HSOC 0000 Free Elective Transfer or Away Credit
For courses from other schools, transfer students and majors taking a course for the major elsewhere.
1 Course Unit

HSOC 0100 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.
Fall
Also Offered As: STSC 0100
1 Course Unit

HSOC 0228 Studying Sex
The concept of "sex" has meant multiple things to science and medicine over the last few hundred years: a way of sorting bodies, a behavior to observe, a driving force behind reproduction and evolution, and a yardstick by which to measure normality. It has been both a binary of male and female, and a spectrum; both separate from gender, and inseparably entwined with it. It has been defined at different moments by anatomy, hormones, chromosomes, and even metabolism. In this course, we will explore how scientists have studied—and perhaps produced—the many-faceted thing called sex, and how historians have come to understand that past. This first-year seminar introduces students to primary source research, historical writing, and methods from both Science and Technology Studies (STS), and queer, trans, and feminist studies. Course materials will focus mainly on the United States in the 19th and 20th centuries.
Fall
Also Offered As: GSWS 0228, STSC 0228
1 Course Unit

HSOC 0283 Medicine, Magic and Miracles
This course explores the nature of disease and the history of medical practice and healing in the medieval period, using methods from intellectual, cultural, and social history, as well as the life sciences, and incorporating material from Indonesia to England. The themes of this course include: 1) the diversity of healing practices and beliefs in this period; 2) specific rationalities of different methods of healing; 3) views of the human body and disease; 4) the wide array of practitioners that people turned to for medical care, including physicians, midwives, family members, herbalists, snake handlers, saints, and surgeons; 5) institutions of medicine, such as the hospital. Students will have their minds blown as they learn to question everything they thought they knew about how science and medicine work.
Fall
Also Offered As: STSC 0283
1 Course Unit

HSOC 0311 Addiction: Understanding how we get hooked and how we recover
We will investigate the evolution of scientific theories and popular beliefs regarding the causes of addiction in the 20th and 21st centuries, and how they have shaped treatment approaches to these disorders. We will examine the crack cocaine epidemic of the 1980s and the current opioid epidemic, and consider sociocultural and political factors that contributed to the onset of and reaction to these crises. Finally, we will discuss research into the neurobiological, psychological, familial, social, and political factors that initiate and sustain addiction, and the efficacy of various treatment approaches.
Fall
1 Course Unit

HSOC 0313 Cane and Able: Disability in America
Disability is a near universal experience, and yet it remains on the margins of most discussions concerning identity, politics, and popular culture. Using the latest works in historical scholarship, this seminar focuses on how disability has been experienced and defined in the past. We will explore various disabilities including those acquired at birth and those sustained by war, those visible to others and those that are invisible. For our purposes, disability will be treated as a cultural and historical phenomenon that has shaped American constructions of race, class, and gender, attitudes toward reproduction and immigration, ideals of technological progress, and notions of the natural and the normal.
Fall
Also Offered As: STSC 0313
1 Course Unit

HSOC 0331 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.
Not Offered Every Year
1 Course Unit

HSOC 0361 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.
Not Offered Every Year
1 Course Unit
HSOC 0387 Epidemics in History
The twenty-first century has seen a proliferation of new pandemic threats, including SARS, MERS, Ebola, Zika, and most recently the novel coronavirus called COVID-19. Our responses to these diseases are conditioned by historical experience. From the Black Death to cholera to AIDS, epidemics have wrought profound demographic, social, political, and cultural change all over the world. Through a detailed analysis of selected historical outbreaks, this seminar examines the ways in which different societies in different eras have responded in times of crisis. The class also analyzes present-day pandemic preparedness policy and responses to health threats ranging from influenza to bioterrorism.

Fall
Also Offered As: STSC 0387
1 Course Unit

HSOC 0400 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.

Fall
Also Offered As: HIST 0876, STSC 0400
1 Course Unit

HSOC 0480 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 medical 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.”

Fall or Spring
1 Course Unit

HSOC 0490 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.

Fall
Also Offered As: STSC 0490
1 Course Unit

HSOC 0600 Technology & 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.

Spring
Also Offered As: STSC 0600
1 Course Unit

HSOC 0823 Sport Science in the World
This seminar is designed for first-year students who are interested in some big questions related to the topic of “sport science.” Sport science may seem to be just a niche field where teams of physiologists, psychologists, geneticists, engineers and others work to make already very athletic people go “faster, higher, stronger.” On the other hand, the work of sport scientists intersects everyday with far-reaching questions about how categories of sex, age, race, disability, and nationality are defined, measured, challenged, or maintained. Sport scientists weigh in on debates over what kinds of physical activity or bodies are “clean,” what kinds of performance are “natural” or even human, and what kinds of sporting spaces or equipment are fair. In this class we’ll read and discuss historical and contemporary accounts of sport science in the world. My hope is that students will enter the class interested in sports and leave interested in sports and in gendered science, objectivity and standardization, the politics of big data and more.

Fall
Also Offered As: STSC 0823
1 Course Unit
HSOC 1120 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.
Not Offered Every Year
Also Offered As: SOCI 1111
1 Course Unit

HSOC 1222 Medical Sociology
This course will give the student an 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. Although we will not explore everything, we will attempt to cover as much of the field as possible through four thematic units: (1) the organization and development of the profession of medicine, (2) the delivery of health-care, especially doctor-patient interaction, (3) the social and cultural factors that affect how illness is defined, and (4) the social causes of illness. The class will emphasize empirical research especially but not only quantitative research.
Also Offered As: SOCI 1110
1 Course Unit

