

WGS/ES 350: GENDER, RACE, SCIENCE AND TECHNOLOGY**Instructor**

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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, 2nd 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 **all** the readings. You are **strongly** encouraged to bring copies of all readings to class **each day**, 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:

- 1) substantial knowledge of foundational and contemporary 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;
- 2) 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;
- 3) 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;
- 4) 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)

* Any Pop Quizzes will count as part of your Class Participation grade

COMMUNICATION

blackboard: Blackboard (available via <http://my.calpoly.edu>) 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 <http://my.calpoly.edu> 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 <http://my.calpoly.edu> 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 2nd 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: <http://www.calpoly.edu/~wrtskills/writlab/>. 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: <http://www.drc.calpoly.edu/>. 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 required 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	
<i>Overall</i>	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	
<i>Discussion of Course Materials</i>	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.	

<i>Data Collection and Personal Argument Development</i>	<ul style="list-style-type: none"> ○ Superficial effort to collect data by following the assignment directions; data appears “made-up” ○ Assertions and conclusions are identifiable, but are not supported by accurate or appropriate evidence ○ Significant errors in logical or understanding detectable ○ Some repetition persists & reading difficult at times ○ Very little thought and reflection 	<ul style="list-style-type: none"> ○ Limited effort to collect data by following the assignment directions; data may appear “made-up” ○ Assertions and conclusions are sometimes supported by accurate & appropriate evidence, but generalities persist ○ Does not sufficiently move beyond summary ○ Errors in logic or understanding detectable ○ Limited in thought and reflection 	<ul style="list-style-type: none"> ○ Adequate and valid effort to collect data by following the assignment directions ○ Clear assertions and conclusions are made; evidence is usually used effectively ○ Some errors in logic or understanding may be detectable but do not detract significantly from overall discussion ○ Thoughtful and reflective ○ Development aided by the inclusion of some key details 	<ul style="list-style-type: none"> ○ Substantial and sincere effort to collect data by following the assignment directions ○ Makes fully developed assertions and draws logical conclusions that are supported by accurate and appropriate evidence. Insightful ○ Consistently includes details that point to the complex nature of the topic ○ Asks generative questions, i.e., questions that do not have simple answers, but that point you in the direction of some sustained inquiry
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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.

1. Take at least 4 Implicit Association Tests (IATs) – you must 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 underrepresented group 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 2nd 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)
 - Include at least one quotation from each assigned article
 - 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 **all** 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 M Sept 19	<i>Introduction & Course Overview; Introduction to Terms & Frameworks</i> 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)

	<p><i>Recommended:</i> 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)</p>
<p>W Sept 21</p> <p>Cohort Class Lead Sign-Up</p>	<p><i>A Brief History of Women & People of Color (PoC) in STEM Fields; The "Problem" of Women and POC in the Twentieth-Century</i></p> <p>Schiebinger (1999), "Hypatia's Heritage" (HFCS, pp. 21-32) 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) Schiebinger (1999), "Meters of Equity" (HFCS, pp. 33-53) Schiebinger (1999), "The Pipeline" (HFCS, pp. 54-64) "Penn to work on increasing faculty diversity" (html) HIGHLY RECOMMENDED – Select one additional reading to complete:</p> <ol style="list-style-type: none"> 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) 3. Oldenzel (1997), "Boys and Their Toys: The Fisher Body Craftsman's Guild, 1930-1968, and the Making of a Male Technical Domain" (PDF – 36p) 4. Bix (2000), "Feminism Where Men Predominate: The History of Women's Science and Engineering Education at MIT" (PDF – 24p) 5. Bix (2004), "From "Engineeresses" to "Girl Engineers" to "Good Engineers": A History of Women's U.S. Engineering Education" (PDF – 27p) <p><i>Recommended:</i> 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)</p>
<p>Week 2</p> <p>M Sept 26</p> <p>DUE – Online Dialogue Paper 1</p> <p>Critical Book Analysis Assignment Introduced</p>	<p><i>Focusing on Race; Intersections of Race & Gender</i></p> <p>Morrill Land Grant Act, http://eca.state.gov/education/engteaching/pubs/AmLnC/br27.htm McDowell (2003), "Engaged Universities: Lessons from the Land-Grant Universities and Extension" (PDF, pp. 33-36) Washington (1895), "A Sunday Evening Talk," http://teachingamericanhistory.org/library/index.asp?document=595 Washington (1896), "Industrial Education is the Solution," [excerpts], http://www.yale.edu/glc/archive/1147.htm Washington (1903), "Industrial Education for the Negro," http://teachingamericanhistory.org/library/index.asp?document=62 Du Bois (1903), "The Talented Tenth," from <i>The Negro Problem: A Series of Articles by Representative Negroes of To-day</i> [excerpts], http://www.yale.edu/glc/archive/1148.htm Dunn (1993), "The Educational Philosophies of Washington, DuBois, and Houston: Laying the Foundations for Afrocentrism and Multiculturalism" (PDF, pp. 24-29) Wennersten (1991), "The Travails of Black Land-Grant Schools in the South, 1890-1917" (PDF – 8p) Jenkins (1991), "The Black Land-Grant Colleges in Their Formative Years, 1890-1920" (PDF – 9p)</p>

