  - 1. Excerpts from Ballard's diary. Go to <a href="http://dohistory.org/diary/">http://dohistory.org/diary/</a> and read the entries for the following: August 1-31, 1787; November 1-December 7, 1793; February 1 March 6, 1801.
  - 2. Channing, Remarks on the Employment of Females (CD)
- 3/26 Submit 1-paragraph description of research question for final paper
- 3/30 FILM: Sentimental Women Need Not Apply
- 4/1 Nursing
- 4/6 Women physicians before Flexner
  - 1. Anon., "Female Practitioners of Medicine" (1867) (ER)
  - 2. Morantz, "The 'Connecting Link'" (ER)
- 4/8 Women physicians after Flexner

### Women's Bodies in the Recent Past

4/13 PMS

Henig, "Dispelling Menstrual Myths" (CD)

4/15 Breast cancer

Lerner, "Great Expectations" (CD)

4/16 Research paper due (note that this is a Friday)

Please drop off your paper in the History Department office no later than 3pm.

4/20 FAS

Golden, Message in a Bottle

4/22 FAS

Golden, Message in a Bottle

4/27 Conclusion

# LB 333,002 The Historical Relationship of Science and Gender

Mondays / Wednesdays, 10:20AM – 12:10PM C-103 Holmes

Dr. Mark Waddell (waddellm@msu.edu) Office: Holmes W-25D

Hours: Tuesday/Thursday 11:15AM - 12:15PM, or by appointment

In 2005, the president of Harvard University created a storm of controversy when he suggested that the under-representation of women in professional science was due, in part, to their biology. His remarks, though reprehensible, are but one example of the complex relationship between the practice of science and the cultural construction of gender in the West, and this course will explore elements of this relationship from the sixteenth century through to the present day in an effort to understand how each has affected the development of the other. Some of the questions we will consider include: What role has gender played in the identity of individual scientists? How are science and technology themselves gendered by consumerism, advertising, and cultural expectations? How might we understand "masculinist" and "feminist" science, and how do these reflect (or differ from) the way that science is practiced today?

### Required Texts:

- Londa Schiebinger, *Nature's Body: Gender in the Making of Modern Science*, 2<sup>nd</sup> ed. (Rutgers University Press, 2004)
- Coursepack for LB 333,002 (available in the campus bookstore)

### **Grading Scheme:**

Total:	500 points	
Class Attendance/Participation:	100 points	
Student Presentations	150 points	299 - 250 = 2.0
Final Essay (10-12 pages):	150 points	399 - 350 = 3.0 $349 - 300 = 2.5$
Response Paper (4-5 pages):	50 points	500 - 450 = 4.0 449 - 400 = 3.5
5 Pop Quizzes	50 points	

### Participation:

I will use the following guidelines when assessing your final participation score. These are not hard and fast numbers, but merely a baseline I'll use when calculating your final grade.

Excellent attendance, but never speaks -- 30 / 100 points

Excellent attendance, speaks once a week -- 50 / 100 points

Excellent attendance, speaks once every class

Excellent attendance, speaks often, contributes -- 100 / 100 points

meaningful ideas and opinions

### Attendance Policy:

I'm a big believer in regular attendance – you can't participate in the class and engage with your peers if you don't show up. You will be allowed one free unexcused absence this semester (an unexcused absence is one that isn't excused by a note from a doctor, counsellor, dentist, professor, etc.); every unexcused absence after that will lose you 5 points from the overall attendance and participation score as listed above. Attendance will be taken in the first minutes of class – if you're not here when attendance is taken, you won't get credit for that day.

### Written Work:

All written work for this class will be submitted twice:

- Firstly, to http://www.turnitin.com, to ensure that there are no issues with plagiarism. To access our class, you will need the class ID number (2794898) and the enrollment password (waddellm).
- Secondly, a paper copy to be handed to the instructor, which will be graded and returned.

For every day that an assignment is overdue, you will lose 10 points. A failure to submit your paper to turnitin.com by the deadline will also lose you 10 points. All assignments must be handed in for you to receive a grade in this course; if any assignments are not submitted, your grade for the course will be 0.

### Final Deadline:

The final exam for this class is scheduled to end at **12PM** on **Friday, December 18th**. Even though we will not have a regular exam, this is the *final deadline* for all work in this class – <u>no exceptions will be made</u>.

