HSOC 001 Emergence of Modern Science
During the last 500 years, science has emerged as a central and transformative force that continues to reshape everyday life in countless ways. This introductory course will survey the emergence of the scientific world view from the Renaissance through the end of the 20th century. By focusing on the life, work, and cultural contexts of those who created modern science, we will explore their core ideas and techniques, where they came from, what problems they solved, what made them controversial and exciting and how they relate to contemporary religious beliefs, politics, art, literature, and music. The course is organized chronologically and thematically. In short, this is a "Western Civ" course with a difference, open to students at all levels.

For BA Students: Hum/Soc Sci or Nat Sci/Math Sector
Taught by: Kucuk
Course usually offered in fall term
Also Offered As: STSC 001
Activity: Lecture
1 Course Unit

HSOC 002 Medicine in History
This course surveys the history of medical knowledge and practice from antiquity to the present. No prior background in the history of science or medicine is required. The course has two principal goals: (1) to give students a practical introduction to the fundamental questions and methods of the history of medicine, and (2) to foster a nuanced, critical understanding of medicine's complex role in contemporary society. The course takes a broadly chronological approach, blending the perspectives of the patient, the physician, and society as a whole—recognizing that medicine has always aspired to "treat" healthy people as well as the sick and infirm. Rather than history "from the top down" or "from the bottom up," this course sets its sights on history from the inside out. This means, first, that medical knowledge and practice is understood through the personal experiences of patients and caregivers. It also means that lectures and discussions will take the long-discredited knowledge and treatments of the past seriously, on their own terms, rather than judging them by today's standards. Required readings consist largely of primary sources, from elite medical texts to patient diaries. Short research assignments will encourage students to adopt the perspectives of a range of actors in various historical eras.

For BA Students: History and Tradition Sector
Taught by: Barnes
Course usually offered in fall term
Also Offered As: HIST 036, STSC 002
Activity: Lecture
1 Course Unit

HSOC 003 Technology and Society
Technology plays an increasing role in our understandings of ourselves, our communities, and our societies, in how we think about politics and war, science and religion, work and play. Humans have made and used technologies, though, for thousands if not millions of years. In this course, we will use this history as a resource to understand how technologies affect social relations, and conversely how the culture of a society shapes the technologies it produces. Do different technologies produce or result from different economic systems like feudalism, capitalism and communism? Can specific technologies promote democratic or authoritarian politics? Do they suggest or enforce different patterns of race, class or gender relations? Among the technologies we'll consider will be large objects like cathedrals, bridges, and airplanes; small ones like guns, clocks and birth control pills; and networks like the electrical grid, the highway system and the internet.

For BA Students: Society Sector
Taught by: Benson
Course usually offered in spring term
Also Offered As: STSC 003
Activity: Lecture
1 Course Unit

HSOC 010 Health and Societies
"Two fundamental questions structure this course: (1) What kinds of factors shape population health in various parts of the world in the twenty-first century? and (2) What kinds of intellectual tools are necessary in order to study global health? Grasping the deeper "socialness" of health and health care in a variety of cultures and time periods requires a sustained interdisciplinary approach. "Health and Societies: Global Perspectives" blends the methods of history, sociology, anthropology and related disciplines in order to expose the layers of causation and meaning beneath what we often see as straightforward, common-sense responses to biological phenomena. Assignments throughout the semester provide a hands-on introduction to research strategies in these core disciplines. The course culminates with pragmatic, student-led assessments of global health policies designed to identify creative and cost effective solutions to the most persistent health problems in the world today."

For BA Students: Humanities and Social Science Sector
Taught by: McKay
Course usually offered in spring term
Activity: Lecture
1 Course Unit
Notes: Also fulfills General Requirement in Science Studies for Class of 2009 and prior
HSOC 032 Risky Business
This freshman seminar on medical decision making will focus on personal and public medical and health decisions - how we make them and how they can be improved. While in theory medical decisions are in large part both informed and constrained by scientific evidence, in reality they are much more complex. Drawing upon a range of information sources including original research and popular media, the seminar will introduce students to the challenges of making personal and public (i.e., policy) decisions under conditions of inherent uncertainty and resource constraint. We will examine how research and scholarship can inform and improve such decisions and decision making processes. Using a variety of approaches (class discussions, examination of primary research, popular media, simple experiments, expert guests) this highly interactive seminar will provide a strong introductory foundation to medical decision making specifically and, by extension, to decision making under conditions of uncertainty more generally.
Taught by: Schwartz
Course not offered every year
Also Offered As: STSC 032
Activity: Seminar
1 Course Unit