HSOC 1312 Mental Illness
This course is designed to give a general overview of how sociologists study mental illness. We will be concerned with describing the contributions of sociological research and exploring how these contributions differ from those of psychology, psychiatry, and social work. This overview will be done in three parts: we will discuss (i) what “mental illness” is, (ii) precisely how many Americans are mentally ill, (iii) how social factors (e.g. race, gender, class) and social arrangements (e.g. social networks) lead to mental illness, and (iv) how we as a society respond to and treat the mentally ill. Throughout the course, we will be concerned with uncovering the assumptions behind different definitions of mental health and exploring their political, social, and legal implications.
Fall or Spring
Also Offered As: SOCI 1111
1 Course Unit

HSOC 1330 Bioethics
This course is intended to introduce students to the fundamental principles of bioethics and the many ethical issues that arise in the rapidly changing fields of biomedicine and the life sciences. The first half of the course will provide an overview of the standard philosophical principles of bioethics, using clinical case studies to help illustrate and work through these principles. In the second half of the course we will focus on recent biomedical topics that have engendered much public controversy including diagnostic genetics, reproductive technologies and prenatal screening, abortion, physician assisted suicide, human experiments, and end of life decision making. We will use the principles learned in the first half of the course to systematically think through these bioethical issues, many of which affect our everyday lives.
Not Offered Every Year
Also Offered As: SOCI 2971
1 Course Unit

HSOC 1382 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.
Fall
Also Offered As: ANTH 1238
1 Course Unit

HSOC 1401 The Peoples Health
While the scary threats of the moment in recent years, Ebola, MERS, swine flu, bioterrorism dominate media coverage of public health, most human suffering and death are driven by more mundane causes. This course critically addresses twenty-first-century public health science and policy by examining the long history (beginning with the plague epidemics of Renaissance Italy) that brought us to where we are today. Topics include responses to epidemics; socioeconomic, racial, and other disparities in health; occupational health; the rise of public health as a field of scientific inquiry; sanitary reform; the Bacteriological Revolution; the shift from disease causes to risk factors; and the social determinants of health.
Fall or Spring
1 Course Unit

HSOC 1411 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.
Fall or Spring
1 Course Unit
HSOC 2002 Sociological Research Methods
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 both 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.
Fall or Spring
Also Offered As: SOCI 2000
1 Course Unit

HSOC 2198 Race, Science, and Globalization
Why do racist ideologies persist when a majority of scientists and scholars reject the premises they rely upon? Since the end of WWII, major scientific organizations like UNESCO and the American Anthropological Association have published statements rejecting race as an accurate representation of human biological variation. Yet despite widespread scientific opposition to the validity of race as an object of study, troublesome issues concerning race and racism abound in Western societies. If not an accurate description of human biology then what is race? And is racism an inevitable feature of human societies?
Fall or Spring
Also Offered As: LALS 2198, STSC 2198
1 Course Unit

HSOC 2202 Health of Populations
This course is designed to introduce students to the quantitative study of factors that influence the health of populations. Topics to be addressed include methods for characterizing levels of health in populations, comparative and historical perspectives on population health, health disparities, health policy issues and the effectiveness of interventions for enhancing the health of populations. These topics will be addressed both for developed and developing world populations. The course will focus on specific areas of health and some of the major issues and conclusions pertaining to those domains. Areas singled out for attention include chronic diseases and their major risk factors, such as smoking, physical activity, dietary factors and obesity. Throughout the course, the focus will be on determining the quality of evidence for health policy and understanding the manner in which it was generated.
Fall or Spring
Also Offered As: SOCI 2220
1 Course Unit

HSOC 2211 Sex, Sexuality and Sexual Science in South Asia: Perspectives from the Past and Present
This course will introduce students to the problems of sex, sexuality and sexual science in South Asia over the centuries. Its central problem will be how sex, society and knowledge about sex have been transformed in South Asia under the conditions of colonial and postcolonial modernity. It will consider how a multitude of indigenous practices and knowledges, from the famous Kamasutra and its allied knowledges to the transgender communities, from the Lazzat-un-Nisa to concubinage and the sexual norms of elite households, were framed and reframed during the nineteenth and twentieth centuries through the agency of a variety of institutions, groups and individuals. The course will also show how South Asia played a crucial role in the global evolution of sexual knowledge. Topics will include the varieties and functions of traditional sexual knowledges, colonial sexology, changing sexual identities and practices, the relation of psychiatry and medicine to sex, queer and transgender sexualities, and the complex and shifting role of the state and civil society to all of these topics.
Not Offered Every Year
Also Offered As: SAST 2211
1 Course Unit

HSOC 2213 Herbs and Humors: Medieval and Early Modern Pharmacology
What do gold, mummies, and rhubarb have in common? All were important ingredients in premodern pharmacy! This course surveys the history of pharmacology in the Medieval and Early Modern periods, beginning with the earliest European universities, through the professionalization of the medical field in the High and Late Middle Ages, and into the chymical medicine of the Renaissance. By engaging with a selection of both primary and secondary sources, students will learn about the development of the field of pharmacology and its relation to the broader field of medicine during its formation. Students will also learn how other emerging fields, such as alchemy and chemistry, and new technological advances made the development and advancement of pharmaceuticals possible. By the end of the course, students should expect to be able to address the following questions: How do theory and practice converge in premodern medicine and pharmacology? What is the relationship between the pharmacist and the physician, and how does this relationship shape medical practice? How does the invention of new technology shape the development of pharmacology during this period?
No prior knowledge of medical history is needed for this course.
Also Offered As: STSC 2213
1 Course Unit
HSOC 2254 American Medicine and Technology in War and Peace

