

ARIZONA STATE UNIVERSITY

GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:

Copy and pa	ste <u>cu</u>	<u>rrent</u> course inf	ormation fro	m <u>Class Search/</u>	Course Catalog.	The School fo	r the Futu	re of	
College/School		(Select One)			Department	The School for the Future of Innovation in Society			
Prefix	FIS	Number	334	Title	Science, Technolog	y & Inequality	Units:	3	
Is this a cross-listed course?			No	If yes, plea	ase identify course(s)				
Is this a shared course?			No	If so, list a	all academic units offerin	ng this course			

Note- For courses that are crosslisted and/or shared, a letter of support from the chair/director of <u>each</u> department that offers the course is required for <u>each</u> designation requested. By submitting this letter of support, the chair/director agrees to ensure that all faculty teaching the course are aware of the General Studies designation(s) and will teach the course in a manner that meets the criteria for each approved designation.

Is this a permanent numbered course with topics? No

If yes, all topics under this permanent numbered course must be taught in a manner that meets the criteria for the approved designation(s). It is the responsibility of the chair/director to ensure that all faculty teaching the course are aware of the General Studies designation(s) and adhere to the above guidelines. (Required)

Course description: See attached

Requested designation:

Cultural Diversity in the United States-C Note- a **separate** proposal is required for each designation.

Eligibility:

Permanent numbered courses must have completed the university's review and approval process. For the rules governing approval of omnibus courses, contact <u>Phyllis.Lucie@asu.edu</u>.

Submission deadlines dates are as follow:

For Fall 2016 Effective Date: October 1, 2015

For Spring 2017 Effective Date: March 10, 2016

Mandatory Review: (Choose one)

Area(s) proposed course will serve:

A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

Checklists for general studies designations:

Complete and attach the appropriate checklist

- Literacy and Critical Inquiry core courses (L)
- Mathematics core courses (MA)
- <u>Computer/statistics/quantitative applications core courses (CS)</u>
- Humanities, Arts and Design core courses (HU)
- <u>Social-Behavioral Sciences core courses (SB)</u>
- Natural Sciences core courses (SQ/SG)
- Cultural Diversity in the United States courses (C)
- Global Awareness courses (G)
- Historical Awareness courses (H)

A complete proposal should include:

- Signed course proposal cover form
- Criteria checklist for General Studies designation(s) being requested

David Guston

- Criteria checklist for Genera
 Course catalog description
- Sample syllabus for the course
- Copy of table of contents from the textbook and list of required readings/books

It is respectfully requested that proposals are submitted electronically with all files compiled into one PDF. **Contact information:**

Name Jameson Wetmore E-mail

Jameson.Wetmore @asu.edu

Phone

480-727-0750

3/4/16

Date:

Department Chair/Director approval: (Required)

Chair/Director	name (Typed):
Chair/Director	(Signature):

Rev. 4/2015

Arizona State University Criteria Checklist for

CULTURAL DIVERSITY IN THE UNITED STATES [C]

Rationale and Objectives

The contemporary "culture" of the United States involves the complex interplay of many different cultures that exist side by side in various states of harmony and conflict. The history of the United States involves the experiences not only of different groups of European immigrants and their descendants but also of diverse groups, including, but not limited to, American Indians, Latinos, African Americans, and Asian Americans--all of whom played significant roles in the development of contemporary culture and together shape the future of the United States. At the same time, the recognition that gender, class, and religious differences cut across all distinctions of race and ethnicity offers an even richer variety of perspectives from which to view ourselves. Awareness of our cultural diversity and its multiple sources can illuminate our collective past, present, and future and can help us to achieve greater mutual understanding and respect.

The objective of the Cultural Diversity requirement is to promote awareness and appreciation of cultural diversity within the contemporary United States through the study of the cultural, social, or scientific contributions of women and minority groups, examination of their experiences in the U.S., or exploration of successful or unsuccessful interactions between and among cultural groups.

Revised April 2014

Proposer: Please complete the following section and attach appropriate documentation.

