

History 619/SI 719/Rackham 619/AC 620

Knowledge/Power/Practice in Science, Technology & Medicine

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Winter 2014

Mondays 1-4pm

G437 Mason Hall

This graduate readings seminar provides a comprehensive introduction to the major themes and issues in Science & Technology Studies (STS, or S&TS). Drawing on scholarship in history, sociology, anthropology, American studies, and information studies, the course mixes theoretical material with more empirically oriented studies. The course focuses particularly on the relation between social, political, and cultural contexts and the development of ideas, practices, tools, and objects within science, technology, and medicine.

Work for the seminar includes reading approximately 200-350 pages per week, brief weekly response papers, two discussion papers based on a week's reading, and a final project of 10-12 pages.

This course is required for students enrolled (or planning to enroll) in the [STS Graduate Certificate Program](#). While some background in science, technology and/or medicine is helpful, the course does not require any particular expertise.

Requirements: Assignments and Expectations

Reading

All required readings *except books* are available for download through the course CTools site, or via the library's ebrary subscription.

Students should purchase the following books. Copies are also on reserve at Hatcher Library.

- Donna Haraway, *Simians, Cyborgs, and Women* (Routledge, 1991)
- Bruno Latour, *Reassembling the Social: an introduction to actor-network theory* (Oxford University Press, 2007)
- Annemarie Mol, *The Body Multiple: Ontology in Medical Practice* (Durham: Duke University Press, 2003)
- Fred Turner, *From Counterculture to Cyberculture* (Chicago: Chicago University Press, 2006)
- Michel Foucault, *Society Must Be Defended: Lectures at the Collèges de France, 1975-1976*, (Picador, 2003)
- Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, (Duke UP, 2007)
- Peter Redfield, *Life in Crisis: The Ethical Journey of Doctors Without Borders*, (U. of California Press, 2013)
- Natasha Schüll, *Addiction by Design: Machine Gambling in Las Vegas*, (Princeton University Press, 2014)

Optional for purchase:

- Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump* (University of Chicago Press, 1985)
(this is a foundational STS classic, and you should probably own it)

Harry Collins & Trevor Pinch, *The Golem: what you should know about science* (Cambridge University Press, 1998), 2nd edition
Thomas Misa, *Leonardo to the Internet: Technology and Culture from the Renaissance to the Present*, (Johns Hopkins University Press, 2011.)

Those interested in overviews of STS (or its subfields) may find the following texts useful:

Daniel Kleinman and Kelly Moore, eds., *Handbook on Science, Technology and Society* (Routledge, 2014).
Jan Golinski, *Making Natural Knowledge: Constructivism and the History of Science* (Cambridge: Cambridge University Press, 1998)
Sergio Sismondo, *An Introduction to Science and Technology Studies* (Oxford: Blackwell, 2004)
Edward Hackett, Olga Amsterdamska, Michael Lynch, and Judy Wajcman, eds., *The Handbook of Science and Technology Studies, Third Edition* (MIT Press, 2008)
Francesca Bray, "Gender and Technology," *Annual Review of Anthropology* 36 (2007): 37-53

Writing

There are three types of writing assignment:

- 1) **Weekly responses.** Every week — except for the ones in which you are leading discussions and doing the recommended reading — you must turn in a 400-600 word response to the required reading. Rather than merely summarize the reading, you should engage with it analytically. ***The electronic version of this response is due no later than 8 a.m. on the day of the seminar, submitted to course blog at this [link](#). Feedback and grades for these assignments will be returned either on paper (Hecht) or via assignment link (Nakamura) Also bring 1 printed copy to class.***

You can skip one response paper between February and April. No skips in January.

SEE TOOLS RESOURCES FOLDER FOR EXAMPLES OF EXCELLENT RESPONSE PAPERS.