HSOC 039 The Healer's Tale: Negotiating Trust in Modern America
Dramatic, deadly, and terrifying in their brutal immediacy, outbreaks of epidemic disease have devastated and transformed human societies since the beginnings of recorded history. From the Black Death to cholera to AIDS, epidemics have wrought profound demographic, social, political, and cultural change all over the world. Such is the power of their mystery and horror that while thousands die everyday in the United States from mundane illnesses such as heart disease or lung cancer, panic grips the land at the thought of a handful of deaths from seemingly exotic afflictions such as West Nile encephalitis and “weaponized” anthrax.
Through a detailed analysis of specific historical outbreaks, this seminar will investigate the causes and effects of epidemic disease, and will examine the ways in which different societies in different eras have responded in times of crisis.
Taught by: Tighe
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 050 Mad, Bad and Sad: The Construction, Prevention and Treatment of Mental Illness
This freshman seminar is designed to introduce students to research and debates surrounding the concept of mental disorder and to help them to think critically about these disorders’ biological and social construction.
In addition to learning about the presentation and treatment of mental illness, they will also be introduced to concepts in epidemiology, psychology, psychiatry and health services research, and learn about the history of the science surrounding psychiatry and how different beliefs at different times have influenced policy, systems, services and treatment.
Taught by: Mandell
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 052 Autism Epidemic
The CDC estimates that 1 in 150 children have autism. Three decades ago, this number was 1 in 5,000. The communities in which these children are identified in ever increasing numbers are ill prepared to meet their needs. Scientists have struggled to understand the causes of this disorder, its treatment, and why it appears to be rapidly increasing. Families, policy makers, schools and the healthcare system have argued bitterly in the press and in the courts about the best way to care for these children and the best ways to pay for this care. In this class, we will use autism as a case study to understand how psychiatric and developmental disorders of childhood come to be defined over time, their biological and environmental causes identified, and treatments developed. We will also discuss the identification and care of these children in the broader context of the American education and healthcare systems.
Taught by: Mandell
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 059 Medical Missionaries and Partners
Global health is an increasingly popular goal for many modern leaders. Yet critics see evidence of a new imperialism in various aid programs. We will examine the evolution over time and place of programs designed to improve the health of underserved populations. Traditionally categorized as public health programs or efforts to achieve a just society, these programs often produce results that are inconsistent with these goals. We will examine the benefits and risks of past programs and conceptualize future partnerships on both a local and global stage.
Students should expect to question broadly held beliefs about the common good and service. Ultimately we will examine the concept of partnership and the notion of community health, in which ownership, control, and goals are shared between outside expert and inside community member.
Taught by: Bream
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 100 Introduction to Sociological Research
One of the defining characteristics of all the social sciences, including sociology, is a commitment to empirical research as the basis for knowledge. This course is designed to provide you with a basic understanding of research in the social sciences and to enable you to think like a social scientist. Through this course students will learn the logic of sociological inquiry and the nuts and bolts of doing empirical research. We will focus on such issues as the relationship between theory and research, the logic of research design, issues of conceptualization and measurement, basic methods of data collection, and what social scientists do with data once they have collected them.
By the end of the course, students will have completed sociological research projects utilizing different empirical methods, be able to evaluate the strengths and weaknesses of various research strategies, and read (with understanding) published accounts of social science research.
Taught by: Armenta, Harknett, Koppel, Park, Smith, Wilde
One-term course offered either term
Also Offered As: SOCI 100
Activity: Lecture
1 Course Unit
HSOC 107 Science, Technology & Medicine in Colonial India
In this course we will explore the broad contours of the histories of Science, Medicine and Technology in Colonial India (c. 1757-1947). This broad overview will be delivered each week through a case study based on one particular scientific discipline, technological project or medical event. Overall the course will attempt to locate the development of science, technology and medicine within the social, political and cultural context of colonial India. It is also worth noting that ‘Colonial India’, will include discussions of regions which today make up the Republic of India, Pakistan and Bangladesh.
Taught by: P. Mukarji
One-term course offered either term
Also Offered As: STSC 107
Activity: Seminar
1 Course Unit

HSOC 110 Science and Literature
This course will explore the emergence of modern science fiction as a genre, the ways it has reflected our evolving conceptions of ourselves and the universe, and its role as the mythology of modern technological civilization. We will discuss such characteristic themes as utopias, the exploration of space and time, biological engineering, superman, robots, aliens, and other worlds—and the differences between European and American treatment of these themes.
For BA Students: Arts and Letters Sector
Taught by: Adams
Course usually offered in spring term
Also Offered As: COML 074, ENGL 075, HIST 117, STSC 110
Activity: Lecture
1 Course Unit

HSOC 111 Health of Populations.
This course develops some of the major measures used to assess the health of populations and uses those measures to consider the major factors that determine levels of health in large aggregates. These factors include disease environment, medical technology, public health initiatives, and personal behaviors. The approach is comparative and historical and includes attention to differences in health levels among major social groups.
Taught by: Kohler
One-term course offered either term
Also Offered As: SOCI 111
Activity: Lecture
1 Course Unit

HSOC 123 Darwin's Legacy: The Evolution of Evolution
Darwin's conceptions of evolution have become a central organizing principle of modern biology. This lecture course will explore the origins and emergence of his ideas, the scientific work they provoked, and their subsequent re-emergence into modern evolutionary theory. In order to understand the living world, students will have the opportunity to read and engage with various classic primary sources by Darwin, Mendel, and others. The course will conclude with guest lectures on evolutionary biology today, emphasizing current issues, new methods, and recent discoveries. In short, this is a lecture course on the emergence of modern evolutionary biology--its central ideas, their historical development and their implications for the human future.
For BA Students: Living World Sector
Taught by: Gil-Riano
Course usually offered in spring term
Also Offered As: STSC 123
Activity: Lecture
1 Course Unit

HSOC 135 The Politics of Food
In this ABCS and Fox Leadership Program course students will use course readings and their community service to analyze the institutions, ideas, interests, social movements, and leadership that shape "the politics of food" in different arenas. Service sites include: the Agatston Urban Nutrition Initiative; the Greater Philadelphia Coalition Against Hunger; the West Philadelphia Recess Initiative; the Vetri Foundation's Eatiquette Program; and Bon Appetit at Penn. Academic course work will include weekly readings, Canvas blog posts, several papers, and group projects. Service work will include a group presentation (related to your placement) as well as reflective writing during the semester. Typically one half of each class will be devoted to a discussion of the readings and the other either to group work and discussion of service projects, or to a course speaker. This course is affiliated with the Communication within the Curriculum (CWIC) program, and student groups are required to meet twice with speaking advisors prior to giving presentation.
Taught by: Summers
Course not offered every year
Also Offered As: PSCI 135
Activity: Lecture
1 Course Unit

HSOC 140 History of Bioethics
This course is an introduction to the historical development of medical ethics and to the birth of bioethics in the twentieth-century United States. We will examine how and why medical ethical issues arose in American society at this time. Themes will include human experimentation, organ donation, the rise of medical technology and euthanasia. Finally, this course will examine the contention that the current discipline of bioethics is a purely American phenomenon that has been exported to Great Britain, Canada and Continental Europe.
Taught by: Linker
One-term course offered either term
Activity: Seminar
1 Course Unit

