HISTORY OF SCIENCE, MEDICINE, AND PUBLIC HEALTH

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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, scientific collections and material culture, 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.

Pathways The five standard pathways in the major are Medicine and Public Health; Global Health; Science, Technology, and Society; Gender, Reproduction, and the Body; and Media, Knowledge, and Visual Cultures. 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.

Electives 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.

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

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 HSHM-listed course to complete the major. Only students who complete a yearlong senior project are eligible for Distinction in the Major.

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 website.

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 numbered 100 or above, 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 elective

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

Professors Deborah Coen, Naomi Rogers, John Warner
Courses

* HSHM 002b / CLCV 034b / HIST 037b, Medicine and Disease in the Ancient World  Jessica Lamont
Examination of ancient medicine considering modern fields of pathology, surgery, pharmacology, therapy, obstetrics, psychology, anatomy, medical science, ethics, and education, to gain a better understanding of the foundations of Western medicine and an appreciation for how medical terms, theories, and practices take on different meanings with changes in science and society. All readings in English. Enrollment limited to freshmen. Preregistration required; see under Freshman Seminar Program.  HU

* HSHM 004a / HIST 062a, Technology and American Medicine  Rachel Elder
Drawing on perspectives from history and sociology, students explore how technology transformed medical knowledge and practice during the 20th century. Consideration of how technology came to occupy a central role in defining modern medicine through focus on the rise of hospital medicine, domestic medical devices, and numerous diagnostic and information technologies.

* HSHM 005b / HIST 006b, Medicine and Society in American History  Staff
Disease and healing in American history from colonial times to the present. The changing role of the physician, alternative healers and therapies, and the social impact of epidemics from smallpox to AIDS. Enrollment limited to freshmen. Preregistration required; see under Freshman Seminar Program.  WR, HU

HSHM 202a / AMST 247a / FILM 244a / HIST 147a / HLTH 170a, Media and Medicine in Modern America  John Warner and Gretchen Berland
Relationships between medicine, health, and the media in the United States from 1870 to the present. The changing role of the media in shaping conceptions of the body, creating new diseases, influencing health and health policy, crafting the image of the medical profession, informing expectations of medicine and constructions of citizenship, and the medicalization of American life.  HU

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.  WR, HU

HSHM 210a / HIST 443a, Global Histories of Identification and Surveillance  Jose Ragas
Investigation of surveillance technologies that emerged in the last two centuries as the result of transnational cooperation between East and West and South and North. Traditional forms of identification, such as tattoos, family names, and physical features, along with sophisticated technologies, such as fingerprinting, photography, and iris recognition, and the crucial role they play in helping institutions classify, identify, and monitor populations. Consideration of how biometrics and identity cards shape the lives of millions of people worldwide, eroding or empowering them as citizens.

HSHM 214b / HIST 402a, Extraterrestrials in History  Ivano Dal Prete
The notion of extraterrestrials and "radical others" in history and culture from antiquity to the present. Topics include other worlds and their inhabitants in ancient Greece; medieval debates on the plurality of worlds; angels, freaks, native Americans, and other "aliens" of the Renaissance; comet dwellers in puritan New England; Mars as a socialist utopia in the early twentieth century; and visitors from space in American popular culture.  HU

HSHM 215b / HIST 140b, Public Health in America, 1793 to the Present  Naomi Rogers
A survey of public health in America from the yellow fever epidemic of 1793 to AIDS and breast cancer activism at the end of the past century. Focusing on medicine and the state, topics include quarantines, failures and successes of medical and social welfare, the experiences of healers and patients, and organized medicine and its critics.  HU

HSHM 234b, Medicine and Health in Society  Rachel Elder
The history of Western medical knowledge and practice from antiquity to the present. Focusing on the role of medicine in daily life, this course considers patients and practitioners, various approaches to healing, as well as changing understandings of health, disease, and the body across time and place.  HU
* HSHM 401a / HIST 412Ja, Critical Issues in the History of Technology  Jose Ragas
A historical approach to current debates on the role of technology in society and the multiple ways people have imagined, designed, and resisted technological developments since the Industrial Revolution. Topics include how technology is transforming the world; reliance on technology to connect, to combat social inequality, and to promote democracy; whether technology has created a gap between rich and developing countries and isolated users; and how people in the past engaged with technology and what we learn from those experiences.