- 2) **Discussion papers.** Two are due during the semester. Your due dates will be determined on the first day of class. See below under "Discussion" for further details. Please review the whole syllabus carefully before the first day of class so that you can quickly express your preference for a discussion topic.
- 3) **Final project.** Your final project will be a paper of around 3000 words (10-12 pp). The choice of topic and format is up to you. You may write a literature review, a grant proposal, an analysis of current events, or whatever other format best suits your professional training and needs. Whatever you choose, you must directly engage with some aspect of the STS literature. This assignment has three parts:
 - (a) A *proposal* that clearly describes your topic and how it relates to course materials and concepts. This should consist of a 300-500 word narrative description, along with a preliminary bibliography of 5-7 works. We strongly recommend that you discuss your ideas with one of us before submitting this proposal. This is due on **March 16th in class (bring two printed copies).**
 - (b) A good draft of the paper is **due by email on April 17th by 12 noon to the professors and all class members.** This should be at least 1500 words, and should include a full bibliography with annotations of 50-70 words for each item. You are expected to read everyone's draft in order to have an effective wrap-up discussion on April 20th, the last

day of class. We will divide the class up into thematic clusters; you will be providing substantial written comments on the other papers in your cluster.

- (c) The *final version*, edited, revised, and proofread, is **due by email** to the professors by April 23rd at midnight.

Discussion

This is a discussion seminar. Its success depends on the commitment, involvement, and timeliness of all participants. Therefore, you are expected to arrive in class on time and thoroughly prepared to participate actively in all discussions.

Cold calling: to encourage full involvement and preparation, professors will “cold call” several students during each class. This means that we will ask you a direct question on the readings; we will expect answers that demonstrate your knowledge of the material and your ability to draw interesting connections from them to other readings. This practice is not intended to embarrass anyone. Instead, its goal is to help you prepare for class and to learn to think and talk “on your feet,” a crucial skill required by almost any profession.

We will grade you on both the regularity and the quality of your participation, including your responses to cold calls. Attendance without regular, thoughtful, constructive participation is not acceptable.

Presentations and leading discussion: Twice during the term, you will help lead class discussion. This is a substantial assignment that typically requires more than one week of preparation, so you should plan accordingly. It involves:

- Selecting and reading one of the **starred** books or 3 of the **starred** articles from the “recommended reading” list for that week.
- If reading a book, find 2 scholarly reviews of the book.
- Writing an 800-1200 word “think piece” that reviews the book or articles *and relates them to the primary assigned reading*. **You must post this piece to the [class blog](#) no later than 5 pm on the day before the seminar (Sunday). Bring a printed copy to class, stapled to a printed copy of the scholarly book reviews (if applicable).**
- Meeting with the other student(s) presenting in that session and collectively preparing a one-page handout as an aid to class discussion. This handout should list what you consider to be the three or four most interesting analytical points for the week’s reading, including both the main assignment and the recommended reading you did. The handout should also offer two questions designed to provoke interesting, wide-ranging general class discussion. The questions should focus on the concepts, theories, or historiographical frames from the readings.
- Distribute hard copies of this handout to all class members at the start of the seminar.
- At the beginning of that class session, presenters will **jointly spend no more than 20 minutes** outlining the themes from the common readings and elaborating your discussion questions. Presentations should draw upon the recommended readings as appropriate, but they should NOT engage in extended reviews of those readings. That’s what the pre-circulated “think pieces” are for. Everyone is expected to read these pre-circulated pieces.
- **Presentations will be timed.** You will receive a 5-minute warning at the 15-minute mark. A timer will go off at the 20-minute mark, and you must stop talking then. Again, this is not intended to embarrass you. Rather, it is meant to prepare you for professional presentations, which are always time-limited. Speaking concisely and effectively is an important skill in any profession.
- At the end of the presentation, presenters will lead the class discussion. You should be prepared to pose discussion-worthy questions about the readings, call on your peers, and listen to contributions and facilitate productive conversation among class members. Professors will endeavor to minimize their interventions for the first 20-30 minutes of the discussion.

Grading breakdown

- Weekly responses: 25 %
- Discussion “think piece” and presentation: 30 percent (15 % each)
- Participation: 25 %
- Final paper (including prep stages and peer comments): 20 %

All assignments must be turned in on time. Lateness will be reflected in the final course grade.

Science, Technology, Medicine & Society Colloquium

Everyone is welcome and encouraged to attend the Science, Technology, Medicine, and Society (STeMS) faculty-graduate student colloquium. STeMS meets 4-6 times each semester on Monday afternoons from 4-5:30 (usually in 1014 Tisch Hall).

