HISTORY OF SCIENCE, MEDICINE, AND PUBLIC HEALTH

Director of undergraduate studies: William Rankin, HGS 206, 432-1354, william.rankin@yale.edu ; hshm.yale.edu

FACULTY ASSOCIATED WITH THE PROGRAM OF HISTORY OF SCIENCE, MEDICINE, AND PUBLIC HEALTH

Professors  Naomi Rogers, William Summers, John Warner

Associate Professor  Paola Bertucci

Assistant Professors  Henry Cowles, Joanna Radin, William Rankin

Senior Lecturer  Rebecca Tannenbaum

Affiliated Faculty  Toby Appel (Yale University Library), Dimitri Gutas (Near Eastern Languages & Civilizations), Jennifer Klein (History), Joanne Meyerowitz (History), Amy Meyers (Yale Center for British Art), Alan Mikhail (History), Kevin Repp (Yale University Library), Paul Sabin (History), Gordon Shepherd (School of Medicine), Frank Snowden (History), Jenifer Van Vleck (History)

History of Science, Medicine, and Public Health is an interdisciplinary program that focuses on how different forms of knowledge and technology have been created in various times, places, and cultures, and how they have shaped the modern world. The program explores questions such as whether science is universal, or whether each culture has its own approach to trustworthy knowledge; the relationship between medical expertise, social structure, and everyday life; the nature of technology and its relationship to political, economic, and military power; reasons why even the best public health campaigns have unintended consequences.

Course topics include the Scientific Revolution, medicine and media in modern America, health activism and public health, global health and epidemics, biotechnology, predictions of planetary catastrophe, and the historical development of the physical, environmental, biological, and human sciences.

A major in History of Science, Medicine, and Public Health offers excellent preparation for a wide range of careers. Premedical students and others interested in health-related fields can combine preprofessional training with a broad humanistic education. The major also provides a solid foundation for any career at the intersection of the sciences, technology, and public life, including law, business, journalism, museum work, public policy, and government.

Requirements of the major  The major in History of Science, Medicine, and Public Health requires twelve term courses, including the two-term senior requirement. Students select a pathway of seven courses that guides them through an area of specialization. The seven pathway courses must include two courses in History of Science, Medicine, and Public Health; one seminar numbered 100 or above in History of Science, Medicine, and Public Health or in History; one science course; and three electives chosen from relevant courses in any department.

The five standard pathways in the major are medicine and public health; global health; science, technology, and power; gender and sexuality; and arts and media. Students may also design customized pathways in consultation with the director of undergraduate studies. No later than the beginning of the junior year, students in the major must select a standard pathway or indicate that they wish to design their own.

Beyond the seven pathway courses, students must complete three additional electives in History of Science, Medicine, and Public Health. One of the electives must be a seminar, and one must be chosen from a pathway other than the one selected for the major. All courses for the major are chosen in collaboration with the student’s adviser.

Senior requirement  By the end of reading period in the spring term of the junior year, students choose whether they will work toward a yearlong or a one-term senior project. Yearlong senior projects are completed in HSHM 490, 491; one-term projects are completed in HSHM 492. Students who choose a one-term project must take an additional seminar in History of Science, Medicine, and Public Health during the final term of the senior year. Distinction in the Major is awarded only to students who complete a yearlong senior project.

For both the one-term and yearlong senior projects, students select a project adviser, propose a tentative topic and title, and submit a proposal to the senior project director. The final product of the senior requirement may be a written essay or an alternative project such as a film, exhibition, catalog, atlas, or historical data reconstruction. In the case of an alternative project, the student must identify a second reader in addition to the adviser before the project is approved by the senior project director. Either the adviser or the second reader must be a member of the faculty in History of Science, Medicine, and Public Health. A written component to the senior project must illustrate sources and the intellectual significance of the project. For more details about requirements and deadlines, majors should consult the HSHM Senior Project Handbook; copies are available from the senior project director and on the program’s Web site (http://hshm.yale.edu).

Credit/D/Fail courses  Courses taken Credit/D/Fail may not be counted toward the requirements of the major.
REQUIREMENTS OF THE MAJOR

Prerequisites  None
Number of courses  12 term courses (incl senior req)
Distribution of courses  7 courses in pathway, incl 2 HSHM courses, 1 sem in HSHM or Hist, 1 science course, and 3 electives; 3 addtl
                  HSHM electives, incl 1 sem and 1 course outside major pathway
Senior requirement  Yearlong project (HSHM 490, 491), or one-term project (HSHM 492) and 1 addtl HSHM sem

Courses

* HSHM 007a / HUMS 076a, Epidemics in Global Perspective  William Summers
Interaction of epidemic diseases and society. The response of government, medicine, and the public to the threat or actual presence of widespread contagious diseases. The notion of major epidemics as one of the key contingencies of history, critically examined through contemporary medical, political, and literary accounts. The changing responses of societies and governments to epidemics as well as the reasons for those responses. Enrollment limited to freshmen. Preregistration required; see under Freshman Seminar Program.  HU, SO