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

	<p>Bayer (2010), "Key Survey Findings" from <i>Bayer Facts of Science Education XIV</i> (PDF)</p> <p>NAE (2010), "Gender Differences at Critical Transitions in the Careers of Science, Engineering, and Mathematics Faculty" (PDF)</p> <p>President's Council of Advisors on Science & Technology (2010), "Prepare and Inspire: K-12 Education in STEM for America's Future" (PDF)</p> <p>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)</p> <p>Fry (2011), "Hispanic College Enrollment Spikes, Narrowing Gaps with Other Groups" (PDF)</p>
<p>Week 3 M Oct 3</p> <p>CLASS LEAD 2</p>	<p><i>Complicating Narratives – Asian Americans in STEM Fields; Global STEM Development & Workforce</i></p> <p>Lee (2005), "Asian Americans and the Gender Gap in Science and Technology" (WST, pp. 72-83)</p> <p>Thrupkaew (2002), "The Myth of the Model Minority" (html)</p> <p>Chang & Au (2007), "You're Asian. How Could You Fail Math?" (PDF)</p> <p>Rana (2000), "Fulfilling Technology's Promise: Enforcing the Rights of Women Caught in the Global High Tech Underclass" (WST, pp. 322-333)</p> <p>Mellström (2009), "The Intersection of Gender, Race and Cultural Boundaries, or Why is Computer Science in Malaysia Dominated by Women?" (PDF)</p> <p>Grossman (2006), "Where Computers Go to Die – and Kill" (HTML)</p> <p>Hickman (2010), "Concern over human cost overshadows iPad launch" (html)</p> <p>Cox (2006), "War, Murder, and Rape ... All for your Cell Phone" (HTML)</p> <p>The Enough Project (2009), "Can You Hear Congo Now?" (PDF)</p> <p>(Browse) Silicon Valley Toxics Coalition Website http://www.etoxics.org/</p> <p>Video: http://www.huffingtonpost.com/brooke-smith/hello-im-a-mac-and-heres_b_617256.html</p>
<p>Module 2: Medical Care & Health – Introduction to Questions of Access, Questions of Quality</p>	
<p>W Oct 5</p>	<p><i>The Women's Health Movement in the United States; Case Study – The Politics of Child Birth</i></p> <p>Boston Women's Health Collective (1973), "Preface from the 1973 Edition of <i>Our Bodies, Ourselves</i>" http://www.ourbodiesourselves.org/about/1973obos.asp</p> <p>Ehrenreich & English (1973). <i>Witches, Midwives, and Nurses</i></p> <p>Norsigian, et al (1999). "The Boston Women's Health Book Collective and <i>Our Bodies, Ourselves</i>: A Brief History and Reflection" http://www.ourbodiesourselves.org/about/jamwa.asp</p> <p>Ruzek & Becker (1999), "The Women's Health Movement in the United States: From Grassroots Activism to Professional Agendas" (PDF – 5 p)</p> <p>Browse: Blood Sisters (c. 1995), "Hot Pants: Do It Yourself Gynecology" (PDF)</p> <p>Blustain (2009), "Modern Childbirth: Failure to Progress" (PDF – 3 p)</p> <p>Block (2009), "Where's the Birth Plan?" (PDF – 3 p)</p> <p>Pikington (2010), "New York midwives lose right to deliver babies at home" (html)</p> <p>AFP (2010), "US low score on world motherhood rankings: charity" (html)</p> <p>Bazon & Lithwick (2003), "Motherhood Lost" (html)</p> <p>Grigoriadis (2010), "Waking up from the Pill" (html)</p> <p><i>Recommended:</i> (Browse) History of <i>Our Bodies, Ourselves</i>, http://www.ourbodiesourselves.org/about/history.asp</p> <p>Cyr (2005), "Myth of the Ideal Cesarean Rate" (PDF – 4 p)</p> <p>Goodman (2007), "Piercing the Veil: The Marginalization of Midwives in the United States"</p> <p>Morgen (2002), "The Politics of Race and Class: Dreams of Diversity, Dilemmas of Difference" (PDF)</p>