### Cell phones, Laptops, etc.:

In order to minimize distractions and interruptions, this class is an electronics-free zone. If your cell phone goes off during class—even on vibrate—you lose 10 points.

Period. So please turn them off and stow them. Laptops are unnecessary and shouldn't make an appearance.

### A Note about the Internet:

My personal policy is that the Internet does *not* constitute a viable source of academic information. With rare exceptions, students will not be allowed to cite websites as legitimate sources – too often, the information sitting on the Internet is not properly reviewed or checked, and it can be difficult to know which sources can be trusted and which cannot. The Net is, however, a valuable way to locate other, legitimate sources of information (books, articles, reviews, *etc.*). When preparing work for this course, please keep this in mind. Papers that rely on Internet sources will be graded accordingly—so if you cite Wikipedia, except to lose a good portion of your assignment grade.

### Academic Integrity and Honesty:

Article 2.3.3 of the *Academic Freedom Report* states that, "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the Lyman Briggs College adheres to the policies on academic honesty as specified in General Student Regulations 1.0, *Protection of Scholarship and Grades*; the all-University Policy on *Integrity of Scholarship and Grades*; and Ordinance 17.00, Examinations. (See *Spartan Life: Student Handbook and Resource Guide* and/or the MSU Web site: http://www.msu.edu.)

In addition, students in Lyman Briggs are expected to know, understand, and adhere to the Lyman Briggs Academic Honesty Policy, which can be found at the following URL: http://www.lymanbriggs.msu.edu/current/honorCode.cfm

Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including homework, lab work, quizzes, tests and exams, without assistance from any source. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the www.allmsu.com Web site to complete any course work in LB 333.

Instances of academic dishonesty, including but not limited to cheating, plagiarism, and illegal use of outside and/or copyrighted materials, will result in penalties ranging from a 0 on the assignment to a failing grade in the class and possible disciplinary action. These penalties will be decided by the instructor on a case-by-case basis.

### **READINGS**

Readings marked with [coursepack] are, of course, included in the prepared coursepack which you can purchase from the bookstore. Readings marked with [online] are available through ANGEL, and must be printed off and brought to class.

### Week 1 - Sep. 2<sup>nd</sup>

Wednesday: Introduction to the course and its themes. What is gender, and how is it

determined? Why is it important to understand its relationship with

science?

### Week 2 - Sep. 7<sup>th</sup> & 9<sup>th</sup>

Monday: HOLIDAY – NO CLASS!

Wednesday: We'll start with a brief essay about the study of gender and science, and

consider both where it came from and where it might be going.

Readings: - Evelyn Fox Keller, "Gender and Science: Origin, History, and Politics,"

Osiris, 2<sup>nd</sup> series, vol. 10 (1995), pp. 26-38 [**online**]

### Week 3 - Sep. 14th & 16th

Monday: Picking up in many ways from the ideas presented by Keller, we will

consider the possibility of a "gynocentric science" and its suppression by conventional "androcentric science." Does it make sense to think in these

terms? Is it useful to understand science in this way?

Readings: - Ruth Ginzberg, "Uncovering Gynocentric Science," Hypatia, vol. 2, no.

3 (1987), pp. 89-105 [online]

Wednesday: Our historical survey begins in the 16<sup>th</sup> century with the unfortunate case

of Anna Zieglerin, a self-proclaimed alchemist who came to a grisly end. As a woman, her professional and intellectual reputation was easily questioned, but she was able to exploit both her sex and her gender in

order to gain the patronage of a powerful duke.

Readings: - Tara Nummedal, "Alchemical Reproduction and the Career of Anna

Maria Zieglerin," <u>Ambix: The Journal of the Society for the History of Alchemy and Early Chemistry</u>, vol. 49 (July 2001), pp. 56-68 **[online]** 

### Week 4 - Sep. 21st & 23rd

Monday: The scientific and medical study of the body was strongly influenced by

historical notions of gender and sex. For centuries, the human body was understood to have, effectively, a single sex, onto which ideas about masculinity and femininity were projected by physicians and anatomists.

We will examine, first, the history and theory behind this model.