HSOC 145 Comparative Medicine
This course explores the medical consequences of the interaction between Europe and the "non-West." It focuses on three parts of the world Europeans colonized: Africa, South Asia, and Latin America. Today's healing practices in these regions grew out of the interaction between the medical traditions of the colonized and those of the European colonizers. We therefore explore the nature of the interactions. What was the history of therapeutic practices that originated in Africa or South Asia? How did European medical practices change in the colonies? What were the effects of colonial racial and gender hierarchies on medical practice? How did practitioners of "non-Western" medicine carve out places for themselves? How did they redefine ancient traditions? How did patients find their way among multiple therapeutic traditions? How does biomedicine take a different shape when it is practiced under conditions of poverty, or of inequalities in power? How do today's medical problems grow out of this history? This is a fascinating history of race and gender, of pathogens and conquerors, of science and the body. It tells about the historical and regional roots of today's problems in international medicine.
For BA Students: History and Tradition Sector
Taught by: Mukharji
Course usually offered in fall term
Also Offered As: HIST 146, STSC 145
Activity: Lecture
1 Course Unit
HSOC 150 American Health Policy
"American Health Policy" places the success or failure of specific pieces of U.S. health care legislation into social and political context. The course covers the time period from the U.S. Civil War to the 2010 Affordable Care Act (ACA), addressing two central questions: 1) Why was the United States one of the only industrialized nations to, until recently, have a private, non-nationalized, non-federalized health care system? 2) Why has U.S. health insurance historically been a benefit given through places of employment? Some topics addressed include: private health insurance, industrial health and workmen's compensation, the welfare state (in Europe, Canada, and the U.S.), maternal and infant care programs, Medicare and Medicaid. One of the main take-home messages of the course is that 20th-century U.S. health care policies both reflected and shaped American social relations based on race, class, gender, and age. This course is a combination lecture and "SAIL" class. SAIL stands for "Structured, Active, In-Class Learning." During many class periods, students will work in small groups on a specific exercise, followed by a large group discussion and/or brief lecture. Students who choose to take this course, therefore, must be fully committed to adequately preparing for class and to working collaboratively in class. (Note: the 2015 format will be somewhat different from the 2014 format).

Taught by: Johnson
One-term course offered either term
Also Offered As: SOCI 152
Activity: Seminar
1 Course Unit

HSOC 152 Technology and Medicine in Modern America
Medicine as it exists in contemporary America is profoundly technological; we regard it as perfectly normal to be examined with instruments, to expose our bodies to many different machines; and to have knowledge produced by those machines mechanically/electronically processed, interpreted and stored. We are billed technologically, prompted to attend appointments technologically, and often buy technologies to protect, diagnose, or improve our health: consider, for example, HEPA-filtering vacuum cleaners; air-purifiers; fat-reducing grills; bathroom scales; blood pressure cuffs; pregnancy testing kits; blood-sugar monitoring tests; and thermometers. Yet at the beginning to the twentieth century, medical technologies were scarce and infrequently used by physicians and medical consumers alike. Over the course of this semester, we will examine how technology came to medicine's center stage, and what impact this change has had on medical practice, medical institutions and medical consumers - on all of us!

Taught by: Johnson
Course usually offered summer term only
Also Offered As: STSC 162
Activity: Seminar
1 Course Unit

HSOC 157 Chinese Science
Taught by: Petrie
One-term course offered either term
Also Offered As: STSC 152
Activity: Lecture
1 Course Unit

HSOC 170 Ancient Greek Medicine
The history of modern medicine as we know it in the West is remarkably recent; until the nineteenth century prevailing theories of the body and mind, and the many therapeutic methods to combat disease, were largely informed by an elaborate system developed centuries earlier in ancient Greece, at a period when the lines between philosophy, medicine, and what we might consider magic, were much less clearly defined than they are today. This course will examine the ways in which the Greeks conceptualized the body, disease, and healing, and will compare these to medical culture of our own time. We will consider sources from Hippocrates, Plato, and Aristotle to Galen and Soranus, and whenever possible we will juxtapose these writings with modern discourse about similar topics. Several visitors from the Medical School are expected to participate on a regular basis. All readings will be in English and no previous background in Classical Studies is required.

Taught by: Rosen
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 179 Environmental History
This course provides an introduction to environmental history—the history of the interrelationship between humans and the rest of nature. In the words of historian J.R. McNeill, "Human history has always and will always unfold within a larger biological and physical context, and that context evolves in its own right. Especially in recent millennia, that context has co-evolved with humankind." In this course we will study this co-evolution between human actors and non-human actors in global history, analyzing political, social, cultural and economic factors that affect ideas about nature and material effects on nature. We will consider the concept of the Anthropocene and study current environmental changes and challenges.

Taught by: Greene, A
Course not offered every year
Also Offered As: STSC 179
Activity: Lecture
1 Course Unit

HSOC 202 The Scientific Revolution
During the 16th and 17th centuries, something that resembled modern science emerged from something that did not. Though the nature and cause of that transition are contested, there were unquestionably many pivotal developments in the content and conduct of science, and it is in this period that many of the 'founding' figures of science, from Copernicus to Galileo to Newton, are identified. This course will examine the many elements that went into the transition, including the revolution in cosmology, the revolt against ancient natural philosophy, the rise of experimentalism, the new philosophies of inquiry, new social structures for natural inquiry and the conceptual foundations of classical physics.