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

	<p>Spanier (1995), "Biological Determinism and Homosexuality" (PDF)</p> <p>Hausman (2000), "Do Boys Have to Be Boys? Gender, Narrativity, and the John/Joan Case" (PDF)</p> <p>Gowaty (2003), "Sexual Natures: How Feminism Changed Evolutionary Biology" (PDF)</p> <p>Lederman (2010), "The Genomic Revolution: Secrets of Life, Secrets of Death" (PDF)</p>
<p>Week 6</p> <p>M Oct 24</p> <p>CLASS LEAD 4</p> <p>Directions for the Take-Home Exam (Exam #2) Available</p>	<p><i>The Politics of Language & Classification</i></p> <p>Background Reading – Schiebinger (1999), "Biology" (HFCS, pp. 145-158)</p> <p>Martin (1991), "The Egg and the Sperm: How Science has Constructed a Romance Based on Stereotypical Male-Female Roles" (PDF – 12 pages)</p> <p>Schiebinger (1994), "Why Mammals are Called Mammals: Gender Politics in Eighteenth-Century Natural History" (PDF)</p> <p>Subramaniam (2001), "The Aliens Have Landed! Reflections on the Rhetoric of Biological Invasion" (WST, pp. 133-140)</p> <p><i>Recommended:</i> Keller (1992), "Gender and Science: An Update" (WST, pp. 245-254)</p> <p>Stepan (1986), "Race and Gender: The Role of Analogy in Science" (PDF)</p> <p>Biology & Gender Study Group (1988), "The Importance of Feminist Critique for Contemporary Cell Biology" (PDF)</p> <p>Upchurch & Fojtova (2009), "Women in the Brain: A History of Glial Cell Metaphors" (PDF)</p>
W Oct 26	<p><i>Scientific Racism and Scientific Anti-Racism</i></p> <p>Rothman (1998/2001), "Mapping the Past: The Macroeugenics of Race" (BOL, pp. 45-85)</p> <p>Omi & Winant (1986), "Racial Formations" (PDF – 9 p)</p> <p>Duster (2006), "Lessons from History: Why Race and Ethnicity Have Played A Major Role in Biomedical Research" (PDF – 10 p)</p> <p>"Interview with Richard Lewontin" (2003) (PDF – 11 p)</p> <p>American Anthropological Association Statement on "Race" and Intelligence (1994) (html)</p> <p>American Anthropological Association Statement on "Race" (1998) (html)</p> <p>Everding (1997), "Challenging 'The Bell Curve': College education halves black, white IQ score gap" (html)</p> <p>Selected readings on Jim Watson's Oct 2007 comments about race</p> <p>1) Fury at DNA Pioneers Theory (PDF)</p> <p>2) Mortification of Jim Watson (PDF)</p> <p>Browse: http://www.understandingrace.org/</p> <p>Natural History Museum, "Chapter 9: Transfer and Exploitation of Knowledge" from <i>Slavery and the Natural World</i> (PDF)</p> <p>Singleton (2010), "Henrietta Lacks: How a Black Woman's Cells Fueled Medical Progress" (html)</p> <p><i>Recommended:</i> Gould (1981), "American Polygeny and Craniometry Before Darwin" (PDF – 20 p)</p> <p>Fausto-Sterling (1995). "Gender, Race, and Nation: The Comparative Anatomy of 'Hottentot' Women in Europe, 1815-1817" (PDF – 23 p)</p> <p>Weasel (2004), "Feminist Intersections in Science: Race, Gender and Sexuality through the Microscope" (PDF)</p> <p>Wise (2011), "Race, Intelligence and the Limits of Science: Reflections on the Moral Absurdity of 'Racial Realism'" (html)</p>