War and its effects on the human body are brutal; the carnage of the battlefield and the conditions of camp life have presented special challenges to medicine throughout history. Additionally, the incorporation of new technologies into the military sphere, whether or not they started as civilian technologies, fundamentally changed the ways in which war was conceptualized, fought, and won. But the significance of medicine and technology in a military context extends well beyond the injuries and illnesses of war. Looking more closely at the ways in which physicians, military officers, soldiers, and civilians have interacted with each other both in war and in peace reveals much about the political, cultural, and disciplinary formation of medicine in the modern era and the roles technology in such formations. Understanding historical uses of medicine and technologies sheds light upon notions of localized and globalized warfare, as well as the political machinations in which nations engaged to create ideologies of dominance, threat, and safety. This seminar surveys the history of medicine and technology, principally in an American context, from the seventeenth through the late twentieth centuries. We will look at the ways in which the practices, theories, and tools of military medicine have played, and continue to play, a prominent role in conceptualizations of warfare, health, disease, politics, disability, morality, society, the body, culture, and ethics. We will take an in-depth look at the ways in which militaries and medical institutions have shaped, and been shaped by, other social and political categories like gender, race, class, and ethics over the last four hundred years and across various (though mostly Western) societies, and the ramifications for both soldiers and civilians alike. Students will be graded on two short essay assignments, an exam, in-class participation, and a final paper (no longer than ten pages in length) based on material covered in the course.

Spring
1 Course Unit

HSOC 2293 From Madness to Mental Health: The History of Psychiatry

Studies show that about a quarter of college students take psychotropic medications, such as anti-depressants and stimulants. This figure has been attacked from both sides – by those who describe American adolescents and young adults today as over-medicated, and by those who point to accessibility gaps to suggest that too many are actually undertreated. Interrogating this question requires a deep dive into the history of one of our most contested disciplines. We'll briefly consider the ancient roots of mental illness to show that concerns about sanity and aberrant behavior have always been with us, but most of the syllabus will focus on the shifting landscape in the United States, as biological theories ceded to psychoanalysis and back again. Specific topics will include somatic therapies (like lobotomy and electroconvulsive therapy), pharmaceutical interventions, and institutionalization/deinstitutionalization. We'll close by examining the current state of the field as represented by the fifth edition of the American Psychiatric Association's Diagnostic and Statistical Manual.

Spring
1 Course Unit

HSOC 2303 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.

Spring
Also Offered As: STSC 2303
1 Course Unit

HSOC 2304 Insect Epidemiology Pests, Pollinators and Disease Vectors

Malaria, Dengue, Chagas disease, the Plague- some of the most deadly and widespread infectious diseases are carried by insects. The insects are also pernicious pests; bed bugs have returned from obscurity to wreak havoc on communities, invasive species decimate agricultural production, and wood borers are threatening forests across the United States. At the same time declines among the insects on which we depend- the honeybees and other pollinators- threaten our food security and ultimately the political stability of the US and other nations. We will study the areas where the insects and humans cross paths, and explore how our interactions with insects can be cause, consequence or symptom of much broader issues. This is not an entomology course but will cover a lot about bugs. It’s not a traditional epidemiology course but will cover some fascinating epidemiological theory originally developed for the control of disease vectors. It will cover past epidemics and infestations that have changed the course of the history of cities and reversed advancing armies. HSOC 241. Stem Cells, Science and Society.

Fall or Spring
Also Offered As: STSC 2304
1 Course Unit

HSOC 2312 Healthy Schools

This Fox Leadership and academically based community service seminar will use course readings and students’ own observations and interviews in their service learning projects in West Philadelphia schools to analyze the causes and impact of school health and educational inequalities and efforts to address them. Course readings will include works by Jonathan Kozol, studies of health inequalities and their causes, and studies of No Child Left Behind, the CDC’s School Health Index, recess, school meal, and nutrition education programs. Course speakers will help us examine the history, theories, politics and leadership behind different strategies for addressing school-based inequalities and their outcomes. Service options will focus especially on the West Philadelphia Recess Initiative. Other service options will include work with Community School Student Partnerships and the Urban Nutrition Initiative.

Not Offered Every Year
Also Offered As: PSCI 2203
1 Course Unit
**HSOC 2382 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. The seminar is structured to allow us to examine specific case material from around the world (Haiti, South Africa, Brazil, Russia, China, India, for example), and to address the ways in which social, political-economic, and technological factors – which are increasingly global in nature – influence basic biological mechanisms and disease outcomes and distribution. As we analyze each case and gain familiarity with ethnographic methods, we will ask how more effective interventions can be formulated. The course draws from historical and ethnographic accounts, medical journals, ethical analyses, and films, and familiarizes students with critical debates on globalization and with local responses to globalizing processes.
Fall or Spring
Also Offered As: ANTH 2730
1 Course Unit

**HSOC 2401 Social Determinants of Health**
Over the last century, we have witnessed dramatic historical change in population health, e.g. rising numbers of obese Americans and dramatic declines in death from stomach cancer. There has also been highly visible social patterning of health and disease, such as socio-economic disparities in AIDS, substance abuse, and asthma in the U.S. to day or the association of breast cancer with affluence around the world. This course will explore the way researchers and others in past and present have tried to make sense of these patterns and do something about them. The course is historical and sociological. We will examine evidence and theories about how poverty, affluence and other social factors influence health AND we will examine how social and historical forces shape the ways in which health and disease are understood.
Not Offered Every Year
1 Course Unit

**HSOC 2418 Engineering Cultures**
Modern engineering, technology, science, and medicine converge with each other in countless places, landscapes, institutions, and households. The profession of the engineer has been distinct from that of the scientist, and the “doctor,” since its inception in the 1880s, however. In our class we trace overlaps and boundaries among engineers and other key experts of modern society, government, and public health, covering spaces in the Americas, Asia, and Europe. We explore rivalries, the roles of management and the state, class status and prestige, and we listen to engineers themselves and their understandings of their roles, functions, and purpose in modern societies. We cover fields such as civil engineering, mining, chemical-industrial engineering (including pharmaceutics and oil refinery), mechanical engineering and machine design/maintenance, computer science, and the engineering of information technologies. No pre-requisites, no prior knowledge required.
Also Offered As: STSC 2418
1 Course Unit