ASU[C] CRITERIA cultural diversity in the united states						
YES	NO	S Identify Documentation Submitted				
		1. A Cultural Diversity course must meet the following general criteria:	Syllabus			
\square		The course must contribute to an understanding of cultural diversity in contemporary U.S. Society.	Syllabus			
		2. A Cultural Diversity course must then meet at least one of the following specific criteria:				
		 a. The course is an in-depth study of culture-specific elements, cultural experiences, or cultural contributions (in areas such as education, history, language, literature, art, music, science, politics, work, religion, and philosophy) of gender*, racial, ethnic and/or linguistic minority groups** within the United States. 				
		 b. The course is primarily a comparative study of the diverse cultural contributions, experiences, or world views of two or more gender*, racial, ethnic and/or linguistic minority groups** within the United States. 				
		 c. The course is primarily a study of the social, economic, political, or psychological dimensions of relations between and among gender*, racial, ethnic and/or linguistic minority groups** within the United States. *Gender groups would encompass categories such as the following: women, men, lesbians, gays, bisexuals, transgender individuals, etc. **Cultural, racial, ethnic, and/or linguistic minority groups in the U.S. would include categories such as the following: Latinos, African Americans, Native Americans/First Peoples, Asian Americans, Jewish Americans, Muslim Americans, members of the deaf community, etc. 	Syllabus			

Course Prefix	Number	Title	General Studies Designation
FIS	334	Science, Technology, & Inequality	С

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
Example-See 2b. Compares 2 U.S. cultures	Example-Compares Latino & African American Music	Example-See Syllabus Pg. 5
1. The course must contribute to an understanding of cultural diversity in contemporary U.S. society.	The major focus of this course is inequality in the application of science and technology within and between societies and how this differential application affects the social, economic, environmental, psychological, and political relationships between racial, ethnic, class, religious, and gender groups.	Course Description and Course Objectives outline this focus, and the following weekly topics address cultural diversity: Week 1: technology and social inequity, Week 2: racism and urban development, Week 4: Indigeneity and technological development, Week 6: Inequality and income, Week 8: Gender, Week 11: Race and technology, Week 12: Digital inequality, Week 13: Environmental values, Week 14: Energy systems and inequality.
2C. The course is primarily a study of the social, economic, political, or psychological dimensions of relations between and among gender, racial, eithnic and/or linguistic minority groups within the United States.	This course examines the underlying social, political and historical conditions that shape the application of science and technology in society in terms of economics, environmental, and infrastuctural effects on different groups based on gender, race, ethnicity, and class, esp. in the US.	See course description and objectives, as well as: Week 2: racism and urban development, week 4: indigeneity and technological development. Week 11: race and genetics; week 12: digital inequality, and Week 14: energy systems and inequality.

FIS 334 - Science, Technology and Inequality Course description: Conceptual and theoretical frameworks; provides empirical case studies that contribute to understandings of science and technology as they are used in society. The applications of science and technology in society need to be understood as instrumental to the creation and maintenance of inequality within and between societies. Science and technology does not merely cause or alleviate inequality, but are more profoundly implicated in social relations regarding distribution and access to the benefits of different technologies as well as exposure to risks from science and technology projects in society. The more pervasive and obdurate sources of social distribution are enshrined and entrenched in these scientific and technological systems.

Science, Technology, & Inequality FIS 334

Prof. Jennifer Richter

Jennifer.richter@asu.edu 480-727-3294 Office: Wilson 250 Office Hours: MTWHF 0:00-0:00 or by appointment

Course Description: This course introduces conceptual and theoretical frameworks and provides empirical case studies that contribute to understandings of science and technology as they are used in society. The applications of science and technology in society need to be understood as instrumental to the creation and maintenance of inequality within and between societies, affecting social, economic, environmental, psychological and political relationships between different groups of people. These differences are compounded through differences that are racialized, gendered, and class-based. Science and technology does not merely cause or alleviate inequality, but are more profoundly implicated in social relations regarding distribution and access to the benefits of different technologies as well as exposure to risks from science and technology projects in society. The more pervasive and obdurate sources of social distribution are enshrined and entrenched in these scientific and technological systems.