Module 4: Reproductive, Medical and Genetic Technologies

<p>Week 7</p> <p>M Oct 31</p>	<p><i>The Feminist Case for Abortion Rights Race, Class & Reproductive Politics Prenatal Diagnosis Feminist Questions about Selective Abortion</i></p> <p>Shaw & Lee (2007). "Abortion" (PDF – 7 p)</p>
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	<p>Silliman et al (2004), "Women of Color and Their Struggle for Reproductive Justice" (PDF – 7 p)</p> <p>Waller (2008), "LaBruzzo: Sterilization plan fights poverty" (html)</p> <p>Hines (2011), "The Racist Anti-Abortion Group That Criminalizes Black Motherhood" (html)</p> <p>Zoila Pérez (2011), "Past and Present Collide as the Black Anti-Abortion Movement Grows" (html)</p> <p>Rothman (1998/2001), "Writing the Body: The Genetics of Illness" (BOL, pp. 111-127)</p> <p>Rothman (1998/2001), "The Micro-Eugenics of Procreation" (BOL, pp. 173-192)</p> <p>Rapp (1988), "Chromosomes and Communication: The Discourse of Genetic Counseling" (PDF – 13 pages)</p> <p><i>Recommended:</i> NASW, "Reproductive Health Disparities for Women of Color (PDF – 4 p)</p> <p>A. Davis (1981), "Racism, Birth Control, and Reproductive Rights" (PDF – 11 p)</p> <p>Woliver (1995), "Reproductive Technologies, Surrogacy Arrangements, and the Politics of Motherhood" (WST, pp. 361-369)</p> <p>Kapsalis (1997), "Mastering the Female Pelvis: Race and the Tools of Reproduction" (PDF)</p> <p>Layne (1997), "Breaking the Silence: An Agenda for a Feminist Discourse of Pregnancy Loss" (PDF)</p> <p>Lawrence (2000), "The Indian Health Service and the Sterilization of Native American Women" (PDF)</p> <p>Reagan (2000), "Crossing the Border for Abortions: California Activists, Mexican Clinics, and the Creation of a Feminist Health Agency in the 1960s" (PDF)</p> <p>Ludlow (2008), "Sometimes, It's a Child and a Choice: Toward an Embodied Abortion Praxis" (PDF)</p>
W Nov 2	<p>Independent Writing Assignment to be announced</p> <p>Film Options:</p> <ol style="list-style-type: none"> 1. CBS Reports (1965), "Abortion and the Law" http://www.cbsnews.com/video/watch/?id=3204142n 2. <i>Jane: An Abortion Service</i> (1996) 3. <i>The Coat Hanger Project</i> (2008) 4. Other films TBA
<p>Week 8 M Nov 7</p> <p>CLASS LEAD 5</p>	<p><i>The Politics of Disability Rights, Sex Selection, Designer Babies & Assisted Reproductive Technologies</i></p> <p>Rothman (1998/2001), "The Micro-Eugenics of Procreation" (BOL, pp. 193-218)</p> <p>Hubbard (1991), "Abortion and Disability" (PDF – 13 pages)</p> <p>Neumayr (2005), "The New Eugenics" (html)</p> <p>Dorsey (2002), "The New Eugenics" (HTML)</p> <p>Alexander (2002), "The Remastered Race" (html)</p> <p>Levine (2002), "What Human Genetic Modification Means for Women" (PDF – 4 pages)</p> <p>Bhatia, Mallik & Dasgupta (2003), "Sex Selection: New Technologies, New Forms of Gender Discrimination" (HTML)</p> <p>Simoncelli (2003), "Pre-Implantation Genetic Diagnosis and Selection: From Disease Prevention to Customized Selection" (PDF – 4 pages)</p> <p>Sama-Resource Group for Women and Health (2008), "Assisted reproductive technologies: Autonomy or subjugation? A case study from India" (PDF)</p> <p>Carney (2010), "Inside India's Rent-A-Womb Business" (PDF – 10 p)</p> <p>Newport (2011), "Americans Prefer Boys to Girls, Just as They Did in 1941" (html)</p> <p>Padawer (2011), "The Two-Minus-One Pregnancy" (html)</p> <p>Tanner (2011), "Boy or girl? A simple test raises ethical concerns" (html)</p> <p>The Economist (2011), "Gendercide in India" (html)</p>