**HSOC 2433 Sustainability and Public Health**
We know that wild animal populations are only as healthy as their habitats, but what about humans? What is the connection between the health of human populations and the environments we inhabit? This course explores how the goals of the sustainability movement intersect with public health policy. It asks the question, “To what extent is sustainability the most important public health issue of our time?” We will examine issues related to climate change, peak oil, environmental toxins, ecosystem destruction, water availability, and food production through the lens of public health policy and human health. On a more positive note, we will learn about how applications of whole systems thinking are transforming our culture, creating a more sustainable and healthier society, and how these cultural trends will transform health policy in the future.
Summer Term
1 Course Unit

**HSOC 2457 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.
Fall or Spring
1 Course Unit

**HSOC 2483 Health, Politics, and Social Movements**
What is the relationship between health and social movements for race, gender, or political justice? How do political, economic, and social struggles intersect with, impede, or give rise to new demands for health, changing medical practice, or intensified or ameliorated experiences of disease? Recently, such questions have animated news headlines and popular media as responses to COVID have occurred simultaneously with popular protest, social mobilizations, and heated debates regarding race, police violence, and social policy. Moreover, convergences of popular protest, health crises, and health action can be observed in historical accounts and in widely disparate geographical examples. This course asks what such instances have to offer our understandings of health politics today. It explores this through two questions: how have questions of health and medicine been taken up or influenced by political and social movements in diverse historical and geographical spaces? And, how have scholars thought about the relationship between social and political mobilizations and health access and practice? Drawing from examples from around the globe, the course will ask students to master conceptual tools and core questions used to analyze the relationship between health, political mobilizations, and social movements. Course materials will include scholarly readings, news media accounts, films, and popular and fictional writing.
Fall or Spring
1 Course Unit
HSOC 2511 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).
Spring
1 Course Unit

HSOC 2514 Environments and Public Health
This course explores the relationship between local environmental conditions and health. Using historical case studies, we will consider a variety of questions: What factors (employment, pollution, local flora and fauna, racism, etc.) influence citizens' environment and health? How have insects, landscapes, and diseases shaped cultures or events in history? Was eighteenth-and nineteenth-century Philadelphia actually a good place to live? What was going on with all those basements and cobblestone streets in Old City? Would you rather work in a coal mine or a uranium mine? You will examine these issues through a mixture of readings, lectures, class discussion, short essays and a research project.
Fall
1 Course Unit

HSOC 2518 Devices, Pills, People: American Medicine in the 20th and 21st Centuries
In this course, we approach some of the most pressing questions in the modern American medical marketplace, attempting to understand why it looks the way it does, how it developed, and what it offers (and takes) from patients. By the end of the course, we will also try to look forward and consider where current trends in American medicine might lead. The course is organized around six topics: 1) demography (changing patterns of health, disease, and death); 2) the growing and changing role of institutions, like hospitals and universities, in medical education and patient care; 3) the development and increasing role of technology in medicine; 4) changes in medical and pharmaceutical research and regulation; 5) patient experiences of health, illness, and patient-practitioner relations; 6) the construction of disease, or the broader social context and cultural representation of health and illness, both in culture and particular groups of patients. You will examine these issues through a mixture of readings, lectures, class discussion, short essays and a research project.
Spring
1 Course Unit

HSOC 2523 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 even 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!
Summer Term
1 Course Unit

HSOC 2537 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.
Not Offered Every Year
Also Offered As: GSWS 2537
1 Course Unit

HSOC 2563 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.
Not Offered Every Year
1 Course Unit

HSOC 2583 Law and Medicine: Global Themes
The course will explore the complex relationship between Law and Medicine in the modern world. It will cover a range of themes such as the regulation of quackery, forensic science, medical malpractice, medical patents and biopiracy etc. The course will be historical in its orientation and roughly cover the period from the late seventeenth century to the present. It will also focus particularly on the Majority World, looking especially at case studies from Asia and Africa.
Fall or Spring
1 Course Unit
HSOC 2707 Data and Death
Digital tools and data-driven technologies increasingly permeate twenty-first century life. But how have they affected death? Do we conceive of death differently in a digitally mediated world? How do we mourn in the age of Facebook? How is "big data" put to work in the medical world that seeks to diagnose and treat fatal illness? What new forms of death and violence have been imagined or developed with digital technologies in hand? And what of those who believe that they could live forever, defying death, by uploading "themselves" into some new digital form? This course offers a historical exploration of these questions, looking at different intersections between data and death. We will work with a range of different sources ranging from science fiction to medical journals to the often-controversial death counts that follow natural and political disasters. Our goal will be to map the many contours of death in a digital world, but also to recognize the longer histories of counting, mourning, diagnosing, dreaming, and dying that have shaped them.

Fall
Also Offered As: STSC 2707
1 Course Unit

HSOC 2999 Independent Study
Approved independent study under faculty supervision.
1 Course Unit

HSOC 3097 Indigeneity in Health, Science, and Technology
In recent decades, Indigenous Studies has emerged as a trans-national and interdisciplinary academic discipline that seeks to understand the historical experience, social reality, and political aspirations of Indigenous peoples. This course examines how theories and methods from Indigenous Studies offer new perspectives on core issues in the social study of science and technology and of health and society. Through films, podcasts, literature, and academic articles we will examine the historical role that science, technology, and medicine have played in the colonization of Indigenous people in the Americas, Australia, and New Zealand. We will also examine how Indigenous groups have resisted scientific and technological projects and participated in their development in ways that foster self-governance and territorial sovereignty.

