

RESOURCES & TOOLS for STS COURSE DEVELOPMENT

ONLINE COLLECTIONS OF STS SYLLABI

symptom.ucdavis.edu/stsnet/index.php

This great site is hosted by UC-Davis, and was created to promote connections between STS faculty around the country (it includes a collection of syllabi).

vos.ucsb.edu/browse.asp?id=2731

Hosted by UC-Santa Barbara, this site is an index of online resources in Science, Technology, & Culture organized topically (museums, history, scifi, syllabi, conferences, etc.)

www.4sonline.org

The **Society for the Social Studies of Science** (4S) is devoted to understanding the social context of science and technology, and technology as science. Their online website contains information for scholars interested in STS issues, including a collection of STS syllabi, a list of journals and books series in the field, and a list of films professors have used in STS courses.

www.nlm.nih.gov/hmd/collections/digital/syllabi

An extensive syllabus archive for the history of health, disease, healing, psychiatry and related topics, hosted by the National Library of Medicine.

www.racesci.org “The RaceSci website is a resource for scholars and students interested in the history of “race” in science, medicine, and technology.” It includes links to digital archives, online resources, and syllabi.

Additionally, the last two pages of this handout include links to the online presence of 50+ programs in STS related fields. Many of these departments have a selection of syllabi posted online, and contain links to STS resources you may find valuable.

ONLINE DATABASES & WIKIS

(to help you design and/or find classroom materials)

General STS

Moving Image Archive: www.archive.org/details/movies

Includes the Prelinger Archives, and contains over 2,000 “ephemeral films” online, all within public copyright, including such 1950s classics as *Duck and Cover* (1951) and *A is for Atom* (1953), Thomas Edison’s first films in the early 1900s, and recent material in the public domain.

The Library of Congress, American Memory Collection memory.loc.gov/ammem/index.html

This fully indexed and searchable meta-collection of multi-format sources also contains a list of browsable collections, including African American History, Environment/Conservation, Government/Law, Technology/Industry, etc.

The American Experience, by PBS, contains a theme on technology in American history, from big business to aviation and household innovations, www.pbs.org/wgbh/amex

Linda Hall Library, Science, Engineering & Technology Information for the World, Online

Exhibitions: www.lhl.lib.mo.us/events_exhib/exhibit/index.shtml

- Centuries of Civil Engineering
- Paper Dinosaurs 1824-1969
- The Year 1000: A Legacy of Science and Technology
- The Face of the Moon: Galileo to Apollo

New York Public Library Digital Gallery, “free and open access to hundreds of thousands of digital images,” digitalgallery.nypl.org/nypldigital

- The Newtonian moment: science and the making of modern culture: www.nypl.org/research/newton
- i on infrastructure, commemoration the 150th anniversary of the American Society of Civil Engineers: www.nypl.org/admin/exhibitions/ioni/index.html
- Diversity endangered/diversity discovered: www.nypl.org/admin/exhibitions/endangered/index.html
- Heavens above: art and actuality: www.nypl.org/research/sibl/trouvelot
- Seeing is believing: 700 years of scientific and medical illustration: seeing.nypl.org

Museums of Natural History, Science, and Industry can also be great resources for talking about the interface between expert and non-expert knowledge. Although most have a greater physical than online presence, browsing their pages can give you a good idea of the issues they are addressing in their current exhibits. Here are links to a few major museums:

- American Museum of Natural History in New York: www.amnh.org
- Denver Museum of Science and Nature: www.dmns.org/main/en
- Museum of Science, Boston: www.mos.org
- Museum of Science and Industry in Chicago: www.msichicago.org
- Smithsonian’s Air and Space Museum, www.nasm.si.edu & Museum of Natural History, www.mnh.si.edu

Medicine, Food, and Culture

Image Archive of the American Eugenics Movement, co-sponsored by the Dolan DNA Learning Center and Cold Spring Harbor Laboratories: www.eugenicsarchive.org/eugenics

Race: A Project of the American Anthropological Association: www.understandingrace.org