	<p><i>Recommended:</i> Roberts (1997), "Race and the New Reproduction" (HTML) Garland-Thomson (2002), "Integrating Disability, Transforming Feminist Theory" (PDF)</p>
Module 5: Revisiting Race in a Genomic Age	
<p>W Nov 9</p> <p>DUE – Take Home Exam (Exam #2); Due at the beginning of class</p>	<p><i>The BiDiI Story and the Rise of Race-Based Pharmacogenics Questioning the Impacts of Inclusion Reforms in Clinical Trials</i></p> <p>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)</p> <p>Fullwiley (2008). "The Molecularization of Race" (PDF – 5 p)</p> <p>Duster (2003). "Unlikely mix -- Race, biology and drugs" (HTML)</p> <p>Duster (2005), "Race and Reification in Science" (HTML)</p> <p>Kimberly (2005), "A Bitter Pill for Black Hearts" (html)</p> <p>Harmon (2003), "In DNA Era, New Worries About Prejudice" (PDF – 4 p)</p> <p>Wade (2004), "Race-based Medicine Continued ... " (PDF – 2 p)</p> <p>Johnston (2004), "Race and Biology: Changing Currents in Muddy Waters" (PDF – 6p)</p> <p>Craddock (2006), "Rethinking Race and Ethnicity in Health Disparities" (PDF – 4p)</p> <p>Terrell (2010), "Who's Afraid of a Little AIDS Vaccine?" (PDF – 3 p)</p> <p>Lewin (2010), "College Bound, DNA Swab in Hand" (PDF – 2 p)</p> <p><i>Recommended:</i> Whittle & Inhorn (2001), "Rethinking Difference: A Feminist Reframing of Gender/Race/Class for the Improvement of Women's Health Research" (PDF)</p> <p>Long (2003), "Human Genetic Variation: The Mechanisms and Results of Microevolution" (PDF)</p> <p>Epstein (2008), "The Rise of 'Recruitmentology': Clinical Research, Racial Knowledge, and the Politics of Inclusion and Difference" (PDF)</p> <p>Fullwiley (2008), The Biological Construction of Race: 'Admixture' Technology and the New Genetic Medicine" (PDF)</p> <p>Kahn (2008), "Exploiting Race in Drug Development" (PDF – 18 p)</p>
<p>Week 9</p> <p>M Nov 14</p> <p>CLASS LEAD 6</p> <p>Due – Online Dialogue Paper 3</p>	<p><i>Genetic Ancestry, Identity, and Group Membership</i></p> <p>Adelman (2003), "Race and Gene Studies: What Difference Does a Difference Make?" (html)</p> <p>Bolnick, et al (2007). "GENETICS: The Science and Business of Genetic Ancestry Testing" (PDF – 2 p)</p> <p>Tallbear & Bolnick (2004) "Native American DNA" Tests: What are the Risks to Tribes?" (PDF – 4 p)</p> <p>Anwar (2007). "Researchers caution against genetic ancestry testing" (PDF – 2 pages)</p> <p>Brown (2002). "Seminole Nation Divided by Race, Money" (PDF – 2 pages)</p> <p>Appleton (2009), "Blood Quantum" (html)</p> <p>Tallbear (2003), "DNA, Blood, and Racializing the Tribe" (PDF – 17 p)</p> <p>Dyer (2006), "DNA tests locate genetic branches on African-Americans' family trees" (html)</p> <p>Goffe (2009), "Americans seek their African roots" (html)</p> <p><i>Recommended:</i> Miller (2005), "Seminoles and Africans under Seminole Law: Sources and Discourses of Tribal Sovereignty and 'Black Indian' Entitlement" (PDF)</p> <p>Nelson (2008). "Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry"</p>
Module 6: (Re)imagining Science, Technology & Society	
<p>W Nov 16</p> <p>Due – ODP 3 critical responses</p>	<p><i>(Re)imagining Science? Feminist Epistemologies of Science</i></p> <p>Schiebinger (1998). "Will Women Do Science Differently?" (HFCS, pp. 8-13)</p> <p>Wyer et al (2009), "The Next Generation: Bringing Feminist Perspectives into Science and Technology Studies" (WST, pp. 237-243)</p>