Spring, odd numbered years only
Also Offered As: STSC 3097
1 Course Unit

HSOC 3147 Scientific Instruments and the Making of Knowledge
This course surveys the history of scientific proof and authority through the instruments used to collect and interpret data. In stories of discovery, scientists’ tools often take a back seat to their ideas, but instruments play a crucial role as physical intermediaries. All scientific instruments have been built and used by human beings according to their own ideas of what data are important to collect and how the data should be interpreted. How have the design and function of instruments affected scientists’ perspectives, and vice versa? What intellectual, political, and symbolic roles have instruments played beyond simply collecting data, and how do they continue to do so? We begin by examining the instruments of the “Scientific Revolution” and the ways their owners put them to use constructing not just data sets, but a new scientific authority in describing previously invisible realms of nature. Next, we look at the reciprocal relationship between scientific theory and physical tools, assessing how each has shaped the other, both individually and for entire fields of study in the nineteenth and twentieth centuries. We conclude by expanding the view to include the ways instruments interact with and affect the general public, from doctor-patient interaction to national politics and policy.

Spring
Also Offered As: STSC 3147
1 Course Unit

HSOC 3185 Global Radiation History: Living in the Atomic Age 1945-Present
In this seminar, students will engage with broad experiences of radiation risk since 1945, of Navajo uranium miners, scientists producing and testing nuclear weapons, physicians studying those exposed to radiation, Japanese survivors of the atomic bombings, and of the Fukushima nuclear disaster, and others. We will read novels and poetry relating to the atomic bombings and other radiation incidents, consider the protracted and complex ethical debate about nuclear risk, meet with artists who have contributed to the public debate, participate in meetings with survivors and scientists, museum professionals, activists, and others, and work together to come to understand the impact of the atomic bombs, the rise of nuclear energy, and the continuing legacies of radiation exposure and risk today. This is a Penn Global Seminar that involves travel to Japan in May 2023.

Spring, odd numbered years only
Also Offered As: STSC 3185
1 Course Unit
HSOC 3210 Health in Philly, Past and Present
How have different neighborhood organizations, activist groups, and private and public institutions in Philadelphia tried to understand and address shared health problems? How have Philadelphia organizations, groups, and institutions promoted wellbeing? In this course, students will read about neighborhood- and community-based interventions into health in Philadelphia since the turn of the 20th century. We will start the term reading some of the foundational research of W.E.B. DuBois, who investigated health in South Philly and was the first American sociologist to identify structural racism as a cause of illness. We will then investigate the histories of various health-focused organizations in Philadelphia, which may include: Lutheran Settlement House (1900s-present), the International Institute of Philadelphia/Nationalities Service Center (1920s-present), public FQHCs (1960s-present), Yellow Seeds & the Philadelphia Chinatown Development Cooperation (1960s/1970s-present), the Black Women's Health Alliance (1980s-present), Philadelphia Community Health Alternatives/the Mazzoni Center (1980s-present), JUNTOS/Puentes de Salud (2000s-present), Philly Thrive (2010s-present), and the Black Doctors COVID Consortium (2020s). When studying the origins of Philadelphia-based health organizations and interventions, students will ask and answer: How was "health" defined at the time and by whom? What were some important health concerns – and for whom – that this group addressed, and how? What are some of the activities of this organization today? Students will practice historical and ethnographic research methods. Assignments will require students to 1) locate, analyze, and share primary sources that shed light on the history of these different organizations and 2) participate in a collaborative research project designed to answer a question relevant to health in Philadelphia today. Training in ethnographic interviewing methods will be provided.
Fall, even numbered years only
1 Course Unit

HSOC 3216 Toxicity in Context
We live amidst a constant stream of messages, practices, and regulations about things, behaviors, or relationships deemed "toxic." Within environmental health in particular, all sorts of actors grapple with complex decisions about what it means to live with materials and anticipate the ways they can interact with human health and the environment - at present through the distant future. What exactly do we mean when we categorize some substances as toxic, and by extension others as safe? Are there other ways of managing uncertainty or conceptualizing harm? How are these concepts built into broader social structures, economics, and regulations? What other work are they used to do? In this course, we will explore major social science approaches to toxicity and apply these theories to our own analysis of examples from the contemporary United States, and in particular, to a robust oral history collection with residents, developers, and government scientists grappling with these questions just outside of Philadelphia. This course grows out of scholarship in the history and anthropology of environmental risk, and health, as well as direct ethnographic, historical, and oral history research at a site outside of Philadelphia grappling with the meaning of materials that remain on site after past industrial manufacturing. In this course, students will gain an introduction to oral history and analysis of in-depth interviews, and introduction to key approaches in theorizing toxicity. By connecting life experiences of residents, government scientists and others, at an actual site, with the literatures we read in class, students will think critically about the ways the literatures we engage do and do not fully encompass the experiences and concerns that are intertwined with toxicity for actual people grappling with making sense of uncertain harms amidst urban planning.
Also Offered As: STSC 3216
1 Course Unit

HSOC 3217 Weird Science
What do we mean by "science"? How did we come to agree on a common definition? Do we agree on a common definition? What about when we don't? This course explores histories of heterodox science and the construction of sciences and pseudosciences. In doing so, we will focus on expertise, authority, and legitimacy in science, as well as public consumption of science. This course will also introduce students to fundamental questions in the philosophy of science, as well as offering instruction in reading and methods of historiography. Topics include: phrenology, parapsychology, cryptozoology, UFOs, climate change denial.
Also Offered As: STSC 3217
1 Course Unit