National Library of Medicine

Online Exhibitions and Digital Projects: www.nlm.nih.gov/onlineexhibitions.html

- Opening Doors: Contemporary African American Academic Surgeons: www.nlm.nih.gov/exhibition/aframsurgeons/
- Changing the face of Medicine
- Profiles in Science (including Rosalind Franklin’s papers)
- Visible Proofs: Forensic Views of the Body: www.nlm.nih.gov/exhibition/visibleproofs/index.html
- The Visible Human Project: www.nlm.nih.gov/research/visible/visible_human.html

Dittrick Medical History Center: www.case.edu/artsci/dittrick/site2/museum/online

- Smallpox: A city on the edge of disaster
- Obstetric literature and the changing character of childbirth
- Haunting images: photography, dissection, and medical students

Wellcome Trust Centre for the History of Medicine: www.ucl.ac.uk/histmed

Smallpox History: www.smallpoxhistory.ucl.ac.uk

University of Adelaide's Research Centre for the History of Food and Drink:

www.arts.adelaide.edu.au/centrefooddrink

Information, Communication, and Society

LabLit.com: the culture of science in fiction & fact: www.lablit.com

Although it looks cheesy, this website has the single best online index of sci-fi literature available.

It is searchable by author, title, or *subject!* www.scifan.com

The scholarly journal *Science Communication* focuses on communication both between scientists and a non-scientific audience, as well as with the professional community: scx.sagepub.com

Interested in high quality, reusable, distributable, educational media? Think video games.

Epistemic Games: "Building the future of education." epistemicgames.org/eg

The education arcade: www.educationarcade.org

The learning arcade: www.learningarcade.org

Innovation and Entrepreneurship in Social Context

J. Robert Oppenheimer Centennial at Berkeley: ohst.berkeley.edu/oppenheimer/exhibit

American Institute of Physics: Cosmic Journey: A History of Scientific Cosmology:

www.aip.org/history/cosmology/index.htm

Chemical Heritage Foundation, Online Exhibits: www.chemheritage.org/exhibits/ex-nav4.html

- The Biotechnology Hall of Fame
- Her lab in your life: women in chemistry
- The Pittcon Hall of Fame (scientific instrument makers)
- Spinning the elements: Wallace Carothers and the nylon legacy

African American Scientists Bibliography, from the California Academy of Sciences:

www.calacademy.org/research/library/biodiv/biblio/afamsci.htm

The Faces of Science: African Americans in the Sciences. This website might not look very snazzy, but it contains a fantastic collection of resources! <https://webfiles.uci.edu/mcbrown/display>

Nature, Environment, and Sustainability

Understanding Evolution for Teachers: evolution.berkeley.edu/evosite/evohome.html

This website has a fantastic section on the history of evolutionary thought

Intergovernmental Panel on Climate Change: www.ipcc.ch

Environmental History Resources: www.eh-resources.org

Score Card: "A pollution report for your county, covering air, water, chemicals, and more."

What are the pollutants in your backyard and who put them there: www.scorecard.org

Roberta Millstein's History and Philosophy of Biology Resources:

philosophy.ucdavis.edu/millstein/philbio.html

Law, Values, and Science Policy

U.S. House of Representative's Committee on Science and Technology. This site includes current legislation, press releases, hearings, and information about and materials distributed by the various Subcommittees (Space and Aeronautics, Technology and Innovation, Research and Science Education, Investigations and Oversight, and Energy and Environment).