HSHM 204b / AMST 163b / EVST 120b / HIST 120b, American Environmental History  Paul Sabin
Ways in which people have shaped and been shaped by the changing environments of North America from precolonial times to the present. Migration of species and trade in commodities; the impact of technology, agriculture, and industry; the development of resources in the American West and overseas; the rise of modern conservation and environmental movements; the role of planning and impact of public policies.  HU

HSHM 211b / EVST 211b / G&G 211b / HIST 416b, Global Catastrophe since 1750  William Rankin
A history of the geological, atmospheric, and environmental sciences, with a focus on predictions of global catastrophe. Topics range from headline catastrophes such as global warming, ozone depletion, and nuclear winter to historical debates about the age of the Earth, the nature of fossils, and the management of natural resources. Tensions between science and religion; the role of science in government; environmental economics; the politics of prediction, modeling, and incomplete evidence.  HU

HSHM 212b / HIST 146b / HLTH 280b, Historical Perspectives on Global Health  Joanna Radin
The broader historical context of contemporary practices, policies, and values associated with the concept of global health. Historical formations around ideas about disease, colonialism, race, gender, science, diplomacy, security, economy, and humanitarianism; ways in which these formations have shaped and been shaped by attempts to negotiate problems of health and well-being that transcend geopolitical borders.  HU

HSHM 216a / CGSC 135a / HIST 118a / PSYC 135a, Minds and Brains in America  Henry Cowles
A survey of the science and medicine of mind and brain in America since 1800. Madness and the asylum; phrenology and psychoanalysis; psychology in politics, law, and advertising; the rise of the "neuro-" disciplines; mental health in public life. Texts from fields such as neurology, physiology, psychology, psychiatry, and philosophy. May not be taken after HSHM 409.  HU

HSHM 218a / HIST 153a, Science from Newton to Neutrons  William Summers
Major themes and ideas in science from the seventeenth century through the twentieth. Focus on evolving descriptions and theories of matter and energy, physics, and chemistry. The evolution of Newtonian ideas to the world of modern physics and the transition from alchemical thinking to the chemical revolution.  HU

HSHM 223b / HIST 120b, Doctors and Patients in Western Medicine  Courtney Thompson
The history of Western medicine, with particular attention to the the doctor/patient relationship. The roles of different kinds of practitioners and the experiences of patients in the therapeutic encounter.  HU

* HSHM 412b / HSHM 415b, The History of the Laboratory  Chitra Ramalingam
The social and cultural history of the experimental laboratory as a site for scientific activity, from early modern origins to the present day. The early modern origins of the laboratory: private, institutional, and state laboratories; relations between labs and field stations; the lab in the colonial and developing world; industrial and corporate labs; laboratory architecture; secrecy and openness; gender in the experimental workplace; and popular representations of the laboratory. Undergraduate enrollment limited to juniors and seniors.  WR, HU

* HSHM 420b / HSHM 423b, History of Addiction  Henry Cowles
A survey of the understanding and treatment of addiction in the modern period. Psychology and psychiatry; alcoholism, abstinence, and prohibition; gambling and other behavioral addictions; recent work on habit formation; and addiction narratives in literature and film. Readings include primary texts from a range of scientific and medical fields as well as from court cases, political debates, and social and religious movements.  WR, HU

* HSHM 422a / HIST 467Ja, Cartography, Territory, and Identity  William Rankin
Exploration of how maps shape assumptions about territory, land, sovereignty, and identity. The relationship between scientific cartography and conquest, the geography of statecraft, religious cartographies, encounters between Western and non-Western cultures, and reactions to cartographic objectivity. Students make their own maps. No previous experience in cartography or graphic design required.  WR, HU
Ideas about biomedicine’s promises and perils as they have been realized differently across place and time. Visions of the future of biomedicine that have shaped public policy, medical practice, and therapeutic innovation. Speculation about what medicine would come to look like in time. Ideas from literature, film, advertisements, policy documents, and medical texts around the world since World War II. WR, HU

* HSHM 455a / HIST 182Ja, Gender in Science and Medicine  Courtney Thompson
Exploration of the relationship between gender and science, medicine, and technology in Western society, from the medieval and early modern period to contemporary American debates. Topics include gendered representations of the body; ways in which gender expectations have informed visual and material representations of the body; ways in which ideas about the natural world and medical practice have been shaped by gendered assumptions; the development of scientific theories and medical practices surrounding gender, sex, and reproduction; and debates surrounding the role of women and men in scientific and medical practice, from early modern scientists to recent controversies surrounding the role of gender in STEM. Class sessions at the Yale Medical School and the Peabody Museum. HU