HSOC 3279 Nutritional Modernities: Food, Science, and Health in Global Context
How has food shaped the global transition to modernity? Columbus' 1492 voyage to the Americas sparked a global process that transformed the eating habits and environments of humans throughout the world. Using approaches from food studies, STS, environmental history and global history, this class examines how the production, consumption, and study of food has been central to the emergence of the modern capitalist system and its discontents. Topics include the role of diet and food in European colonial conquest, the links between racial anxieties and the creation of modern nutritional standards, the rise of dietary "technologies of the self" such as calorie-counting and the BMI index, and the emergence of microbial regimes of health.
Fall or Spring
Also Offered As: STSC 3279
1 Course Unit
HSOC 3299 CSI Global: History of Forensic Science
Genetics may have transformed criminal detection, but it has built upon a long history of many different types of forensic science. The use of science in the pursuit of criminals has a long, complex and global history, involving diverse forms of knowledge and types of professionals. A range of skills and techniques ranging from trackers who followed traces in the mud to recover stolen cattle to criminal physiognomists who sought to read bodily signs of criminals, from Sherlock Holmes’ analysis of types of cigar ash in Victorian Britain to Charles Hardless’ chemical analysis of different types of ink in colonial India, have informed and influenced the development of our contemporary forensic modernity. This course will explore a range of different forensic techniques and their histories along with the rich cultural history, in the form of detective fiction and films from across the world.

Fall
Also Offered As: STSC 3299
1 Course Unit

HSOC 3313 Reproductive Medicine: Societal Impact of New Technologies
Reproduction is essential for the survival of species. Adverse events during embryogenesis or pregnancy can not only have an immediate impact on the well-being of the developing embryo but also later in life as adolescents or adults. Startlingly, we are learning that environmental influences on the molecular mechanisms in germ cells over the reproductive lifespan of adults that regulate gene expression in eggs, sperm and embryos can have serious consequences on progeny and their progeny’s progeny - over generations. We have long sought to control our fertility, for example, from the timing of a pregnancy in our lives; of overcoming infertility; and of ensuring the health and well-being of our progeny from the very beginning of development. Assisted Reproductive Technologies (ART) are now having a significant impact on fertility and embryo viability and well-being. However, they are not without controversy and society must be involved in important policy issues. For example, embryo selection is being used eliminate or reduce genetic-based diseases, but now genome editing, a powerful tool for effectively and safely modifying our genome in perpetuity presents a viable alternative. Should we do it and for which conditions? Since the lifestyles of parents and even grandparents can affect the future health of offspring, how do we ensure that individuals are aware of lifestyle effects and make the right choices for future generations? We are in an era of many groundbreaking discoveries in reproductive medicine that will lead to more technologies that will continue to raise ethical concerns that affect some of society’s most basic social covenants and that will require major societal adjustments. How will society deal with innovations that enable many facing infertility to have genetic offspring; that improve the quality of life or permit life itself for a developing embryo; that ensure successful outcomes of pregnancy by identifying and addressing risk factors in the environment that adversely affect the developing fetus; potentially even the future offspring of a person exposed as a fetus to an adverse environment; and that will enable women to have children at what used to be grandparental ages? Society will also be faced with the possibility of germline interventions and altering our own evolution. How can we manage these technologies to make sure that patients can benefit while also allowing us to be comfortable in our humanity? This course will present the latest in reproductive technologies (and those on the horizon) so as to appreciate their importance for individuals and then focus on how we as a society should manage their use.

Spring
1 Course Unit

HSOC 3326 Medicine and Healing in China
This course explores Chinese medicine and healing culture, its diversity, and its change over time. We will discuss topics including the establishment of canonical medicine, Daoist approaches to healing and longevity, diverse views of the body and disease, the emergence of treatments for women, medical construction of sex difference and imagination of female sexuality, the thriving and decline of female healers, the identity of scholar physicians, the transmission of medical knowledge, domestic and cross-regional drug market, healer-patient relations, and new visions of traditional Chinese medicine in modern China.
Not Offered Every Year
Also Offered As: EALC 3522
1 Course Unit

HSOC 3327 Birth Culture and Medical Technology
How we are born and give birth can vary more than most people realize. For most of history, women only acknowledged their pregnancy when they felt the baby move and they gave birth at home, often surrounded by other women. Now, the majority of Americans learn about pregnancy from an at-home kit you buy at the drugstore and their babies are born in hospitals, often the result of a complex set of processes involving surgical interventions, pharmaceuticals, and plenty of expert advice. How did this shift happen? How has it shaped one of the most foundational and intimate experiences of being human? This course will explore the history of conception, pregnancy, childbirth, and the post-partum period since the 19th century. We will examine the role of medicine, science, and technology, alongside changing ideas about gender, family, and motherhood to better understand this transformation in human reproduction. We will also critically examine the late-20th century emergence of the "natural motherhood" movement that arose as a response to the medicalization of these processes. Our class will examine this history from a critical trans-inclusive feminist perspective. We will also consider the impact of increasingly sophisticated medical technology on reproductive experiences and decisions, including birth control, abortion, conception, pregnancy, in vitro fertilization, surrogate mothers, and more.
Not Offered Every Year
1 Course Unit

HSOC 3328 Women in Medicine
Today in the US almost half of all medical students are women and female physicians comprise roughly one-third of the workforce. However, some statistics are still troubling, including the number of African American women who pursue advanced medical degrees. This course will trace the evolution of women practicing medicine over several centuries, exploring how various cultural, societal, and intellectual norms differed over time while challenging the assumption of linear progress towards equality. While the focus will be on American medicine, including field trips to archives and historical landmarks within Philadelphia, the coursework also includes international case studies and cultural comparisons to help position local issues within a wider and more complicated narrative. Considering both the historical and contemporary contexts for interconnected issues such as bias, motherhood, and burnout, we will analyze challenges and strategize potential solutions for the next generation of women seeking careers in medicine.
Not Offered Every Year
1 Course Unit
HSOC 3356 The Human Subject
In this course, we will consider health and society from the perspective of the human subject. Because medicine is uniquely concerned with human bodies and minds, humans occupy a strange place in the medical landscape as both objects of care, but also of experiment, and curiosity, and frustration, and agents, acting in a variety of roles (patient, researcher, doctor) and tasked with decision making in a complex technical and moral landscape. This course will explore the difficult ethical, practical, and technical questions that arise at that agent/object boundary by examining case studies from the nineteenth, twentieth, and twenty-first centuries. You will examine these issues through a mixture of readings, lectures, class discussion, short essays and a research project.
1 Course Unit