<http://science.house.gov>

AAAS science policy programs: www.aaas.org/spp

US Office of Science and Technology Policy: www.ostp.gov

NIH Office of Science Policy Analysis: <http://ospp.od.nih.gov/policy>

Consortium of Law & Values in Health, Environment & the Life Sciences:
www.lifesci.consortium.umn.edu

Online Ethics Center for Engineering and Science, Case Western Reserve, <http://onlineethics.org>

MAGAZINES, NEWSPAPERS, BLOGS & PODCASTS

(source materials for your students)

Edge: "The Third Culture. The third culture consists of those scientists and other thinkers in the empirical world who, through their work and expository writing, are taking the place of the traditional intellectual in rendering visible the deeper meanings of our lives, redefining who and what we are." www.edge.org

National Geographic: "inspiring people to care about the planet" (and I would add, the planet's inhabitants, both animal and human). They have lots of online photos and interactive material that corresponds to the headlines of National Geographic Magazine.

www7.nationalgeographic.com/ngm and www.nationalgeographic.com/tv/index.html

Scientific American: Well known, readable source of current and historical articles about science and technology. www.sciam.com Also, Digital .pdfs of all articles 1993 to the present are available through the Clemson Library under EBSCO's single journal subscriptions.

Seed: "science is culture." Includes videos, podcasts, articles, blogs, all about science and culture magazine: www.seedmagazine.com blogs: www.scienceblogs.com

Skeptic: "The Skeptics Society is a scientific and educational organization of scholars, scientists, historians, magicians, professors and teachers, and anyone curious about controversial ideas, extraordinary claims, revolutionary ideas, and the promotion of science." www.skeptic.com

Podcasts (if you have iTunes, simply browse through their podcast directory by subject)

- Nature Podcast (my favorite, by far), www.nature.com/podcast The Nature group also produces more specialized podcasts on stem cells, cancer, physics, chemistry, and more.
- The Naked Scientists: Naked Science Radio Show, www.thenakedscientists.com
- Science Friday: Making Science Radioactive, www.sciencefriday.com
- Science Talk: The Podcast of Scientific American, www.sciam.com/podcast
- NASAcasts (shuttle trips, astronomy, etc...), www.nasa.gov/multimedia/podcasting
- President's Weekly Radio Address (3-5 minutes each), www.whitehouse.gov/news/radio

If you don't have iTunes, you can download it for free, www.apple.com/itunes/download

ACADEMIC SOCIETIES & THEIR JOURNALS

American Association for the History of Medicine (AAHM): www.histmed.org

Bulletin of the History of Medicine (Project MUSE: 1996-present online)

American Society for Environmental History (ASEH): www.asch.net

Environmental History (co-published by the Forest History Society)

www.historycooperative.org/ehindex.html (2003-present online, open access)

History of Science Society (HSS): www.hssonline.org

Isis (1913-present online, JSTOR and Univ. of Chicago Press Journals)

Osiris (1936-2005 online, JSTOR and Thompson Gale)

International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB, or “ishkabibble,” or ISH). ISH doesn’t publish a journal of its own, but members can get discounts with any of the following journals. www.ishpssb.org

Metascience (1997-present online, SpringerLink and Kluwer)

Journal of the History of Biology (1997-present online, Kluwer)

Biology and Philosophy (1997-present online, Kluwer)

Annals of Science (1975-present online, Academic Search Premier and Taylor & Francis Journals)

Philosophy of Science Association (PSA): www.philsci.org

Philosophy of Science (1934-present online, JSTOR and University Chicago Press Journals)

Society for the History of Technology (SHOT): www.historyoftechnology.org

Technology and Culture (1959-present online, JSTOR and Project MUSE)

Pamphlet series: Historical Perspectives on Technology, Society, and Culture:

www.historyoftechnology.org/pubs/bklt_list.html

Society for Literature, Science, and the Arts: www.litsciarts.org

Configurations: A Journal of Literature, Science, and Technology (1993-present online, Project MUSE)

Society for the Social Studies of Science (4S): www.4sonline.org

Science, Technology, and Human Values (1978-2003 online, JSTOR)

Social Studies of Science (1975-present online, JSTOR and SAGE Publications)

Perspectives on Science (1996-present online, Academic Search Premier and Project MUSE)

H-NET DISCUSSION NETWORKS

The Humanities and Social Sciences Online network hosted by Michigan State University provides online discussion networks for academics in any field willing to host a forum (currently ~180). You can either read postings online, or have them automatically delivered to your email address. Some forums require registration; others do not. www.h-net.org

Three forums that may be of interest ...