* HSHM 432b / ERKM 360b / HLTH 370b / SOCY 390b / WGSS 390b, Politics of Reproduction  Rene Almeling
Reproduction as a process that is simultaneously biological and social, involving male and female bodies, family formation, and powerful social institutions such as medicine, law, and the marketplace. Sociological research on reproductive topics such as pregnancy, birth, abortion, contraception, infertility, reproductive technology, and aging. Core sociological concepts used to examine how the politics of reproduction are shaped by the intersecting inequalities of gender, race, class, and sexuality. WR, SO

* HSHM 453b / HIST 435Jb, The Global Crisis of Malaria  Frank Snowden
The global crisis of malaria examined in comparative and historical context. The mosquito theory of transmission and other developments in scientific understanding of the disease; World Health Organization strategies to eradicate malaria since 1955; the development of tools such as insecticides, medication, and bed nets; the attempt to create an effective vaccine. WR, HU

* HSHM 445a / HIST 142Ja / WGSS 453a, Women and Medicine in America from the Colonial Era to the Present  Naomi Rogers
American women from the colonial era to the present as midwives, patients, healers, reformers, revolutionaries, innovators, and entrepreneurs. Ways that women have shaped American health care and medical research. WR, HU

* HSHM 447a / HIST 379Ja, History of Chinese Science  William Summers
Major themes in Chinese scientific thinking from antiquity to the twentieth century. Non-Western concepts of nature and the development of science in China; East-West scientific exchanges; and China’s role in modern science. WR, HU RP

* HSHM 459a / HIST 420Ja, Photography and the Sciences  Chitra Ramalingam
The making of photography’s discursive identity as an experimental and evidentiary medium in the sciences, from its announcement to the public in 1839 to the digital innovations of the present. Historical and archival perspectives on uses for photography in different fields of the natural and human sciences. Use of photographic image collections in the Peabody Museum and the Beinecke Library. WR, HU

* HSHM 470a or b and HSHM 471a or b, Directed Reading  Staff
Readings directed by members of the faculty on topics in the history of science, medicine, or public health not covered by regular course offerings. Subjects depend on the interests of students and faculty. Weekly conferences; required papers.

* HSHM 490a or b and HSHM 491a or b, Yearlong Senior Project  Staff
Preparation of a yearlong senior project under the supervision of a member of the faculty. There will be a mandatory meeting at the beginning of the term for students who have chosen the yearlong senior project; students will be notified of the time and location by e-mail before classes begin. Majors planning to begin their projects who do not receive this notice should contact the senior project director. Students expecting to graduate in May enroll in HSHM 490 during the fall term and complete their projects in HSHM 491 in the spring term. December graduates enroll in HSHM 490 in the spring term and complete their projects in HSHM 491 during the following fall term. Majors planning to begin their projects in the spring term should notify the senior project director by the last day of classes in the fall term. Students must meet progress requirements by specific deadlines throughout the first term to receive a temporary grade of SAT for HSHM 490, which will be changed to the grade received by the project upon the project’s completion. Failure to meet any requirement may result in the student’s being asked to withdraw from HSHM 490. For details about project requirements and deadlines, consult the HSHM Senior Project Handbook. Students enrolled in HSHM 491 must submit a completed project to 211 HGS no later than 5 p.m. on April 4, 2016, in the spring term, or no later than 5 p.m. on November 30, 2015, in the fall term. Projects submitted after 5 p.m. on the due date without an excuse from the student’s resident college dean will be subject to grade penalties. Credit for HSHM 490 only on completion of HSHM 491.
* HSHM 492a or b, One-Term Senior Project  
Staff
Preparation of a one-term senior project under the supervision of an HSHM faculty member, or of an affiliated faculty member with approval of the director of undergraduate studies. There will be a mandatory meeting at the beginning of the term for students who have chosen the one-term senior project; students will be notified of the time and location by e-mail before classes begin. Majors planning to begin their projects who do not receive this notice should contact the senior project director. Students expecting to graduate in May enroll in HSHM 492 during the fall term. December graduates enroll in HSHM 492 in the preceding spring term. Students planning to begin their project in the spring should notify the senior essay director by the last day of classes in the fall term. Majors must submit a completed Statement of Intention form signed by the faculty member who has agreed to supervise the project to the HSHM administrator in 207 HGS no later than September 18, 2015 (HSHM 492a), or January 19, 2016 (HSHM 492b). Blank statement forms are available in 207 HGS and in the HSHM Senior Project Handbook. Students enrolled in HSHM 492 must submit a completed senior project to 211 HGS no later than 5 p.m. on December 14, 2015, in the fall term, or no later than 5 p.m. on May 2, 2016, in the spring term. Projects submitted after 5 p.m. on the due date without an excuse from the student’s residential college dean will be subject to grade penalties.