"Inequality" is an important divide to explore in relation to science and technology. We will discuss inequality in relation to several different value systems by examining theories of ethics and justice using classical and modern theorists. Our communal definitions of inequality will involve distribution, recognition, and participatory justice ideals, which we will use to interrogate how different cultural groups value incommensurable components of life such as income, health, and power. In this course, the term "distribution" is used in its dynamic sense, which refers to the process of producing and re-producing inequalities through the design and engineering of everyday objects that are informed by social values, and that also shape social relationships. This course is concerned with the roles that science and technology play in those processes and ways in which one can recognize the origins of, and intervene to generate fewer, unequal outcomes, as well as how vulnerable communities resist and contest unequal distributions of risks from the implementation of these technologies, such as the Navajo Nation and the coal and renewable energy industries, urban Latino communities and transportation systems, and poor communities of color in the Southeastern US who ignited the environmental justice movement in response to persistent chemical dumping. Ultimately, this course aims to provide students with a greater understanding of the processes that contribute to the increase of inequality through the role of science and technology in society.

Course Objectives and Learning Outcomes:

Students will be able to:

- Develop understanding about the complex ways that science, technology, and engineering are informed by social values and cultural biases, exacerbating inequality and inequity in society, especially amongst different racial, ethnic, class, religious, and gender groups.

- Comprehensively compare different cultural approaches and worldviews in relation to science and technology, including the policy-making and regulatory processes governing technological design, introduction, and implementation.

- Develop critical thinking skills and the ability to question how scientific, environmental, and technological relationships affect different communities on local, state, regional, national levels in the United States, and how they are developed in a comparative international context.

-Gain understanding and competency in researching and describing how inequality originates in disparate cultural value systems and how it affects marginalized and vulnerable populations by using theoretical aspects of justice theory and the field of ethics.

- To develop student's skills in oral and written communication, through group discussions, weekly assignments, and individual projects, in order to increase efficacy of student's communication and understanding of environmental, scientific, and technological principles.

- To learn practical and practicable ideas and theories about social change and scientific practices as they pertain to concepts of environmental justice.

Course Requirements:

Weekly Reflection Blog Post: 12 total (70%)

Each week, students will bring in one article (from a newspaper, journal, or magazine) that relates to the subject we are discussing in class. We will be discussing the relationship between these short articles and the class topic in our weekly seminars. In the weekly blog post, students will discuss the readings from the week, and relate them to your personal experience and this outside research (including 2 bibliographic references) in order to demonstrate understanding and relevancy of this topic. The blog post will be about 500 words in length each week. (The grade for your blog post will reflect attendance and the article you bring in for class.)

Paper Outline: 10%.

Midway through the semester, students will turn in an outline related to their final paper. This outline will include the general topic of your paper, description of your paper ideas, methodology of research, three annotated sources, and a formal outline of your paper. See description in Blackboard for more details.

Final Paper: 20%.

This 10-12 page double-spaced paper will discuss a relevant topic to the course, but students will pick their own topic. Your paper will examine the roots and consequences of one modern technology, such as GMOs, cell phones, solar panels, etc. See description in Blackboard for more details.

> Barrett students interested in adding an honors contract to the class should contact the instructor in the first week of classes.

Grading Scale:

A-/ A/ A+	90.0-92.4/ 92.5-97.9/ 98-100	Excellent
B- /B/ B+	80.0-82.4/82.5-87.4/87.5-89.9	Good
C/ C+	70.0-77.4/ 77.5-79.9	Average
D	60.0-69.9	Passing
Ε	<60	Failure
XE		Failure due to Academic Dishonesty

[Note: in order to receive University Distribution requirement credit you must earn at least a "C."]

Course Calendar

This syllabus is subject to change. It is your responsibility to read e-mail updates from the instructor and TAs as well as check the blackboard site for alterations made as events occur.