H-Energy (political economy of oil, hist. technology, energy, and the environment):

www.h-net.org/~energy

H-Environment (environmental history): www.h-net.org/~environ

H-Sci-Med-Tech (history of science, medicine, and technology): www.h-net.org/~smt

STS ANALYSIS TOOL

Developed by Professor Julie R. Newell, Southern Polytechnic State University
<http://www.spsu.edu/sis/newell/StudentResources/sts4200tool.html>

CHOICE

What choices are being made?

How has the choice been framed?

By whom? Why?

What options have already been eliminated?

By whom? Why?

Who is doing the choosing?

“Experts”? Which ones? What is the basis of their expertise?

Members of the community expected to benefit from the choice? (see “benefit” below)

Members of the community bearing the cost of the choice? (see “cost” below)

Members of the community bearing the risks of the choice? (see “risk” below)

ACCESS

How and why access to knowledge or technology is controlled and distributed.

Before:

Who has access to the information necessary to participate in the choice process?

If access to such information is being actively limited, why and on what basis is access granted?

If access to such information is being passively limited, what barriers to access exist and how might they be eliminated? (such barriers might be technological, educational, economic or bureaucratic, for instance)

After:

Access to knowledge or technology may be limited as a result of the choice being considered.

These barriers may be active or passive.

Have the potential limits to access been evaluated as part of the costs and benefits of the choice?

RISK

What risks are involved?

How is risk being defined?

By whom?

How is risk being measured and weighed?

By whom?

Are potential risks not easily quantified being eliminated or minimized in the decision process?

How are long-term risks being weighted relative to short-term or immediate risks?

Are those potentially at risk involved in the decision making process?

Is this a self-defined or an externally defined group?

If those at risk are included, at what stage of the process?

What weight are their concerns being given in the decision-making process?

COST

What costs are involved?

How is cost being defined?

By whom?

Does “cost” mean just “dollars and cents” or does it include other impacts such as economic, environmental, and social impacts?

How is cost being measured and weighed?

By whom?

Are potential costs not easily quantified being eliminated or minimized in the decision process?

How are long-term costs being weighted relative to short-term or immediate costs?

Are those expected to bear the cost involved in the decision making process?

Is this a self-defined or an externally defined group?

If those bearing the cost are included, at what stage of the process?

What weight are their concerns being given in the decision-making process?

RESPONSIBILITY

Responsibility may be an issue with regard to any issue of choice, access, cost, risk, or benefit.

Responsibility may lie at any one of, or at several of, the following levels:

Individual, social, professional, governmental

How is responsibility being defined?

Moral/ethical? financial? rules (including laws)? other?

How is responsibility being assigned or assumed?

By whom?

Limited or unlimited?

For choosing, for implementing the choice, or for the outcomes of implementation?

For what period of time?

For intended or unintended outcomes?

BENEFITS

What are the potential benefits?

How is benefit being defined? By whom?

How is benefit being measured and weighed? By whom?

Are potential benefits not easily quantified being eliminated or minimized in the decision process?

How are long-term benefits being weighted relative to short-term or immediate benefits?

Are the benefits widely or narrowly distributed?

Are those expected to reap the benefits involved in the decision making process?

Is this a self-defined or an externally defined group?

If those expected to benefit are included, at what stage of the process?

What weight are their concerns being given in the decision-making process?

To what degree do those benefiting from a given choice:

Bear the responsibility?

Accrue the costs?

Take the risks?

SCIENCE, TECHNOLOGY, POLICY INTERNSHIP PROGRAMS FOR STUDENTS

American Academy for the Advancement of Science

Science and Technology Fellowships, “Plug the power of science into public policy”:

<http://fellowships.aaas.org>

Center for Science, Technology and Security Policy, opportunities:

<http://cstsp.aaas.org/opportunity.html>

University of Virginia’s STS Policy Internship Program, “provides information about the school's internships for undergraduate engineering students interested in science and technology policy,”

www.sts.virginia.edu/pip

IEEE (Institute of Electrical and Electronics Engineers) Public Policy and Government Internship Opportunities www.ieeeusa.org/policy/Internships/index.html

Progressive Policy Institute, Policy Internships:

www.ppionline.org/ppi_sub.cfm?knlgAreaID=87&subsecid=64

Includes internships in education policy, energy and environmental policy, health care policy, & technology and new economy policy.