Three semesters of attendance at the STeMS colloquium are required for the STS Graduate Certificate Program. To receive credit toward the certificate, you must register for Rackham 571 (a 1-credit course) each semester.

Course Schedule

If you’ve never encountered any STS or history of science, technology, and medicine before, we strongly recommend you read these two books over the inter-semester break. These will give you some empirical grounding, which in turn will help you make sense of the theoretically-oriented readings on which we will focus in the first few weeks of the term:

Thomas J. Misa, *Leonardo to the Internet*

Harry Collins and Trevor Pinch, *The Golem: What You Should Know about Science*

In order to cope with the reading load in this course – and your academic life more generally – we strongly recommend you read Paul N. Edwards, “[How to Read a Book](#)”

January 12 — Week 1. Introduction: Sociology of Scientific Knowledge (SSK) and Social Construction of Technology (SCOT)

SSK:

Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump* (Chicago: University of Chicago Press, 1985), pp. 3-79 and 332-344

David Bloor, “The Strong Programme in the Sociology of Knowledge,” in *Knowledge and Social Imagery*, 2nd ed. (Chicago: University of Chicago Press, 1991) (orig. 1976), pp. 3-23

Ian Hacking, *The Social Construction of What?* (Cambridge MA: Harvard University Press, 1999), chapters 1 and 4.

SCOT:

David Noble, “Social Choice in Machine Design,” in MacKenzie and Wajcman, *The Social Shaping of Technology*, 2nd edition, pp. 161-176

Thomas Hughes, "The Evolution of Large Technical Systems," in Wiebe Bijker, Thomas Hughes, and Trevor Pinch, eds. *The Social Construction of Technological Systems* (Cambridge MA: MIT Press, 1987), pp. 51-82

Bryan Pfaffenberger, "The Harsh Facts of Hydraulics: Technology and Society in Sri Lanka's Colonization Schemes," *Technology and Culture* (1990): 361-397.

SSK Recommended:

***Michael Lynch, *Scientific Practice and Ordinary Action: Ethnomethodology & Social Studies of Science*

***Steven Shapin, *A Social History of Truth*

***Harry Collins, *Changing Order: Replication and Induction in Scientific Practice*

Barry Barnes, *Scientific Knowledge: A Sociological Analysis*

Trevor Pinch, *Confronting Nature*

SCOT Recommended:

***Thomas P. Hughes, *Networks of Power*

***David Noble, *Forces of Production*

***Susan J. Douglas, *Inventing American Broadcasting, 1899-1922*

***Wiebe Bijker, *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change*

Nelly Oudshoorn & Trevor Pinch, *How Users Matter: the Co-Construction of Users and Technology*

Claude Fischer, *America Calling: A Social History of the Telephone to 1940*

January 19 – no class, attend MLK Jr. events

⇒ **by 1 pm: post self-introduction on class blog, along with a picture!**

January 26 — Week 2. Gender-Technoscience

Donna Haraway, "A Cyborg Manifesto" and "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), pp. 149-203.

Abbate, Janet, *Recoding Gender: Women's Changing Participation in Computing*, MIT Press, 2012. pgs 11-38 (ctools)

Chun, Wendy *Programmed Visions*, MIT Press, 2011. pgs 22-41 (ctools)

Recommended:

***Firestone, Shulamith, *The Dialectic of Sex*, Bantam Books, 1971

***Lisa Nakamura, *Digitizing Race*, University of Minnesota Press, 2008,

***Anne Fausto-Sterling, *Sexing the Body: Gender Politics and the Construction of Sexuality*, Basic Books, 2000.

***Oldenziel, Ruth, *Making Technology Masculine: Men, Women, and Modern Machines in America, 1870-1945*

***Harding, Sandra, *Sciences from Below: Feminisms, Postcolonialities, and Modernities*

***Bray, Francesca, *Technology, Gender and History in Imperial China: Great Transformations Reconsidered* (Routledge, 2013)