Week 1: Why ST & I?

(Post to "Hallway Conversations" by Monday)

- David Schlosberg, "Distribution and Beyond: Conceptions of Justice in Contemporary Theory and Practice" in Defining Environmental Justice: Theories, Movements and Nature (Oxford: Oxford University Press, 2009), 11-41.
- McGurty, Eileen. "From NIMBY to Civil Rights: The Origins of the Environmental Justice Movement." Environmental History 2, no.3 (1997): 301-323.

Jameson Wetmore. "Introduction to Special Issue on Science, Policy, and Social Inequity,"

Science and Public Policy, no. 35, v. 2 (March 2007), 83-84.

Susan Cozzens. "Distributive Justice in Science and Technology Policy," in Science and Public Policy, no. 35, v. 2 (March 2007), 85-94.

Week 2: Environmental Racism and Urban Development

- Laura Pulido. "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California." Annals of the Association of American Geographers 90, no. 1(2000): 12-40.
- Bolin, Bob et al. "The Geography of Despair: Environmental Racism and the Making of South Phoenix, Arizona, USA." Research of Human Ecology 12, no.2 (2005): 156-168.

Week 3: Roots of Technology as Social Progress

- Merritt Roe Smith. "Technological Determinism in American Culture," in Does Technology Drive History? (Cambridge, MA: MIT Press, 1994), pgs. 1-35.
- Ted Steinberg. "The Unforgiving West," in Down to Earth: Nature's Role in American History, 116-135. Oxford: Oxford University Press, 2009).

Week 4: Indigeneity and Technological Development

- Elizabeth Sumida Huaman. "Indigenous-Minded Innovation in Shifting Ecologies," in Indigenous Innovation: Universalities and Peculiarities (Rotterdam: Sense Publishers, 2015), pgs. 1-9.
- Netra Chhetri and Nalini Chhetri. "Alternative Imaginations: Examining Complementarities Across Knowledge Systems," in Indigenous Innovation: Universalities and Peculiarities, 11-24. Rotterdam: Sense Publishers, 2015.

Week 5: Producing New Natures

Rachel Carson. Silent Spring. New York: Mariner Books, 2002 (1962).

- Harry Cleaver. "The Contradictions of the Green Revolution" in The American Economic Review v. 62, n. 1/2 (March 1972), pgs. 177-186.
- Michael Specter. "Seeds of Doubt: An Activist's Controversial Crusade Against Genetically Modified Crops," The New Yorker (August 25, 2014).

Week 6: Inequality and Income

- Varian, Hal. "Many Theories on Income Inequality, but One Answer Lies in Just a Few Places," New York Times (9/21/06).
- Bernstein, Jared. "The Hierarchy of Income Inequality in the United States," Multinational Monitor May 2003, v. 24 no.5.
- Acemoglu, Daron. "Technology and Inequality," The National Bureau of Economic Research (Winter 2003).

Freeland, Christina. "The Lesson of US Income Inequality," Financial Times 8/25/2008.

Week 7: Feeding the Masses

McLeod-Kilmurray, Heather. "Commoditizing Nonhuman Animals and Their Consumers: Industrial Livestock Production, Animal Welfare, and Ecological Justice." Bulletin of Science, Technology and Society 32, no.1 (2012): 71-85.

Week 8: Gendered Divides

Sze, Julie. "Boundaries and Border Wars: DES, Technology, and Environmental Justice." American Quarterly 58, no. 3 (2006): 791-814.

Week 9: Spring Break (no class). Work on paper outlines!

Week 10: Field Trip- Arizona Science Center

(Post #2 due Monday)

(Post #1 due Monday)

(Post #5 due Monday)

(Post #6 due Monday)

(Post #7 due Monday)

(Post #4 due Monday)

(Post #3 due Monday)

Science and Public Policy 34, no. 2 (2007): 127-138.

Marisa Elena Duarte and Miranda Belarde- Lewis. "Imagining: Creating Spaces for Indigenous Ontologies." Cataloging and Classification Quarterly 53 (2015): 5-6, 677-702.