Readings: - Thomas Laqueur, Making Sex: Body and Gender from the Greeks to

Freud (Harvard University Press, 1990), Chapter 2 (pp. 25-62)

[coursepack]

Wednesday: The one-sex model of human anatomy was required, of course, to

correspond with the actual physiology observed in dissections of the body. The lengths to which thinkers went in order to create this correlation are

both astonishing and enlightening.

*Readings:* - Laqueur, Chapter 3 (pp. 63-113) [coursepack]

### Week 5 - Sep. 28<sup>th</sup> & 30<sup>th</sup>

Monday: Beginning with Linnaeus in the 18<sup>th</sup> century, relations between plants were

cast in obviously gendered and sexual language, despite the fact that most

plants are actually hermaphroditic. What were the reasons for this?

Readings: - Schiebinger, Nature's Body, Preface and Introduction (pp. ix -10) and

Chapter 1

Wednesday: Most of us have probably never considered where the word "mammal"

comes from, but in fact the entire taxonomical division of *Mammalia* has its roots in what Schiebinger calls "the cultural history of the breast." How did historical notions of gender come to play such a role in shaping

our own scientific identity as mammals?

Readings: - Schiebinger, Nature's Body, Chapter 2

### Week 6 - Oct. 5<sup>th</sup> & 7<sup>th</sup>

Monday: Ideas about gender and race both played crucial roles in the historical

study of primates, and in Western efforts to separate humanity from

beasts. To what extent do some of these ideas remain with us today?

Readings: - Schiebinger, Nature's Body, Chapter 3

\*\*\*RESPONSE PAPER DUE\*\*\*

Wednesday: If race worked with gender to shape Western ideas about primates and

their position relative to humans in the hierarchy of nature, gender itself also worked *on* notions of race in the 18<sup>th</sup> and 19<sup>th</sup> centuries. Masculine characteristics, such as beards, were used as signifiers of racial difference,

while the term *Caucasian* stemmed from one man's ideas concerning female beauty.

Readings: - Schiebinger, Nature's Body, Chapter 4

### Week 7 - Oct. 12th & 14th

Monday: We have already seen how the study of human anatomy was shaped by

historical ideas about gender and sexuality in the 16<sup>th</sup> and 17<sup>th</sup> centuries. In the 18<sup>th</sup> century, human anatomy and, specifically, the quest for sexual

difference occupied a great deal of scientific and medical thought.

Readings: - Schiebinger, Nature's Body, Chapter 5

Wednesday: In the 19<sup>th</sup> and early 20<sup>th</sup> centuries, scientists became interested in finding

scientific evidence for sex-linked differences—the idea, in other words, that men and women were not merely biologically different, but that ideals like masculinity and femininity could be linked to biology as well. What

drove this interest, and what were the consequences?

Readings: - Londa Schiebinger, The Mind Has No Sex? Women in the Origins of

Modern Science (Harvard University Press, 1989), Chapter 7 – "More Than Skin Deep: The Scientific Search for Sexual Difference" (pp. 189-

213) [coursepack]

### Week 8 - Oct. 19th & 21st

Monday: It is perhaps unsurprising that some scientists today remain interested in

establishing "masculine" and "feminine" biologies, and linking these findings with various kinds of behavior, including sexual orientation. Are

there problems with this kind of science? Why or why not?

Readings: - Beth Skwarecki, "Mad Science: Deconstructing Bunk Reporting in 5

Easy Steps," from *Bitch* magazine, no. 39 (Spring 2008) [handout] - Anya C. Hurlbert and Yazhu Ling, "Biological components of sex differences in color preference," <u>Current Biology</u>, vol. 17, no. 16 (2006)

[online]

Wednesday: Evelyn Fox Keller and others have argued that language is incredibly

powerful. But what happens when we never notice the gendered language of science? Are its effects more powerful, or less? These are questions we will consider as we examine the language used to describe human

reproduction at the cellular level.

Readings: - Emily Martin, "The Egg and the Sperm: How Science Has Constructed a

Romance Based on Stereotypical Male-Female Roles," Signs: Journal of

Women in Culture and Society, vol. 16, no. 3 (1991), pp. 485-501

[online]

### Week 9 - Oct. 26th & 28th

Monday: Is it possible that the way in which science was constructed and created

made the exclusion of women from rational, intellectual pursuits seem both inevitable and justified? Evelyn Fox Keller suggested as much about the 17<sup>th</sup> century, and Londa Schiebinger now argues the same about the

19<sup>th</sup> and 20<sup>th</sup> centuries.