February 2 — Week 3. Actor-Network Theory

- Bruno Latour, "Give Me a Laboratory and I will Raise the World," in Karin Knorr-Cetina and Michael Mulkay, eds. *Science Observed: Perspectives on the Social Study of Science* (Sage 1983)
- Madeleine Akrich, "The De-Description of Technical Objects," in Bijker and Law, eds., *Shaping Technology/Building Society* (MIT, 1992), pp 205-224
- Michel Callon, "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St. Brieuc Bay," in *Power, Action, Belief*, ed. John Law (London: Routledge and Kegan Paul, 1986), pp 196-233
- John Law (1992), "Notes on the Theory of the Actor Network: Ordering, Strategy and Heterogeneity"
- Bruno Latour, *Reassembling the social: an introduction to actor-network theory* (Oxford University Press: Oxford 2007), **selections.**

Recommended:

- Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society*
 - John Law, *Aircraft Stories: Decentering the Object in Technoscience*
 - Stefan Helmreich, *Silicon Second Nature: Culturing Artificial Life in a Digital World* (2nd edition)
 - John Law and John Hassard (eds), *Actor Network Theory and After*
- Bruno Latour, *Gifford Lectures on Natural Religion* (2013)
- Bruno Latour, *We Have Never Been Modern*
- Nowotny, Helga (1990), "Actor-networks vs. science as self-organizing system: A comparative view of two constructivist approaches." *Sociology of the Sciences* 14: 223-239

February 9 — Week 4. Race/Classification

- Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things Out*, Chapters 1, 3, 7-8 (Ctools)
- Warwick Anderson, *The Cultivation of Whiteness*, pgs. 11-40 (Ctools)
- Tallbear, Kim *Native DNA: Tribal Belonging and the False Promise of Genetic Science*, Minneapolis, U. Minn Press, 2013, pgs 49-66

Recommended:

- ***Nelson, Alondra, "Race and Revelation: Genetic Ancestry Testing and the YouTube Generation," *Race After the Internet*, Routledge
- Duster, Troy, "The Combustible Intersection: Genomics, Forensics, and Race," *Race After the Internet*, Routledge, 2011 (Ctools)
- ***Duster, Troy, *Backdoor to Eugenics*, Routledge, 2003.
- ***Clifford, James, *The Predicament of Culture: Twentieth-Century Ethnography, Literature, and Art*, Harvard UP, 1988, chapter on Mashpee
- ***Haraway, Donna, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 2003)
- Sinclair, Bruce, *Technology and the African-American Experience: Needs and Opportunities for Study*

February 16 — Week 5. Constructions of Medicine and Health

- Annemarie Mol, *The Body Multiple: Ontology in Medical Practice* (Durham: Duke University Press, 2003), especially pp. 1-85 – read selectively/skim the rest.
- Liz Roberts, "Assisted existence: an ethnography of being in Ecuador," *Journal of the Royal Anthropological Institute* 19 (2013), 562-80
- Steven Epstein, "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials," *Science, Technology & Human Values* 20 (1995): 408-437.

Charles E. Rosenberg, "The Therapeutic Revolution: Medicine, Meaning, and Social Change in Nineteenth-Century America," in M.J. Vogel and Charles E. Rosenberg, eds., *The Therapeutic Revolution: Essays in the Social History of American Medicine* (Philadelphia: University of Pennsylvania Press, 1979), 3-25.

Recommended:

- Alexandra Stern, *Eugenic Nation: Faults and Frontiers of Better Breeding in Modern America*
 - Shobita Parthasarathy, *Building Genetic Medicine: Breast Cancer, Technology, and the Comparative Politics of Health Care*
 - Joel Howell, *Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century*
 - Steven Epstein, *Impure Science: AIDS, Activism, and the Politics of Knowledge* **OR** *Inclusion: The Politics of Difference in Medical Research*
 - Charles Rosenberg, *The Cholera Years* **OR** *The Care of Strangers*
- Robert Aronowitz, *Making Sense of Illness: Science, Society, and Disease*

Martin Pernick, *The Black Stork: Eugenics and the Death of "Defective" Babies in American Medicine and Motion Pictures since 1915*

Adele E. Clarke, *Disciplining Reproduction: Modernity, American Life Sciences, and the Problem of Sex*

Charis Thompson, *Making Parents: The Ontological Choreography of Reproductive Technologies*

February 23 — Week 6. Data Networks, Postcoloniality, and Power

Philip, Kavita "Producing Transnational Knowledge, Neoliberal Identities, and Technoscientific Practice in India," *Tactical Biopolitics*

Anita Say Chan, *Networking Peripheries: Technological Futures and the Myth of Digital Universalism*, MIT Press, 2013, pgs. 153-186.