Taught by: VOELKEL
Course not offered every year
Also Offered As: STSC 202
Activity: Lecture
1 Course Unit
HSOC 206 Doing Good?: Humanitarianism and Global Health
This course will explore the current context of health policy, health reform, and health service delivery in the developing world. After examining global economic and political context of health care, students will analyze the role that economic development plays in promoting or undermining health. Students will examine key disease challenges such as tuberculosis, malnutrition, and HIV/AIDS.
Taught by: McKay
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 209 Race and Gender in Global Science
This course critically examines the creation of scientific conceptions of 'race' and 'sex' in the modern era and their global impact. How did 'race' and 'sex' come to be the primary categories through which human variation has been classified in the modern West? What concepts of "race" and "sex" did colonial scientists, doctors, naturalists, and other experts invent, and how and why did they do this? How have scientific conceptions of 'race' and 'sex' been adapted to fit the sociopolitical projects of formerly colonized regions? And how have recent developments in genomic science sought to reinvent these categories? With these questions in mind, this course challenges us to think critically about the political contexts in which conceptions of 'race' and 'sex' have been crafted as well as how they have been contested and re-defined.
Taught by: Gil-Riano
Course usually offered in spring term
Also Offered As: STSC 209
Activity: Seminar
1 Course Unit

HSOC 212 Science Technology and War
In this survey we explore the relationships between technical knowledge and war in the nineteenth and twentieth centuries. We attend particularly to the centrality of bodily injury in the history of war. Topics include changing interpretations of the machine gun as inhumane or acceptable; the cult of the battleship; banned weaponry; submarines and masculinity; industrialized war and total war; trench warfare and mental breakdown; the atomic bomb and Cold War; chemical warfare in Viet Nam; and "television war" in the 1990s.
For BA Students: Humanities and Social Science S
Taught by: Lindee
Course not offered every year
Also Offered As: STSC 212
Activity: Lecture
1 Course Unit

HSOC 216 Gender and Health
Women’s health is a constant refrain of modern life, prompting impassioned debates that speak to the fundamental nature of our society. Women's bodies are the tableaux across which politicians, physicians, healthcare professional, activists, and women themselves dispute issues as wide-ranging as individual versus collective rights, the legitimacy of scientific and medical knowledge, the role of the government in healthcare, inequalities of care, and the value of experiential knowledge, among many others. Understanding the history of these questions is crucial for informed engagement with contemporary issues.
Taught by: Linker
Course not offered every year
Also Offered As: GSWS 216
Activity: Seminar
1 Course Unit

HSOC 230 Fundamentals of Epidemiology
This course introduces students to the basic tenets of epidemiology and how to quantitatively study health at the population level. Students learn about measures used to describe populations with respect to health outcomes and the inherent limitations in these measures and their underlying sources of data. Analytic methods used to test scientific questions about health outcomes in populations then are covered, again paying particular attention to the strength and weaknesses of the various approaches. Multiple large epidemiologic research and field studies are used as in-class exemplars.
Course usually offered in spring term
Activity: Seminar
1 Course Unit

HSOC 232 Social Epidemiology
Illness, crime, and other instances of social dysfunction do not happen in a vacuum, nor are they distributed randomly throughout society. The field of social epidemiology examines the influence of workplace, neighborhood, social relationships, and other nonbiological factors on health outcomes. This course gives students the skills to explore and assess complex health challenges that are seen in popular media and public discourse by examining such factors as healthcare access, social inequality, racism and discrimination, and trust and social capital. Using readings, videos and interactive discussions with a focus on emergent health issues, this course equips students to diagnose and interpret underlying reasons for poor health using social epidemiological tools, and to consider practical interventions to address those fundamental causes of illness.
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 238 Introduction to Medical Anthropology
Introduction to medical anthropology takes central concepts in anthropology – culture, adaptation, human variation, belief, political economy, the body – and applies them to human health and illness. Students explore key elements of healing systems including healing technologies and healer-patient relationships. Modern day applications for medical anthropology are stressed.
For BA Students: Humanities and Social Science S
Taught by: Barg
One-term course offered either term
Also Offered As: ANTH 238
Activity: Lecture
1 Course Unit
HSOC 239 Global Health: Anthropological Perspectives
In some parts of the world spending on pharmaceuticals is astronomical. In others, people struggle for survival amid new and reemerging epidemics and have little or no access to basic or life-saving therapies. Treatments for infectious diseases that disproportionately affect the world’s poor remain under-researched and global health disparities are increasing. This interdisciplinary seminar integrates perspectives from the social sciences and the biomedical sciences to explore 1) the development and global flows of medical technologies; 2) how the health of individuals and groups is affected by medical technologies, public policy, and the forces of globalization as each of these impacts local worlds. This course is a Benjamin Franklin Seminar.
Taught by: Petryna
Course not offered every year
Also Offered As: ANTH 273
Activity: Seminar
1 Course Unit

HSOC 251 Foundations of Public Health
Many factors have shaped, and continue to shape, population health and public health policy. This course will explore the concept, mission, and core functions of public health. Students will have a chance to learn about its key methodological (epidemiology, biostatistics) and content (environmental health, social and behavioral sciences, health policy) areas. In addition, we will focus on topics of particular relevance to the current health of the public; topics likely will include the basics of life (food, water, and shelter) and topics of current interest (e.g., motor vehicle crashes, mental health, violence).
Taught by: Sorenson
One-term course offered either term
Activity: Lecture
1 Course Unit

HSOC 271 Greek & Roman Medicine
The history of Western medicine is remarkably recent; until the nineteenth century prevailing theories of the body and mind, and many therapeutic methods to combat disease, were largely informed by an elaborate system developed centuries earlier in ancient Greece, at a period when the lines between philosophy, medicine, and what we might consider magic, were much less clearly defined than they are today. This course will examine the ways in which the Greeks, and then the Romans, conceptualized the body, disease, and healing, and will compare these to medical culture of our time. We will consider sources from Hippocrates, Plato, and Aristotle to Galen and Soranus, and will juxtapose these writings with modern discourse about similar topics. We will also pay some attention to ancient pharmacology and religious healing, and will visit the Penn Museum to see their collection of ancient medical instruments. All readings will be in English and no previous background in Classical Studies is required. This course will be especially appealing (and useful) to Pre-med and Nursing students, and to students interested in the History of Science, Ancient Philosophy, and Classics.
Taught by: Rosen
Course not offered every year
Also Offered As: CLST 271
Activity: Seminar
1 Course Unit
Notes: Fulfills History Tradition Distribution Requirement