HSOC 3377 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.
Fall or Spring
Also Offered As: LALS 3377
1 Course Unit

HSOC 3383 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 rules 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.
Spring
Also Offered As: STSC 3509
1 Course Unit

HSOC 3447 The Future of Disability and the Afterlives of Epidemics
Medical framings of disease focus on "cure" narratives, but what does "getting better" really mean when examined from a patient perspective and how might epidemics challenge or reshape our relationships to concepts of health, illness, and disability? In this course, we will learn to examine stories of epidemics past and present through the lens of disability. In doing so, we will ask how epidemics in the past have shaped our ideas and experiences of disability, muddied our binary thinking about illness and wellness, and challenged the beliefs, epistemologies, and institutions that drive our approaches to caring for the body, the mind, and the spirit. Through an exploration of primary and secondary source readings, we will interrogate how these eras of crisis, and their aftermaths, have historically influenced the ways we think about and experience disability and its relationship to identity, family, culture, religion, society, and citizenship in the days, weeks, months, years, and decades that follow in their wake. Ultimately, we will draw upon the insights of the past to develop better questions about present epidemics, including COVID-19, Monkeypox, as well as the re-emergence of "old" epidemic diseases like measles and polio in order to think in novel and critical ways about how our ideas about wellness, disability, and society both shape and are shaped by our encounters with contagious epidemic diseases.
Fall or Spring
Also Offered As: GWS 3448
1 Course Unit
HSOC 3488 Current Issues in Global Health
This course examines current world events through the lens of public health. The course will focus on six key questions: 1) What does health infrastructure look like in different parts of the world, and how is it working or failing different groups of people? 2) What public health opportunities and challenges are created by the rise of megacities? 3) What unique public health challenges are created by modern-day proxy wars and refugee flows, and what is the role of health professionals in responding to human disasters? 4) How are fertility patterns and changes in life expectancy impacting different societies? 5) How is climate change altering the global health landscape? 6) What might the next global pandemic look like? We will discuss these questions in class using a mixture of scholarly and popular texts, and you will conduct and present your own secondary research into one of these topics.
Fall
1 Course Unit

HSOC 3524 Medical Mestizaje: Health and Development in Contemporary Latin America
Latin American nations as we know them today emerged in the nineteenth century after violent independence struggles against the Spanish Empire. Since independence, mestizaje has been an influential ideology that seeks to portray the identity of Latin American nations as comprised of a unique cultural and racial fusion between Amerindian, European, and African peoples. Through historical, anthropological, and STS approaches this course examines how concerns with racial fusion and purity have shaped the design and implementation of public health programmes in Latin America after independence and into the 20th century. Topics include: tropical medicine and race; public health and urbanization; toxicity and exposure in industrialized settings; biomedicine and social control; indigenous health; genomics and health; food and nutrition.
Fall or Spring
Also Offered As: LALS 3524
1 Course Unit

HSOC 3528 Public Health & Violence
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.
Not Offered Every Year
1 Course Unit

HSOC 3824 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.
Fall or Spring
Also Offered As: STSC 3824
1 Course Unit

HSOC 3889 Trans Method
What are the subjects of trans studies? What does "trans" as a category afford us in looking at texts, people, systems, and objects? To what extent is trans an identity? What might it mean to think of it as a methodology? How might the tools of trans studies intervene in conversations and practices beyond the field itself? What are the stakes of such an expansive approach? This course introduces students to "trans" as a still-forming analytic that has emerged out of academic spaces, activist movements, and trans cultural production. We will engage with texts and questions that build on trans studies’ connections to (and divergences from) queer and feminist studies, history, critical race studies, disability studies, and science studies, among other fields, and we will also consider how trans knowledge can act beyond the theoretical.
Not Offered Every Year
Also Offered As: GSWS 3500, STSC 3889
Prerequisite: GSWS 0002 OR GSWS 0003 OR ENGL 1300
1 Course Unit

HSOC 4028 Stories, Science, and Medicine
Since COVID-19 shut down the world in 2020, we have been surrounded by stories about health, medicine, and disease that cut across every aspect of our lives. This seminar explores the relationship between scientific knowledge and narrative: how do we tell stories about science and medicine? How is medical knowledge made culturally meaningful? How can thinking about storytelling as a craft make us better at communicating complex ideas about public health, medical knowledge, and their myriad social dimensions? People enjoy stories about science and medicine whether consumed as a podcast, magazine article, novel, Netflix special, or public talk – however, the popularity and the real-world urgency of this content endows the storyteller with great responsibility. This seminar takes the "story" in history seriously and uses methods from the history of medicine to help students produce compelling, contextually nuanced stories about medicine and culture, health and society. We will learn from sources including science fiction, pandemic journalism, historical scholarship, and popular science media when comparing and contrasting how medical subjects are translated into a story for particular audiences and mediums.
Not Offered Every Year
1 Course Unit
HSOC 4094 Science and Disability
How have ideas about ability and disability shaped the questions we ask about the world and the methods we use to answer them? How do assumptions about who can and ought to be a scientist, engineer, or physician intersect with constructions of disability and difference? How might studying the lived experiences of people with disabilities in the context of STEM(Medicine) help us begin to answer these questions? This course explores the exciting intersection between disability studies and the history and sociology of science and medicine through weekly readings, discussions, and original research. Using materials ranging from archival and online sources to oral history interviews and museum collections, students in this course will learn how scientific ideas and institutions have helped shape 20th- and 21st-century categories and experiences of disability as an embodied and socio-political identity. At the same time, students will learn how to use disability as a critical theoretical lens for investigating the cultures, tools, and institutions behind the creation and application of modern scientific and medical knowledge. Collaborative and analytical writing work throughout the course will build towards the completion of a final original research project.
Fall or Spring
Also Offered As: STSC 4094
1 Course Unit