Christian Sandvig, "Connection at Eywiphay Mountain: Indigenous Internet Infrastructure," *Race After the Internet*, Routledge, 2011

Dourish, Irani, et al "[Postcolonial Computing.](#)" CHI 2010

Recommended:

***Ong, Aiwaha and Nancy N. Chen, *Asian Biotech: Ethics and Communities of Fate* (Duke UP, 2010)

***Beatriz da Costa and Kavita Philip, *Tactical Biopolitics: Art, Activism, and Technoscience*, (MIT Press, 2008)

Fouché, Rayvon, "From Black Inventors to One Laptop Per Child: Exporting a Racial Politics of Technology," *Race After the Internet*, Routledge, 2011.

***Eden Medina, *Cybernetic Revolutionaries: Technology and Politics in Allende's Chile*, MIT Press, 2011.

***Warwick Anderson and Gabrielle Hecht, eds., "Postcolonial Technoscience" special issue of *Social Studies of Science* Vol. 32, Nos. 5-6 (October-December 2002).

***Gabrielle Hecht, ed., *Entangled Geographies: Empire and Technopolitics in the Global Cold War*, editor (MIT Press, 2011).

March 2 – no class, winter break

March 9 — Week 7. Platforms, Software, Formats

Sterne, MP3: *The History of a Format*, Duke, 2011, TBA
Coleman, Gabrielle *Coding Freedom*, Princeton UP, 2011 pgs 93-122
Kirschembaum, Matt "Extreme Inscription: a Grammatology of the Hard Drive." *Mechanisms: New Media and the Forensic Imagination*, MIT Press, 2008 pgs 73-109
Ernest, Wolfgang, *Digital Memory and the Archive*, Minnesota U.P., 2013, pgs. 113-140

Recommended:

***Edwards, Paul *The Closed World*, MIT Press, 1997.
***Gitelman, Lisa. *Always Already New: Media, History, and the Data of Culture*, MIT Press, 2006
***Turner, Fred *From Counterculture to Cyberculture*, MIT, 2006.
***Montfort, Nick and Ian Bogost, *Racing the Beam: The Atari Video Game System*, MIT Press, 2006
***Abbate, Janet, *Inventing the Internet*, MIT, 1999

March 16 — Week 8. Technopolitics & Nation

Gabrielle Hecht, *The Radiance of France*, chapters 2 & 8
Timothy Mitchell, *The Rule of Experts*, chapter 2
Brett Walker, *Toxic Archipelago*, 2-3 chapters (TBA)

Recommended:

•••Sonja Schmid, *Producing Power: The Pre-Chernobyl History of the Soviet Nuclear Industry* (MIT Press, 2015)
•••Ken Alder, *Engineering the Revolution*
•••Sara Pritchard, *Confluence: The Nature of Technology and the Remaking of the Rhône*
•••Toby Jones, *Desert Kingdom: How Oil and Water Forged Modern Saudi Arabia*
Gyan Prakash, *Another Reason: Science and the Making of Modern India*
James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*
Chandra Mukerji, *A Fragile Power: Science and the State*
Thomas Zeller, *Driving Germany: the Landscape of the Autobahn*
Suzanne Moon, *Technology and Ethical Idealism: A History of Development in the Netherlands East Indies*

March 23 — Week 9. Labor, Biopower, Technology

Lisa Nakamura, "Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Manufacture," *American Quarterly*, December 2014.
Landecker, Hannah, "immortality, in Vitro: A History of the HeLa Cell Line," in *Biotechnology and Culture: Bodies, Anxieties, Ethics*, Ed. Paul E. Brodwin, Indiana UP, 2000, 53-72
Vora, Kalindi "Limits of Labor: Accounting for Affect and the Biological in Transnational Surrogacy and Service Work," *SAQ*, 2012.
Michel Foucault, *Lectures at the Colleges de France, 1975-1976: Society Must Be Defended*, excerpts

Recommended:

***Saxenian, AnnaLee, Regional Advantage: Culture and Competition in Silicon Valley and Route 128, Harvard University Press, 1996
Braidotti, *The Posthuman*, Cambridge UP, 2013.
***Thacker, Eugene, *The Global Genome: Biotechnology, Politics, and Culture*, MIT Press, 2006.