HSOC 275 Medical Sociology
This course is designed to give the student a general introduction to the sociological study of medicine. Medical sociology is a broad field, covering topics as diverse as the institution and profession of medicine, the practice of medical care, and the social factors that contribute to sickness and well-being. While we will not cover everything, we will attempt to cover as much of the field as possible through four central thematic units: (1) the organization of development of the profession of medicine, (2) the delivery of health-care, (3) social cultural factors in defining health, and (4) the social causes of illness. Throughout the course, our discussions will be designed to understand the sociological perspective and encourage the application of such a perspective to a variety of contemporary medical issues.
For BA Students: Society Sector
Taught by: Schnittker
One-term course offered either term
Also Offered As: SOCI 175, SOCI 275
Activity: Lecture
1 Course Unit
HSOC 279 Nature’s Nation: Americans and Their Environment
The United States is “nature’s nation.” Blessed with an enormous, resource-rich geographically diverse and sparsely settled territory, Americans have long seen “nature” as central to their identity, prosperity, politics and power, and have transformed their natural environment accordingly. But what does it mean to be “nature’s nation? This course describes and explores how American “nature” has changed over time. How and why has American nature changed over the last four centuries? What have Americans believed about the nation’s nature, what have they known about the environment, how did they know it and how have they acted on beliefs and knowledge? What didn’t or don’t they know? How have political institutions, economic arrangements, social groups and cultural values shaped attitudes and policies? How have natural actors (such landscape features, weather events, plants, animals, microorganisms) played roles in national history? In addition to exploring the history of American nature, we will look for the nature in American history. Where is “nature” in some of the key events of American history that may not, on the surface, appear to be "environmental?"

Taught by: Greene, A
Course not offered every year
Also Offered As: STSC 279
Activity: Seminar
1 Course Unit

HSOC 299 Independent Study
Activity: Independent Study
1 Course Unit

HSOC 302 Stem Cell Science in Schools: History, Ethics, and Education
This course will provide University of Pennsylvania and a local Philadelphia High School students with the opportunity to learn fundamental biology concepts and apply them in a hands-on, inquiry-based approach that is also attentive to society, history and social context. Biological sciences have long been deeply engaged with social issues, and our topics for this course reflect their relevance to everyday life. Topics of this course will include, but are not limited to, cell development and stem cell biology, which form the basis of the emerging field of Regenerative Medicine. Penn students will reinforce their learning of these concepts by mentoring high school students, demonstrations by Penn scientists, and a co-teaching method involving Penn faculty and a partnering high school teacher. A primary goal of this course is to expose both Penn and high school students to cutting edge science and its societal impact. Through this course Penn students will learn critical skills that can help them bring scientific ideas to professionals, and important to any educated professional.

Taught by: Shuda
Course not offered every year
Activity: Lecture
1 Course Unit

HSOC 307 Globalization & Medicine in Colonial & Postcolonial South Asia
This seminar will explore a wide range of themes at the intersection of globalization and therapeutic cultures in South Asia and amongst South Asian diasporas. To begin with the course understands ‘supraterritoriality’ as the key feature of globalization and proceeds to interrogate the myriad ways in which this supraterritoriality was produced, consumed, used and abused within the therapeutic cultures that have been, and on occasion still are, available in south Asia—both in reality and symbolically. Each week, through a specific case study, framed by a few theoretical readings, we will attempt to deepen and problematize the simple definition of globalization with which we start the course. Throughout the course there will be a strong emphasis on combining case study-based empirical material with theoretical interventions in Cultural Theory and Postcolonial Studies.

Taught by: Mukharji
One-term course offered either term
Also Offered As: STSC 307
Activity: Seminar
1 Course Unit

HSOC 312 Weapons of Mass Destruction
The course explores the historical development of traditional weapons of mass destruction such as chemical, nuclear and biological agents, in addition to newer and seemingly non-traditional weapons such as land mines and civilian aircraft that can also be employed to cause large numbers of injuries and deaths among civilian and military populations. Through case studies in technology and public health, students will evaluate the medical, scientific, environmental, and cultural ramifications of these weapons and their effect on human health and society by analyzing the rise of the military-industrial-academic-complex in twentieth century America.

Taught by: Lindee
One-term course offered either term
Also Offered As: STSC 312
Activity: Seminar
1 Course Unit

HSOC 321 Health in Urban Communities
This course will introduce students to anthropological approaches to health and to theories of participatory action research. This combined theoretical perspective will then be put into practice using West Philadelphia community schools as a case study. Students will become involved in design and implementation of health-related projects at an urban elementary or middle school. As one of the course requirements, students will be expected to produce a detailed research proposal for future implementation.

Course usually offered in fall term
Also Offered As: ANTH 312, URBS 312
Activity: Seminar
1 Course Unit
HSOC 334 Birth Culture and Medical Technology
How we are born and give birth can vary more than most people realize. Until the rise of medical technology, women gave birth at home surrounded by other women. Now, the majority of Americans are born in hospitals, and a large percentage of those birth are the result of surgical interventions. This course will explore the medicalization of birth, as well as the movements dedicated to promoting home birth, natural birth, and midwifery. Many of the readings will examine birth from an unapologetically feminist and/or holistic perspective, and we will discuss the psychological, political, cultural and spiritual dimensions of birth practices. We will also consider the impact of increasingly sophisticated medical technology on conception and pregnancy, including in vitro fertilization, surrogate mothers, and extending the childbearing years well into late life. An important theme throughout will be the concept of "appropriate technology" -- which technologies are appropriate and who decides? Readings will be drawn from a number of sources, principally midwifery, nursing, and medical journals.

Taught by: Mackenzie
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 335 Healthy Schools
This academically based community service research seminar will develop a pilot program to test the efficacy of using service-learning teams of undergraduates and graduate students to facilitate the development of School Health Councils (SHCs) and the Center for Disease Control's School Health Index (SHI) school self-assessment and planning tool in two elementary schools in West Philadelphia. This process is intended to result in a realistic and meaningful school health implementation plan and an ongoing action project to put this plan into practice. Penn students will involve members of the school administration, teachers, staff, parents and community members in the SHC and SHI process with a special focus on encouraging participation from the school's students. In this model for the use of Penn service-learning teams is successful, it will form the basis of an ongoing partnership with the School District's Office of health, Safety & Physical Education to expand such efforts to more schools.