Week 13: Energy and Environmental Values- The Nuclear Fuel Cycle (Post #10 due Monday)

Endres, Danielle. "From Wasteland to Waste Site: The Role of Discourse in Nuclear Power's Environmental Injustices." Local Environment 14, no. 10 (2009): 917-937.

Eubanks, Virginia. "Popular Technology: Exploring Inequality in the Information Economy."

Brugge, Doug et al. "Psychological Effects of Technological/Human-Caused Environmental Disasters," in The Navajo People and Uranium Mining, 89-115. Albuquerque: UNM Press, 2006.

Week 14: Energy Systems and Inequality- Solar Energy

Martin J. Pasqualetti, Thomas E. Jones, Len Necefer, Christopher A. Scott, Benedict J. Colombi. "A Paradox of Plenty: Renewable Energy on Navajo Nation Lands," Society & Natural Resources (January 16, 2016).

Week 15: Technology and the Future

(Post #12 due Monday) April 22: Herman Kahn and Anthony Wiener. "The Next Thirty-Three Years: a Framework for Speculation," Daedalus, vol. 96, no. 3 (1967), pgs. 705-732.

Week 16: Final Papers Due

Incompletes: A mark of "I" (incomplete) can be given by the instructor when you are otherwise doing acceptable work but are unable to complete the course because of illness or other conditions beyond your control. You are required to arrange with the instructor for the completion of the course requirements. The arrangement must be recorded using the form at http://students.asu.edu/forms/incomplete-grade-request. Students should be proactive and discuss this with their instructor and TA before the end of the semester. Students who do not complete this form before the end of the semester cannot be given an incomplete and will be awarded a grade based on the work they have completed.

Late Assignments: Late assignments will have $1/3^{rd}$ of a letter grade deducted each day they are late. Advanced written or e-mailed notice that you will miss a class or have to turn in an assignment late could help your cause.

Grade Appeals: ASU has formal and informal channels to appeal a grade. If you wish to appeal any grading decisions, please see: http://catalog.asu.edu/appeal

Student Standards: Students are required to read and act in accordance with university and Arizona Board of Regents policies, including: The ABOR Code of Conduct: Arizona Board of Regents Policies 5-301 through 5-308: http://www.azregents.edu/policymanual/default.aspx

Week 11: Race and Categorization

Week 12: The Digital Divide and Science Policy

Social Sciences Research Council. "Is Race Real?" (Leroi, Duster, Hubbard, Graves, Lewontin, Hammonds). 2005.

Sankar, Pamela. "Forensic DNA Phenotyping: Continuity and Change in the History of Race, Genetics, and Policing," in Genetics and the Unsettled Past: The Collision of DNA, Race and History, 104-113. New Brunswick: Rutgers University Press, 2012.

(Post #11 Due Monday)

(Post #9 due Monday)

(Post #8 due Monday)

Professionalism in the Classroom: While learning happens throughout ASU, the classroom is a particularly important focal point. Students are asked to contribute to a collegial atmosphere where ideas can be exchanged, discussed, and debated freely by avoiding disruptions through their own behavior and the distractions of their technology. Disruptive, threatening or violent behavior will be dealt with according to the policies in the Student Services Manual, <u>SSM 104–02</u>. Students wishing to record lectures electronically must first get permission from the instructor.

It is impossible to learn from your fellow students when you or they are not there. As such attendance is required in this course. Should you have to miss a class, contact your instructor as far in advance as possible. Depending on the nature of the absence the instructor may elect to deduct points from your overall grade. Absences can be excused for religious observances or practices that are in accord with <u>ACD</u> <u>304–04</u> or university sanctioned events/activities that are in accord with <u>ACD 304–02</u>.

Academic Integrity: Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see <u>http://provost.asu.edu/academicintegrity</u>.