	<p>Harding (1991), "Feminist Standpoint Epistemology" (PDF – 11 p)</p> <p>Haraway (1985), "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" (PDF)</p> <p>Longino (1993), "Subjects, Power, Knowledge: Description and Prescription in Feminist Philosophies of Science" (PDF – 15 p)</p> <p>Ioannidis (2005), "Why Most Published Research Findings Are False" (PDF – 6p)</p> <p><i>Recommended:</i> Campbell (2009), "Reconstructing Science and Technology Studies Views from Feminist Standpoint Theory" (PDF)</p> <p>Houle (2009), "Making Strange Deconstruction and Feminist Standpoint Theory" (PDF)</p>
<p>Week 10 M Nov 21</p>	<p><i>(Re)imagining Science? Examples of Feminist or Sustainable Sciences</i></p> <p>Schiebinger (1997), "Creating Sustainable Science" (PDF – 16 pages)</p> <p>Schiebinger (1999), "Physics" (HFCS, pp. 159-180)</p> <p>Bug (2003), "Has Feminism Changed Physics?" (PDF – 14 p)</p> <p>Schiebinger (1999), "Primatology, Archaeology, and Human Origins" (HFCS, pp. 126-144)</p> <p>Fedigan (2001), "The Paradox of Feminist Primatology" (WST, pp. 256-267)</p> <p>Conkey (2003), "Has Feminism Changed Archaeology?" (PDF – 11 p)</p> <p><i>Recommended:</i> Phillips & Husebeck (2000), "Just Beneath the Surface: Rereading Geology, Rescripting the Knowledge-Power Nexus" (PDF)</p> <p>Belcastro & Moran (2003), "Interpretations of Feminist Philosophy of Science by Feminist Physical Scientists" (PDF)</p> <p>Roy (2004), "Feminist Theory in Science: Working toward a Practical Transformation" (PDF)</p>
W Nov 23	<i>No Class – Thanksgiving Holiday</i>
<p>Week 11 M Nov 28</p>	<p><i>(Re)imagining Technology? Feminist & Anti-Racist Scholar/Activists Rethink Technological Progress</i></p> <p>Wyer et al (2009), "Reproducible Insights" (pp. 301-305)</p> <p>L. Marx (1987), "Does improved technology mean progress?" (PDF – 10 p)</p> <p>Riley et al (2009), "Feminisms in Engineering Education: Transformative Possibilities" (PDF – 14 p)</p> <p>Interview with Vandana Shiva (2003), "What Would Democracy Look Like?"</p> <p>Loftus (2003), "A New Era" (PDF – 3 p)</p> <p>Selingo (2006), "May I Help You?" (html)</p> <p>ABET 2000 Criteria (1/2 page) (read Criterion 3)</p> <p>(Browse) Engineers Without Borders Website http://www.ewb-usa.org/</p> <p>SET-DEV (2011), "Knowledge Swaraj: An Indian Manifesto on Science and Technology" (PDF)</p> <p><i>Recommended:</i> Perry (2000), "Engendering Environmental Thinking: A Feminist Analysis of the Present Crisis" (WST, pp. 312-320)</p> <p>Miller et al (2000), "A Desire to Help Others: Goals of High-Achieving Female Science Undergraduates" (PDF)</p>
<p>W Nov 30 DUE – Book Review</p>	<p><i>(Re)imagining Scientific & Technical Decision-Making Practices</i></p> <p>Weasel (2001), "Laboratories Without Walls: The Science Shop as a Model for Feminist Community Science in Action" (PDF – 14 p)</p> <p>Leach & Scoones (2005), "The Slow Race" (PDF – pp. 52-73)</p> <p>Sclove (1995), "Town Meetings on Technology" (HTML)</p> <p>Wilderman (2007), "Models of Community Engagement: Design Models from the Field" (PDF)</p>
Week 12	See the Cal Poly Fall 2011 Final Exam Schedule for scheduling details