Taught by: Summers
Course not offered every year
Also Offered As: PSCI 335
Activity: Seminar
1 Course Unit

HSOC 337 Race and Medicine in the Global South
Racialized medical provisions under Apartheid in South Africa, theories of racial immunity to malaria in the Philippines and contemporary investigations of caste-based disease risks in India are some of the topics to be covered in this course. From the more straightforward issues of racial discrimination in medicine, to more complex issues of racial immunity or racial susceptibility to disease, medicine and race have been entangled together in multiple ways. More importantly these issues are far from being matters of the past. Genomic medicine and risk society have combined to make race and medicine one of the most potent contemporary issues. Outside the Western World, in the Global South, these issues are further refracted through local cultural, historical and political concerns. This course will take a long-term view of these contemporary issues.

Taught by: Mukharji
One-term course offered either term
Activity: Seminar
1 Course Unit

HSOC 338 Hybrid Science: Nature, health, and society in Latin America
What role did science and medicine play in the creation and growth of the Spanish and Portuguese empires? And why was the creation of science and health institutions crucial to the revolutionary movements for independence in Latin America? This course examines science and medicine in Latin America by attending to the ways that knowledge of nature and health has been central to the political struggles of the countries in this region. A crucial dynamic shaping the history and culture of this region is the interplay between the healing practices and cosmologies of European settlers, indigenous Americans, and the descendants of African slaves. Bearing this interplay in mind, this course explores how Latin America has been a fertile site of scientific creativity. It also examines the ways in which Latin American scientists and medical experts have refashioned concepts and practices from Europe and North America to fit local circumstances.

Taught by: Gil-Riano
Course usually offered in spring term
Also Offered As: STSC 338
Activity: Seminar
1 Course Unit

HSOC 347 Asian Medicine and Modernity
From Yoga clinics to acupuncture shops, from Sting's advocacy of Tantric Sexual regimens to Dr. Gregory House recommending the Cordyceps sinensis, Asian medicines are an increasingly important and conspicuous facet of the modern world. Yet, nearly all of them claim to be thousands of years old. How have they managed to survive and thrive despite their age? Why have they not disappeared like so much else from bygone Asian intellectual traditions? This course asks these and similar questions. It looks at the multifaceted ways in which Asian medicines have negotiated with modernity.

Taught by: Mukharji
One-term course offered either term
Activity: Seminar
1 Course Unit

HSOC 348 Current Issues in Global Health
Taught by Johnson
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 359 Nutritional Anthropology
Human nutrition and nutritional status within context of anthropology, health, and disease. Particular emphasis on nutritional problems and the development of strategies to describe, analyze, and solve them. Students will participate in the Urban Nutrition Initiative, an academically based community service project in local area schools.

Course not offered every year
Also Offered As: ANTH 359
Activity: Seminar
1 Course Unit
HSOC 379 Animals in Science Medicine Technology
This course explores human-animal relationships: the wide range of these relationships, why they originated and how they have changed over time. How have humans classified, valued, utilized, consumed, behaved toward and understood animals? Where is the boundary between humans and other animals, and how do we know, since humans are also animals? How is that boundary been maintained and redefined? Are humans part of the animal "natural" world- or apart from it? How are humans similar to and different from other kinds of animals? How do we know about animals and what is it we know? To what extent are questions about animals really questions about humans? How has the meaning of animal changed over time? The course focuses in particular to the roles and relationships of animals within science and medicine, and as biotechnologies.
Taught by: Greene, A
One-term course offered either term
Also Offered As: STSC 379
Activity: Seminar
1 Course Unit

HSOC 382 Guns and Love Gone Bad: A Public Health Perspective
This course will address two health concerns of long-standing controversy: the role of guns in population health and violence in relationships. We will adopt a healthy skepticism about the assumptions and ideologies that currently dominate formal and informal discourse about these topics. A life span perspective - guns from design through use, and abuse from childhood through late life - will be grounded in a public health injury prevention framework. As a function of this approach, we will examine key aspects of the social context in which guns and abuse exist and within which related policies are formulated. Students are encouraged to examine their perceptions about these issues so that they can become more effective members of a society that appears to maintain a deep ambivalence about guns and about violence in relationships.
Taught by: Sorenson
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 391 Bioethics and National Security
At least since Augustine proposed a theory of "just war," armed conflict has been recognized as raising ethical issues. These issues have intensified along with the power and sophistication of weapons of war, and especially with increasing engineering capabilities and basic knowledge of the physical world. The life sciences have had their place in these developments as well, perhaps most vividly with the revelations of horrific experiments conducted by the Nazi and Imperial Japanese militaries, but with much greater intensity due to developments in fields like genetics, neuroscience and information science, and the widely recognized convergence of physics, chemistry, biology and engineering. The fields of bioethics and national security studies both developed in the decades following World War II. During the cold war little thought was given to the fact that many national security issues entail bioethical questions, but this intersection has been increasingly evident over the past two decades. In spite of the overlapping domains of bioethics and national security, there has been remarkable little systematic, institutional response to the challenges presented by these kinds of questions: - What rules should govern the conduct of human experiments when national security is threatened? - Is it permissible to study ways that viruses may be genetically modified in order to defeat available vaccines, even for defensive purposes? - What role may physicians or other health care professionals play in interrogation of suspected terrorists? - Must warfighters accept any and all drugs or devices that are believed to render them more fit for combat, including those that may alter cognition or personality? - What responsibilities does the scientific community have to anticipate possible "dual purpose" uses or other unintended consequences of its work? Deploying the resources of ethics, philosophy, history, sociology and theory, this course will address these and other problems.
Taught by: Moreno
Course usually offered in spring term
Also Offered As: STSC 391
Activity: Seminar
1 Course Unit
HSOC 411 Sports Science Medicine Technology
Why did Lance Armstrong get caught? Why do Kenyans win marathons? Does Gatorade really work? In this course, we won't answer these questions ourselves but will rely upon the methods of history, sociology, and anthropology to explore the world of the sport scientists who do. Sport scientists produce knowledge about how human bodies work and the intricacies of human performance. They bring elite (world-class) athletes to their laboratories or their labs to the athletes. Through readings, discussions, and original research, we will find out how these scientists determine the boundary between "natural" and "performance-enhanced," work to conquer the problem of fatigue, and establish the limits and potential of human beings. Course themes include: technology in science and sport, the lab vs. the field, genetics and race, the politics of the body, and doping. Course goals include: 1) reading scientific and medical texts critically, and assessing their social, cultural, and political origins and ramifications; 2) pursuing an in-depth The course fulfills the Capstone requirement for the HSOC/STSC majors. Semester-long research projects will focus on "un-black-boxing" the metrics sport scientists and physicians use to categorize athletes' bodies as "normal" or "abnormal." For example, you may investigate the test(s) used to define whether an athlete is male or female, establish whether an athlete's blood is "too" oxygenated, or assess whether an athlete is "too" fast (false start). Requirements therefore include: weekly readings and participation in online and in-class discussions; sequenced research assignments; peer review; and a final 20+page original research paper and presentation.
Taught by: Johnson
One-term course offered either term
Also Offered As: STSC 411
Activity: Seminar
1 Course Unit