*Readings:* - Schiebinger, The Mind Has No Sex?, Chapter 10 – "The Exclusion of

Women and the Structure of Knowledge" (pp. 265-278) [coursepack]

Wednesday: One of the classic examples of the exclusion of women from scientific

discovery is the experience of Rosalind Franklin, the colleague of James Watson and Francis Crick whose work confirmed their theory concerning the structure of DNA but who was dismissed by her male colleagues as "difficult" and unattractive. How is Franklin's story still relevant today?

Readings: - Sarah Rapoport, "Rosalind Franklin: Unsung Hero of the DNA

Revolution," The History Teacher, vol. 36, no. 1 (2002), pp. 116-127

[online]

### Week 10 - Nov. 2<sup>nd</sup> & 4<sup>th</sup>

Monday: We've already seen numerous examples of science becoming gendered

both in its practices and in its language, and this is reflected in a particular kind of science that some scholars have identified as

"masculine". What does this mean, exactly, and how can it help us better

to understand science today?

Readings: - Alison Kelly, "The Construction of Masculine Science," British Journal

of Sociology of Education, vol. 6, no. 2 (1985), pp. 133-154 [online]

Wednesday: The ideal of masculine science, and its accompanying vision of the

strong, masculine scientist, can perhaps be exemplified best by the American pursuit of nuclear technologies in the middle of the 20<sup>th</sup> century. How were gendered assumptions and ideas built into this kind

of science, and what were the consequences?

Readings: - Brian Easlea, "Patriarchy, Scientists, and Nuclear Warriors," in Janet A.

Kourany, ed., The Gender of Science (Prentice Hall, 2002), pp. 98-111

[coursepack]

### Week 11 - Nov. 9th & 11th

Monday: The postwar period in America was marked by a new optimism in the

possibilities of technology, and this was perhaps most evident in the rise of technologies designed for use in the American home of the 1950s. Advertising and exhibitions targeted a growing consumer population:

women. We will examine what these technologies promised to American families, and how they remained intertwined with contemporary notions of

gender and domesticity.

Readings: - Laura Scott Holliday, "Kitchen Technologies: Promises and Alibis,

1944-1966," <u>Camera Obscura</u>, vol. 16, no. 2 (2001), pp. 78-131 [online]

Wednesday: It is not merely technologies themselves that shape public notions of

gender, but also—perhaps especially—the ways in which these

technologies are advertised. Should we strive to be more conscious and

critical of advertising as it relates to gender and technology?

Readings: - Sarah S. Jain, "Violent Submission: Gendered Automobility," Cultural

Critique, no. 61 (Fall 2005), pp. 186-214 [online]

Week 12 - Nov. 16<sup>th</sup> & 18<sup>th</sup>

Monday: The numbers of women scientists continue to rise, but some are concerned

that this increase is still proceeding too slowly. We will look at the numbers, and consider whether more needs to be done to create sexual

equality amongst scientists.

Readings: - Sally Kohlstedt, "Sustaining Gains: Reflections on Women in Science

and Technology in 20<sup>th</sup>-Century United States," NWSA Journal, vol. 16,

no. 1 (2004), pp. 1-26 [online]

Wednesday: Class time provided for preparation of end-of-semester presentations.

Week 13 - Nov. 23<sup>rd</sup> & 25<sup>th</sup>

Monday: In 2005, the president of Harvard, Lawrence Summers, addressed the

NBER Conference on Diversifying the Science & Engineering Workforce. His remarks created a firestorm of controversy and ultimately led to his being fired as Harvard's president. We will examine what Summers said,

and consider its implications.

Readings: - Lawrence Summers, "Remarks at NBER Conference on Diversifying the

Science & Engineering Workforce" [online]

Wednesday: What are the challenges and obstacles faced by women scientists today?

Several female faculty members from Briggs will join us to discuss their experiences as well as their thoughts on where we need to go from here.

Week 14 - Nov. 30th & Dec. 2nd

**Student Presentations** 

Week 15 - Dec. 7th & 9th

Presentations / Conclusions