- ***Ensmenger, Nathan L. *The Computer Boys Take Over: Computers, Programmers, and the Politics of Technical Expertise*, MIT Press, 2010
- ***Lemke and Caspar, *Biopolitics: An Advanced Introduction*, NYU Press, 2011
- ***Scholz, Trebor, *Digital labor: the Internet as playground and factory*, Routledge, 2013.
- Judith McGaw, *Most Wonderful Machine*
- ***Ruth Schwartz Cowan, *More Work For Mother* (Basic, 1983).

March 30 — Week 10. Human-Body-Machine

Natasha Schüll, *Addiction by Design*
 Lucy Suchman, "Subject Objects." *Feminist Theory*, 12 (2): 119-145. 2011.

Recommended:

- Sherry Turkle, *The Second Self OR Alone Together*
- Edwin Hutchins, *Cognition in the Wild*
- Allan Brandt, *The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America*
- Donald Mackenzie, *An Engine not a Camera: How Financial Models Shape Markets*
- S. Lochlann Jain, *Injury: The Politics of Product Design and Safety Law in the United States*
- Sarah Tracy, *Alcoholism in America: from reconstruction to prohibition*

April 6 — Week 11. Treatments, Ethics, and Making Things Global

Peter Redfield, *Life in Crisis: the Ethical Journey of Doctors without Borders*

Recommended:

- Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life*
- Adriana Petryna, *When Experiments Travel: Clinical Trials and the Global Search for Human Subjects*
- Warwick Anderson, *The Collectors of Lost Souls: Turning Kuru Scientists into Whitemen*
- Anna Tsing, *Friction: An Ethnography of Global Connection*
- Joao Biehl, *Vita: Life in a Zone of Social Abandonment*
- Myron Echenberg, *Plague Ports: The Global Urban Impact of Bubonic Plague*
- Marcia Inhorn, *Local Babies, Global Science: Gender, Religion, and In Vitro Fertilization in Egypt*

April 13 — Week 12. Entangled Agents

Karen Barad, *Meeting the Universe Halfway*

Recommended:

- ***Peter Galison, *Image and Logic: A Material Culture of Microphysics OR How Experiments End*
- ***Andrew Pickering, *The Mangle of Practice: Time, Agency, and Science*
- ***David Kaiser, *Drawing Theories Apart: The Dispersion of Feynman Diagrams in Postwar Physics*
- ***Sharon Traweek, *Beamtimes and Lifetimes*

April 20 — Week 13. Wrap-up discussion

Assignment:

- Read pre-circulated drafts of final papers
- Provide written comments on drafts in your theme cluster

- Come to class prepared to discuss the “big picture” that emerges from our semester (including the readings you did for your paper)

GUIDELINES FOR DIALOGUE

We will do our best to:

1. Maintain confidentiality. We want to create an atmosphere for open, honest exchange.
2. Commit to learning from each other. We will listen to other and not talk at each other. We acknowledge differences among us in backgrounds, skills, interests, identities and values. We realize that it is these very differences that will increase our awareness and understanding through this process .
3. Not demean, devalue, or "put down" people for their experiences, lack of experiences, or difference in interpretation of those experiences.
4. Trust that people are always doing the best they can.
We will give each other the benefit of the doubt. We will assume we are all trying our hardest and that our intentions are good even when the impact is not.
5. Challenge the idea and not the person. If we wish to challenge something that has been said, we will challenge the idea or the practice referred to, not the individual sharing this idea or practice.
6. Speak our discomfort. If something is bothering us, we will share this with the group. Often our emotional reactions to this process offer the most valuable learning opportunities.
7. Step Up, Step Back. We will be mindful of taking up much more space than others. On the same note, empower ourselves to speak up when others are dominating the conversation.
8. Not to freeze people in time. We are all works in progress. We will be willing to change and make space for others to do so. Therefore we will not assume that one comment or one opinion made at one time captures the whole of a person's character.

The Program on Intergroup Relations, University of Michigan, 2012