HSOC 413 Perfect Bodies
Taught by: Linker
One-term course offered either term
Also Offered As: STSC 413
Activity: Seminar
1 Course Unit

HSOC 420 Research Seminar Health and Society
This course is designed to provide HSOC students with the tools necessary to undertake original research, guiding them through the research and writing process. Students will produce either a polished proposal for a senior thesis project, or, if there is room in the course, a completed research paper by the end of term. Students work individually, in small groups and under the close supervision of a faculty member to establish feasible research topics, develop effective research and writing strategies, analyze primary and secondary sources, and provide critiques of classmates' drafts. Students must apply for this course by December 1.
Taught by: Cnric
Course usually offered in spring term
Activity: Seminar
1 Course Unit

HSOC 421 Medicine and Development
This course is devoted to readings and research about medicine and development in resource-poor countries. The focus is on medical institutions and practices as seen within the broader context of development. We try to understand changing interpretations of how development takes place—of its relationship to technical knowledge, power and inequality. The course gives students the opportunity to do intensive original research.
Taught by: McKay
One-term course offered either term
Activity: Seminar
1 Course Unit

HSOC 429 The Neurological Condition
Few aspects of our physical makeup are as closely linked to who we are as people as the nervous system. We define our selves by our capacity to think, to react, by our memories. In large part, we believe we are our brains. Yet such perceptions have a history far deeper than our current neuro-obsessed moment. In this course we explore the neurological condition as the human condition: the growing sense since the nineteenth century that we are defined by our nervous systems, and the science that has fostered this vision. From theories of diminishing "nerve force" and the electric cures of the Victorian era, to fMRIs and Obama's 2013 BRAIN Initiative, we explore how science, medicine, and technology have shaped our understanding of the brain and nervous system as the center of human identity. Course 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.
Taught by: Elder
Course usually offered in spring term
Also Offered As: STSC 429
Activity: Seminar
1 Course Unit

HSOC 430 Disease & Society
What is disease? In this seminar students will ask and answer this question by analyzing historical documents, scientific reports, and historical scholarship (primarily 19th and 20th century U.S. and European). We will look at disease from multiple perspectives — as a biological process, clinical entity, population phenomenon, historical actor and personal experience. We will pay special attention to how diseases have been recognized, diagnosed, named and classified in different eras, cultures and professional settings.
Taught by: Aronowitz
One-term course offered either term
Activity: Seminar
1 Course Unit

HSOC 439 The Neurological Condition
Few aspects of our physical makeup are as closely linked to who we are as people as the nervous system. We define our selves by our capacity to think, to react, by our memories. In large part, we believe we are our brains. Yet such perceptions have a history far deeper than our current neuro-obsessed moment. In this course we explore the neurological condition as the human condition: the growing sense since the nineteenth century that we are defined by our nervous systems, and the science that has fostered this vision. From theories of diminishing "nerve force" and the electric cures of the Victorian era, to fMRIs and Obama's 2013 BRAIN Initiative, we explore how science, medicine, and technology have shaped our understanding of the brain and nervous system as the center of human identity. Course 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.
Taught by: Elder
Course usually offered in spring term
Also Offered As: STSC 429
Activity: Seminar
1 Course Unit

HSOC 440 Disease & Society
What is disease? In this seminar students will ask and answer this question by analyzing historical documents, scientific reports, and historical scholarship (primarily 19th and 20th century U.S. and European). We will look at disease from multiple perspectives — as a biological process, clinical entity, population phenomenon, historical actor and personal experience. We will pay special attention to how diseases have been recognized, diagnosed, named and classified in different eras, cultures and professional settings.
Taught by: Aronowitz
One-term course offered either term
Activity: Seminar
1 Course Unit
HSOC 436 Biopiracy: Medicinal Plants and Global Power
Biopiracy has emerged as the name of conflict between multinational pharmaceutical companies attempting to get genetic patents on medicinal plants and indigenous communities in the Global South who have long known and used these plants for medicinal purposes. Today the story of Biopiracy is an unfolding story of plants, patents and power. The extraction and commercial exploitation of plants and knowledge about them from the Global South however is not new. It has been happening at increasing pace for at least the last two centuries. Both the anti-malarial drug quinine and the cancer drug vincristine for instance have their plant-origins in the Global South where local communities used them medicinally long before their discovery by biomedicine. This course will put the current debates around Biopiracy in context and explore how the entanglements of plants and power have changed or not changed.
Taught by: Mukharji
Course not offered every year
Also Offered As: STSC 436
Activity: Seminar
1 Course Unit