Environmental Protection Agency, Opportunities for Students, www.epa.gov/careers/stuopp.html

National Institutes of Health, Office of Science Policy Analysis, Policy Fellowship Programs,

<http://osp.od.nih.gov/fellowships>

National Science Foundation, Student Appointments,

www.nsf.gov/about/career_ops/careers/student.jsp

Clemson University Career Center Internship Resources,

<http://career.clemson.edu/students/internship.htm>

“The Christine Mirzayan Science & Technology Policy **Graduate** Fellowship Program within the Policy and Global Affairs Division of the National Academies is designed to engage graduate science, engineering, medical, veterinary, business, public policy, and law students in the analysis that informs the creation of science and technology policy and to familiarize them with the interactions of science, technology, and government.” The site includes links to other science policy internship possibilities as well: www7.nationalacademies.org/policyfellowships

HOW TO PROPOSE AN STS COURSE @ CLEMSON

(taken from www.clemson.edu/sts)

Decide whether the course you have in mind will be a disciplinary course in your department or an interdisciplinary course with an STS number. If it is a course in your department, fill out the course approval form at <http://dprod6.clemson.edu/cucc/>. Make sure you specify (writing them in if necessary) all the general education requirements you wish the course to satisfy. Also make sure that the syllabus has enough detail so that the STS content covered is clear. That proposal goes through the usual process for approval by your department and college curriculum committee and then to the University Undergraduate Curriculum Committee.

If you are proposing an interdisciplinary course and want to give it an STS number, you fill out the same form but then submit the course to the Science and Technology in Society Committee (Pam Mack, Chair). If that committee approves the course it then goes to the University Undergraduate Curriculum Committee.

The standard university course proposal forms are usually not detailed enough for the committee that evaluates STS courses to be able to see how well your course meets the STS requirement, particularly if the STS content is integrated with technical content. After some experience we have found that what works best is if you provide the STS subcommittee with an expanded syllabus. This syllabus should provide more detail about the STS content than the syllabus required by the Undergraduate Curriculum Committee (SYLCert9119), and may go into more detail than a syllabus you would give your students. This is particularly important if your topic for a particular week is something like “automobile safety”—you need to tell us what social and policy issues you will cover in addition to the technical issues. Your detailed syllabus should not only demonstrate both how the goals of the course investigate questions central to understanding the relationships between society, science, technology, medicine, and/or the environment, but also how some assignments ask students to explore these issues (either inside or outside of class). The detailed syllabus can be included with your course proposal or sent directly to Pam Mack (pammack@clermson.edu).

The University Undergraduate Curriculum Committee has a subcommittee that recommends whether a course should be approved as meeting the STS requirement. In general, the UCC subcommittee looks for:

- At least 30 - 40% STS content
- Preparing students to be good citizens, able to effectively and confidently evaluate complex scientific, medical, and/or technological issues
- Dealing with both the impact of science and/or technology on society AND how science, medicine, and/or technology are social enterprises shaped by politics, funding, ethics, etc.
- Having students evaluate all sides of controversial issues

At www.clemson.edu/sts you will find course descriptions of existing STS courses and resources for faculty. If you have questions, contact Pam Mack at 656-5356 or by email (pammack@clermson.edu).

GENERAL EDUCATION GUIDELINES

Developed by the Undergraduate Curriculum Committee, effective 15 May, 2005¹

Science and Technology in Society (STS)

This requirement will be met by selecting a science and technology course from the approved list of courses. The selected course may be incorporated in the ten required credits in the Mathematical, Scientific and Technological Literacy area, the six required credits in the Arts and Humanities, the six required credits in the Social Sciences, or as an additional requirement within the major.