If you fail to meet the standards of academic integrity in any of the criteria listed on the university policy website, sanctions will be imposed by the instructor, school, and/or dean. Academic dishonesty includes borrowing ideas without proper citation, copying others' work (including information posted on the internet), and failing to turn in your own work for group projects. Please be aware that if you follow an argument closely, even if it is not directly quoted, you must provide a citation to the publication, including the author, date, and page number. If you directly quote a source, you must use quotation marks and provide the same sort of citation for each quoted sentence or phrase. You may discuss assignments with other students, however, all writing that you turn in must be done independently. If you have any doubt about whether the form of cooperation you contemplate is acceptable, ask the TA or the instructor in advance of turning in an assignment. Please be aware that the work of all students submitted electronically can be scanned using SafeAssignment, which compares them against everything posted on the internet, online article/paper databases, newspapers and magazines, and papers submitted by other students. Turning in an assignment (all or in part) that you completed for a previous class is considered selfplagiarism and falls under these guidelines. Any infractions of self-plagiarism are subject to the same penalties as copying someone else's work without proper citations. Students who have taken this class previously and would like to use the work from previous assignments should contact the instructor for permission to do so.

Prohibition of Commercial Note Taking Services: In accordance with <u>ACD 304-06 Commercial Note</u> <u>Taking Services</u>, written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the note taker's name as well as the instructor's name, the course number, and the date.

Student Support and Disability Accommodations: In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act of 1990, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities. <u>Qualified students with disabilities may be eligible to receive academic support services and accommodations</u>. Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are responsible for requesting accommodations and providing

qualifying documentation to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities. Qualified students who wish to request an accommodation for a disability should contact their campus DRC at: <u>http://www.asu.edu/studentaffairs/ed/drc/</u> If you are a student in need of special arrangements we will do all we can to help, based on the recommendations of these services. For the sake of equity for all students, we cannot make any accommodations without formal guidance from these services.

Drop and Add Dates/Withdrawals: Please refer to the <u>academic calendar</u> on the deadlines to drop/withdraw from this course. Consult with your advisor and notify your instructor if you are going to drop/withdraw this course. If you are considering a withdrawal, review the following policies: <u>Withdrawal</u> from Classes, <u>Medical/Compassionate Withdrawal</u>.

Email Communications

All email communication for this class will be done through your ASU email account and the blackboard site. You should be in the habit of checking your ASU email regularly as you will not only receive important information about your class(es), but other important university updates and information. You are solely responsible for reading and responding if necessary to any information communicated via email. For help with your email go to: <u>http://help.asu.edu/sims/selfhelp/SelfHelpHome.seam?dept_pk=822</u> and file a help desk ticket by clicking on "My Help Center."

Campus Resources: As an ASU student you have access to many resources on campus. This includes tutoring, academic success coaching, counseling services, financial aid, disability resources, career and internship help and many opportunities to get involved in student clubs and organizations.

Tutoring: <u>https://tutoring.asu.edu/tutoring</u> Counseling Services: <u>http://students.asu.edu/counseling</u> Financial Aid: <u>http://students.asu.edu/financialaid</u> Major/Career Exploration: <u>https://cls.asu.edu/majorexploration</u> Career Services: <u>http://students.asu.edu/career</u> Student Organizations: <u>http://www.asu.edu/studentaffairs/mu/clubs/</u>