* HSHM 402a / ASTR 199a / CLCV 213a / HIST 468Ja / NELC 333a, Ancient and Medieval Astronomy  Kevin Van Bladel
The history and methods of classical astronomy, one of the seven classical liberal arts, as practiced by ancient and medieval astronomers of Assyria and Babylonia, Greece, Rome, Persia, and by medieval scholars in Latin, Arabic, and Sanskrit, down to the time of Copernicus and Kepler.  QR, HU, SC

* HSHM 406a / HIST 150Ja, Healthcare for the Urban Poor  Sakena Abedin
Exploration of the institutions, movements, and policies that have attempted to provide healthcare for the urban poor in America from the late nineteenth century to the present, with emphasis on the ideas (about health, cities, neighborhoods, poverty, race, gender, difference, etc) that shaped them. Topics include hospitals, health centers, public health programs, the medical civil rights movement, the women’s health movement, and national healthcare policies such as Medicare and Medicaid.

* HSHM 407b / HIST 289b / HSAR 399b / HUMS 220b, Collecting Nature and Art in the Preindustrial World  Paola Bertucci
A history of museums before the emergence of the modern museum. Focus on: cabinets of curiosities and Wunderkammern, anatomical theaters and apothecaries' shops, alchemical workshops and theaters of machines, collections of monsters, rarities, and exotic specimens.  WR, HU

* HSHM 415b / HIST 179Jb, Historical Perspectives on Science and Religion  Ivano Dal Prete
The engagement between science and religion from a historical standpoint and a multicultural perspective. The Islamic, Jewish, Buddhist, and Christian traditions; the roots of modern creationism; salvation expectations and the rise of modern science and technology. General knowledge of western and world history is expected.  HU

* HSHM 416a / HIST 444Ja, Engineering the Modern Body  Rachel Elder
Exploring the human body in relationship to technology and the larger cultural processes of industrialization, medicalization, and most recently, the digital age. From Victorians who sought restoration from illness with electric belts, to the popularization of cosmetic surgery and gene therapy after World War II, students examine how the body became a canvas for a variety of personal, civic, and national goals.  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

* HSHM 423a / ER&M 377 / HIST 417Ja, Biomedical Futures Since 1945  Joanna Radin
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 433a / HIST 419Ja / WGSS 419a, Gender and Science  Deborah Coen
Exploration of the dual potential of the sciences to reinforce received ideas about gender or to challenge existing sexual and racial hierarchies; the rise of the ideas and institutions of the modern sciences as they have reflected and shaped new notions of femininity and masculinity.

* HSHM 435b / HIST 438Jb, New Approaches to Early Science, Medicine, and Technology  Ivano Dal Prete
Discussion of the history of science, medicine, and technology from the ancient Middle East to the Early Modern period. Topics include the history of the interaction between theories of generation and social practices; politics and policies of conception and birth; social control of abortion and infanticide in western and non-western societies; theories of life and gender; the changing status of the embryo; and the lure of artificial life.  HU

* HSHM 438b / HIST 473Jb, The Neurological Condition  Rachel Elder
Exploration of how science, medicine, and technology have shaped understanding the brain and nervous system as the center of human identity. Consideration of the theories of diminishing “nerve force,” the electric cures of the Victorian era, fMRIs, and the current Century of the Brain research. Topics include the rise of professional neurology and neuroscience, cultural meanings of nerves and the brain, and the intimate role of patients and human subjects in formulating this science from the nineteenth century to the present.  HU

* HSHM 440b / HIST 444Jb, Scientific Instruments and the Making of Knowledge  Charlotte Abney Salomon
A survey of the design and use of instruments for making scientific knowledge from the Renaissance to the present. Topics include visualizing the invisible; proof and credit; standardization and precision; exploration, geography, and politics; doctor-patient interaction; and science and the public. Students have weekly hands-on interactions with historical scientific instruments from the Peabody museum collections.  WR, HU
Penalties. 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.

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