Degree programs may select the context of their STS course in such a way that benefits the total curriculum.

¹ These STS guidelines can also be found at <http://virtual.clemson.edu/groups/ugs/GE/> Click on “General Education Guidelines and Courses November 5, 2004” and page down to pages 4 and 5.

Objective: Students will study interactions among the natural sciences, technology, and society. They will explore how these systems affect each other and are affected by humans. Students will learn how to make informed decisions about science and technology in a social context.

Rationale: We live in a world shaped largely by science and technology. It is important that as citizens our graduates are able to come to educated opinions about interactions that involve science, technology and society. This requires an introduction to the methods of science and the ability to ask informed questions and think critically about how science and technology interact with society.

For example:

- How are informed choices made about future human successes within global systems (natural, economic, social)?
- How do our values shape science and technology?
- How do new scientific and technological developments require us to refine our values and ethical judgment?
- What have we gained and what have we lost from the progress of science and technology?
- How does our political system handle controversies about science and technology?
- How are developments in science and technology affected by and how do they affect economic, security, environmental, educational and other policy decisions at local, national, international and global levels?
- Can we predict the impact on society of a new technology?
- To what extent are current technological and social systems sustainable?

Informed decision-making arises from understanding the issues involved. Students will learn to put emotion and bias into perspective, evaluate information and claims of fact, identify alternatives, characterize choices, and assess results.

The Faculty is encouraged to develop and recommend additional courses to meet this requirement. To qualify for STS designation, courses should deal with choices, not simply present the development of a particular science or technology. All STS courses will have a common goal of establishing knowledge and understanding of relationships, impacts, and interactions between science, technology and societal systems. It is not sufficient for an STS course simply to examine how and where science and technology are applied in society. Content and methods will be appropriate to the general education area in which the courses are offered.

Courses are particularly encouraged that deal with a case study, because focus on a single issue like genetics allows the professor both to teach enough of the science so that the students can understand the issue in some depth and also expose students to a wide range of questions, perspectives, and concerns. Courses team-taught by instructors from different disciplines might also be particularly effective.

Faculty submitting proposals for courses to meet the STS General Education requirement should include a separate justification statement which addresses how the course will prepare students to be good citizens in a technological society, able to have useful opinions about complex technological issues. Components of the course addressing science and technology issues in society should be identified and explained.

(some) **STS PROGRAMS at UNIVERSITIES in the U.S.**

Arizona State University

Center for Biology and Society (Bioethics, Policy, and Law; History and Philosophy of Science, Communicating Science): sols.asu.edu/cbs/index.php

Consortium for Science, Policy & Outcomes: www.cspo.org

Carnegie Mellon University, Engineering & Public Policy: www.epp.cmu.edu

Clemson University, Science & Technology in Society, www.clemson.edu/sts/

Claremont Colleges (Harvey Mudd, Scripps, Claremont McKenna, Pitzer, Pomona):

www2.hmc.edu/www_common/sts/stswelc.html

Cornell University, Department of Science & Technology Studies: www.sts.cornell.edu

George Washington University, Center for International Science and Technology Policy:

www.gwu.edu/~cistp/

Georgia Institute of Technology

School of History, Technology, and Society: www.hts.gatech.edu

Science, Technology and Culture: www.lcc.gatech.edu/stac/

The Experimental Game Lab at Georgia Tech: egl.gatech.edu

Harvard University

History of Science Department: www.fas.harvard.edu/~hsdept/

Belfer Center for Science and International Affairs: bcsia.ksg.harvard.edu

Indiana University – Bloomington, Department of History and Philosophy of Science:

www.indiana.edu/~hpscdept/

Johns Hopkins University

History of Science, Medicine and Technology: www.hsmt.jhu.edu

Department of History of Science and technology: web.jhu.edu/host

Institute of the History of Medicine: histmed.jhmi.edu

Lehigh University, Science, Technology, and Society: www.lehigh.edu/~insts/insts.html