FIS 334 Science, Technology, & Inequality List of Required Readings

- David Schlosberg, "Distribution and Beyond: Conceptions of Justice in Contemporary Theory and Practice" in *Defining Environmental Justice: Theories, Movements and Nature* (Oxford: Oxford University Press, 2009), 11-41.
- Eileen McGurty. "From NIMBY to Civil Rights: The Origins of the Environmental Justice Movement." *Environmental History* 2, no.3 (1997): 301-323.
- Jameson Wetmore. "Introduction to Special Issue on Science, Policy, and Social Inequity," *Science and Public Policy*, no. 35, v. 2 (March 2007), 83-84.
- Susan Cozzens. "Distributive Justice in Science and Technology Policy," in *Science and Public Policy*, no. 35, v. 2 (March 2007), 85-94.
- Laura Pulido. "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California." Annals of the Association of American Geographers 90, no. 1(2000): 12-40.
- Bob Bolin et al. "The Geography of Despair: Environmental Racism and the Making of South Phoenix, Arizona, USA." *Research of Human Ecology* 12, no.2 (2005): 156-168.
- Merritt Roe Smith. "Technological Determinism in American Culture," in *Does Technology Drive History?* (Cambridge, MA: MIT Press, 1994), pgs. 1-35.
- Ted Steinberg. "The Unforgiving West," in *Down to Earth: Nature's Role in American History*, 116-135. Oxford: Oxford University Press, 2009).
- Elizabeth Sumida Huaman. "Indigenous-Minded Innovation in Shifting Ecologies," in *Indigenous Innovation: Universalities and Peculiarities* (Rotterdam: Sense Publishers, 2015), pgs. 1-9.
- Netra Chhetri and Nalini Chhetri. "Alternative Imaginations: Examining Complementarities Across Knowledge Systems," in *Indigenous Innovation: Universalities and Peculiarities*, 11-24. Rotterdam: Sense Publishers, 2015.
- Rachel Carson. Silent Spring. New York: Mariner Books, 2002 (1962).
- Harry Cleaver. "The Contradictions of the Green Revolution" in *The American Economic Review* v. 62, n. 1/2 (March 1972), pgs. 177-186.
- Michael Specter. "Seeds of Doubt: An Activist's Controversial Crusade Against Genetically Modified Crops," *The New Yorker* (August 25, 2014).
- Hal Varian. "Many Theories on Income Inequality, but One Answer Lies in Just a Few Places," New York Times (9/21/06).
- Jared Bernstein. "The Hierarchy of Income Inequality in the United States," *Multinational Monitor* May 2003, v. 24 no.5.
- Daron Acemoglu. "Technology and Inequality," *The National Bureau of Economic Research* (Winter 2003).
- Christina Freeland. "The Lesson of US Income Inequality," Financial Times 8/25/2008.
- Heather McLeod-Kilmurray. "Commoditizing Nonhuman Animals and Their Consumers: Industrial Livestock Production, Animal Welfare, and Ecological Justice." *Bulletin of Science, Technology and Society* 32, no.1 (2012): 71-85.
- Julie Sze. "Boundaries and Border Wars: DES, Technology, and Environmental Justice." *American Quarterly* 58, no. 3 (2006): 791-814.
- Social Sciences Research Council. "Is Race Real?" (Leroi, Duster, Hubbard, Graves, Lewontin, Hammonds). 2005.
- Pamela Sankar. "Forensic DNA Phenotyping: Continuity and Change in the History of Race, Genetics, and Policing," in *Genetics and the Unsettled Past: The Collision of DNA, Race and History*, 104-113. New Brunswick: Rutgers University Press, 2012.
- Virginia Eubanks. "Popular Technology: Exploring Inequality in the Information Economy."

Science and Public Policy 34, no. 2 (2007): 127-138.

- Marisa Elena Duarte and Miranda Belarde- Lewis. "Imagining: Creating Spaces for Indigenous Ontologies." *Cataloging and Classification Quarterly* 53 (2015): 5-6, 677-702.
- Danielle Endres. "From Wasteland to Waste Site: The Role of Discourse in Nuclear Power's Environmental Injustices." *Local Environment* 14, no. 10 (2009): 917-937.
- Doug Brugge et al. "Psychological Effects of Technological/Human-Caused Environmental Disasters," in *The Navajo People and Uranium Mining*, 89-115. Albuquerque: UNM Press, 2006.
- Martin J. Pasqualetti, Thomas E. Jones, Len Necefer, Christopher A. Scott, Benedict J. Colombi. "A Paradox of Plenty: Renewable Energy on Navajo Nation Lands," Society & Natural Resources (January 16, 2016).
- Herman Kahn and Anthony Wiener. "The Next Thirty-Three Years: a Framework for Speculation," *Daedalus*, vol. 96, no. 3 (1967), pgs. 705-732.