HSOC 441 Cross Cultural Approaches to Health
This course will explore the ways that health and illness-related beliefs and behaviors develop within communities. We will identify the forces that shape these beliefs and behaviors and ultimately affect who gets sick, who gets well, and the very nature of the illness experience. Emphasis will be given to the relationships among sociocultural, political and biological factors and the ways that these factors interact to produce the variation that we see in health and illness related attitudes, behaviors and outcomes across cultures.
Taught by: Barg
Course usually offered in spring term
Also Offered As: ANTH 441
Activity: Seminar
1 Course Unit

HSOC 442 Hospital as Curing Machine
This course examines the technological, scientific, and spatial evolution of the modern hospital from the miasmatic, vermin-infested medieval European hospital-as-alms house, to the late nineteenth-century ideal of the modern hospital as a condenser of sophisticated technologies, scientific expertise, and Taylorist efficiencies. In so doing, we will see how designers of hospital space, consciously or not, have striven to realize the mechanized, technological vision of the hospital as curing machine a phrase first invoked by 18th century French surgeon and anatomist Jacques Tenon. While the early nineteenth-century hospital had been a locus for fears about contagion, death, and disease in a pre-germ theory world, through its eventual integration of antiseptic practices, spatially produced zones of medical expertise (the operating suite, the laboratory, pediatric and maternity wards), novel technologies (incubators, hyperbaric chambers, x-rays, ultrasounds) and factory-like efficiencies the hospital came into its own as the epitome of rational modernist space. But, over the course of its evolution, the modern hospital remains an incubator for super-bugs, as an engine for projects of power, and as a site for the cultural transformation of the meaning of birth, death, and health itself.
Taught by: Greene, G
Also Offered As: STSC 442
Activity: Lecture
1 Course Unit

HSOC 449 Vertical Global Health Movements
In the past 30-40 years, "vertical" movements to tackle specific disease problems-or even eliminate particular disease vectors-have become the norm for global health interventions, replacing a short-lived Primary Health Care movement that sought to broadly improve health and welfare conditions from the bottom up in resource-poor countries around the world. Many of these vertical programs were at first implemented with little consideration of specific local circumstances regarding difference in disease burden, transmission pathways, microbial strain, existing local treatment and control approaches, significant historical factors, or type and degree of suffering. Recent campaigns have attempted to revisit the problem of the "local." This course examines some of the most influential of these global vertical disease control campaigns from the 1950s through the present. Our goal will be to elucidate some of the crucial factors that have shaped local experiences of the relevant diseases, and that have influenced the direction and outcome of vertical control efforts at the local and global levels. Students will extensively research a particular campaign and its potential effects in a geographical location and time period of their choice.
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 458 Environments and Health
Do classrooms' fluorescent lights give you headaches? Have you ever felt invigorated by a mountain's breeze? Have you ever sought to get a "healthy" tan at the beach? Throughout history people have attributed their health -- good and bad-- to their physical surroundings. In this class we will explore how medical professionals, scientists and the general population have historically understood the ways in which the environment impacts different people, in different places, in different ways. We will interrogate medical theories that underpinned popular practices, like health tourism, public health campaigns, and colonial medical programs. We will also consider how people constructed and understood the physical environment, including farms and factories, cemeteries and cities, to be healthy or not. This course is designed to foster a collaborative atmosphere in which students will complete an original research paper through critical reading and step-wise assignments that will culminate in a final project.
Taught by: Crnic
Course not offered every year
Activity: Seminar
1 Course Unit
HSOC 461 The Child in the City
This course examines the problem of the child in urban space in 19th and 20th century European and American discourses. This course does not propose to recover the subjective experience of the child but, rather, views the child as an object around which numerous adult anxieties connected to industrialization, urbanization, and modernity itself cohered. Discourses on public health, environmental pollution, sexuality, criminality, and racial degeneration all focused their attention, anxieties, and energies on how to deal with the unique vulnerability of the child in modern urban space. This interdisciplinary course focuses specifically on atmospheres, environments, and architectures in urban settings as diverse as Chicago, New York, Paris, and London. We will examine how the built environment was envisioned as part of a set of critical technologies for resolving the threat that urban space posed to the child. We will explore objects and envir as diverse as tenement babycages, wartime floating hospitals, open-air schools, adventu playgrounds in post-WWII London, car-less communities in Radburn, NJ, and American chil books about urban blight and renewal.
Taught by: Greene, G
Course not offered every year
Also Offered As: STSC 461
Activity: Seminar
1 Course Unit

HSOC 462 Seeking Health: Tourism, Medicine in America 1800-2000
Summer camps, spring break, and trips to the beach, mountains, and national parks: vacations are an integral part of American culture. Often we talk and think about traveling for its ability to rejuvenate our tired bodies and spirits. Although tourism only developed over the past 100 years, the tradition of traveling for health has a much deeper history. This course will examine how different people in different times have understood the connections between travel and health, and how technologies have and continue to mediate those experiences. Over the course of the semester students will complete an original research paper through critical reading and step-wise assignments that will culminate in a final project. By the end of the semester, students will have honed their skills in primary and secondary source research, the construction of an academic argument and paper, and will continue to develop skills in critical analysis through weekly reading assignments.
Taught by: Crnic
Course not offered every year
Activity: Seminar
1 Course Unit

HSOC 471 Guns and Health
The purpose of this course is for students to gain an understanding of the role of guns in health, and population and prevention approaches to violence. The course will include a focus on policies and regulations related to firearms, the primary mechanism by which violence-related fatalities occur in the U.S. We will address the life span of a gun, from design and manufacture through to use. In addition, we will address key aspects of the social context in which firearms exist and within which firearm policy is made.
Taught by: Sorenson
One-term course offered either term
Also Offered As: PUBH 534, STSC 471
Activity: Seminar
1 Course Unit

HSOC 488 The Anthropology of Risk Perception in Health
Taught by: Barg
Also Offered As: ANTH 438
Activity: Seminar
1 Course Unit

HSOC 499 Capstone Independent Study
One-term course offered either term
Activity: Independent Study
1 Course Unit