Massachusetts Institute of Technology

Program in Science, Technology, and Society: web.mit.edu/STS

Technology and Policy Program: tppserver.mit.edu

Michigan State University, Science, Technology, Environment, and Public Policy Specialization:

www.jmc.msu.edu/stepps/index.htm

North Carolina State, Science, Technology, and Society Program:

www.chass.ncsu.edu/ids/sts/index.html

Pennsylvania State University, Science, Technology, and Society: www.engr.psu.edu/sts/

Princeton University

History of Science Program: hos.princeton.edu

Program in Science, Technology and Environmental Policy: www.princeton.edu/~step/

Rensselaer Polytechnic Institute, Science and Technology Studies Department:

www.sts.rpi.edu/index.php

Stanford University

Program in Science, Technology & Society: sts.stanford.edu or www.stanford.edu/group/STS/

History and Philosophy of Science Program: www.stanford.edu/dept/HPS/

Stony Brook University, Department of Technology and Society: www.stonybrook.edu/est/

Syracuse University, Center for Technology and Information Policy:

www.maxwell.syr.edu/ctip/ctip.htm

University of California-Berkeley

Science, Technology, and Society Network: ucsts.berkeley.edu

Science, Technology, and Society Center: stsc.berkeley.edu

Office for History of Science and Technology: ohst.berkeley.edu/index.html

University of California-Davis

History and Philosophy of Science Program: sts.ucdavis.edu/frontpage.html

Technocultural Studies: technoculture.ucdavis.edu

University of California-Los Angeles

Program on Medicine, Technology, and Society: www.som.ucla.edu/pmts/

University of California-San Diego, Program in Science Studies (History, Philosophy, Sociology, and Communication of Science): helix.ucsd.edu/~scistud/

University of California-Santa Cruz, Science Communication Program (both Science Writing and Science Illustration): scicom.ucsc.edu

University of Chicago

Conceptual and Historical Studies of Science: chss.uchicago.edu

Fishbein Center for the History of Science and Medicine: social-sciences.uchicago.edu/fishbein/

University of Delaware, Center for Energy & Environmental Policy: ceep.udel.edu/ceep.html

University of Maryland – College Park

Science, Technology, and Society Programs: www.sts.umd.edu

Committee for Philosophy of the Sciences: carnap.umd.edu/cpas/

University of Michigan

Science, Technology & Society: www.umich.edu/~umsts/

Science, Technology, and Public Policy: stpp.fordschool.umich.edu

History of Science, Technology & Medicine: sitemaker.umich.edu/hist.scitechmed/home

University of Minnesota

History of Medicine Program: www.med.umn.edu/history/home.html

History of Science and Technology: groups.physics.umn.edu/hsci/

University of Oklahoma, History of Science Department: www.ou.edu/cas/hsci/

University of Pennsylvania, Department of History and Sociology of Science, including undergraduate degrees in *Health and Societies* and *Science, Technology, and Society*, and a graduate program in the *History and Sociology of Science*: hss.sas.upenn.edu/mt-static/

University of Pittsburgh, Center for the Philosophy of Science: www.pitt.edu/~pittcntr/

University of Texas-Austin, Science, Technology, and Society: tlcerv.la.utexas.edu

University of Virginia, Science, Technology, and Society: www.sts.virginia.edu

University of Wisconsin-Madison

History of Science: histsci.wisc.edu

Medical History and Bioethics: medhist.wisc.edu

Science & Technology Studies: sts.wisc.edu/index.html

Nelson Institute for Environmental Studies: www.ies.wisc.edu

games + learning + society: website.education.wisc.edu/gls/index.htm Based out of the College of Education, this program looks at how people learn while playing computer games.

Virginia Tech (Blacksburg), Science and Technology Studies Program

Graduate studies: www.sts.vt.edu

STS Department: www.sts.vt.edu/department/index.php

(Northern Virginia Campus): www.sts.vt.edu/nvc/

For a worldwide directory of STS Programs, go to:
www.stswiki.org/wiki/Worldwide_directory_of_STS_programs