HSOC 4114 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.
Not Offered Every Year
Also Offered As: STSC 4114
1 Course Unit

HSOC 4178 Sound in Science, Medicine and Technology
How do listening and knowing relate? This capstone will analyze sound as an object, an instrument, a product and a process of research in science, technology, and medicine. From anthropological field recordings to experiments in acoustics, readings will address the ways in which researchers have isolated and investigated sonic phenomena during the modern period. We will consider sound as a tool for knowing about other phenomena as well: bodily functions, seismic events, animal communication, and the like. Technologies of sound production, reproduction, storage, manipulation, and analysis will be front and center in this course. What can you do with magnetic tape that phonography does not allow? How might the hospital soundscape inform clinical decision-making? Why is Amazon's Alexa female? How has scientific communication changed over time? In addition to wrestling with questions like these, the course will provide undergraduates with the opportunity to research and execute an original paper of significant length in the humanistic social sciences. Students must be in their last three semesters for it to fulfill the capstone requirement, but any student may enroll.
Fall
Also Offered As: STSC 4178
1 Course Unit

HSOC 4242 The History & Future of Genetic Medicine
Nearly twenty years after the Human Genome Project was completed, genetic research continues to garner attention and resources. From news coverage to governmental initiatives and commercial investment, genetics is a force in medicine, industry, and society more generally. Using scholarship from diverse disciplines, this capstone seminar focuses on how genetic medicine came into existence. We will explore the field's early history in eugenics and its transformation via technological advancements like prenatal testing and targeted therapies. Through case studies of select genetic conditions, we will examine scientific innovations alongside the lived experience of those advancements, broaching critical questions about disability, race, and inequality. This will provide students with the opportunity to debate historical changes and continuities, taking on some of the most vexing questions in bioethics.
Spring
Also Offered As: STSC 4242
1 Course Unit

HSOC 4288 Invisible Labor in the Human Sciences
This course looks at those disciplines that take people as their subjects of research–including biology and biomedicine as well as anthropology, linguistics, and sociology–to explore the contributions of a wide range of research participants. We will focus on the sciences of human behavior, information, and medicine to analyze the labors of behind-the-scenes actors including tissue donors, survey respondents, student subjects, patients, translators, activists, ethnics review boards, data curators, and archivists. Our job will be to analyze the experiences of these technoscientific laborers with a view to systems of knowledge and power in the production and maintenance of Knowledge about humans and their bodies.
Fall or Spring
Also Offered As: STSC 4288
1 Course Unit
HSOC 4303 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.
Fall or Spring
1 Course Unit

HSOC 4324 Medical Activism and the Politics of Health
During the second half of the twentieth century, overlapping waves of social reform movements agitating for civil rights, women's rights, peace, environmentalism, and gay rights reshaped the U.S. political and cultural landscape. Physicians, other health care professionals, and organized patient groups played important roles in all of these movements. This seminar investigates the history of this medical activism, making special use of the Walter Lear Collection in Penn Libraries' Kislak Center. Readings, discussions, and student research projects analyze the relationships between this history and the political dimensions of individual and population health in the late twentieth century.
Fall or Spring
1 Course Unit

HSOC 4327 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.
Not Offered Every Year
1 Course Unit

HSOC 4333 Bodies, Gender, Science, and Medicine
Americans' ideas about gender and sex have changed dramatically since the 19th century-But what roles have science and medicine played in these changes? How have shifting biological, psychological, cultural and political ideas about femininity and masculinity shaped our experiences of health, illness, sex and reproduction? How have these ideas about gender and sexuality influenced the creation of, participation in, institutions, technologies and experiences of our modern healthcare system? Drawing from the history of science, medicine and technology as well as gender studies, bioethics and disability studies, students in this class will examine a wide array of topics that address these questions, exploring how deeply rooted historical, political and social forces have shaped the relationship between gender and medicine.
Fall
1 Course Unit

HSOC 4334 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.
Not Offered Every Year
Also Offered As: STSC 4364
1 Course Unit

HSOC 4375 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 give students the opportunity to do intensive original research.
Fall or Spring
1 Course Unit

HSOC 4392 Centering the Impaired Mind: Topics in Intellectual and Developmental Disability
Much disability scholarship has focused on physical and sensory disabilities, which better fit the "social model" that locates disability in a mismatch between individuals and their environments. But what about intellectual and developmental disabilities and the cognitive impairments that often, but not always, accompany them? This class will look at some of the more prevalent intellectual and developmental disabilities, including Down syndrome, cerebral palsy, and autism, which has been called “the paradigmatic developmental disability...of the postmodern period.” We will consider how the meaning of these diagnoses -- and sometimes the diagnoses themselves -- have changed over time, as well as the roles diverse stakeholders, including affected individuals, their families, and physicians, have played and continue to play in these conversations. More broadly, intellectual and developmental disabilities provide a unique lens through which we will interrogate questions of representation, identity, personhood, citizenship, and care. Because this course fulfills the Capstone requirement for HSOC/STSC majors, developing the skills necessary to write an original research paper will be a primary focus -- including articulating an argument and supporting it with compelling evidence drawn from both primary and secondary sources in history, sociology, and anthropology.
Fall
1 Course Unit
HSOC 4400 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.  
1 Course Unit

HSOC 4437 Remembering Epidemics
This seminar challenges students to encounter and interpret the city around them in unconventional ways. During a deadly pandemic that has profoundly disrupted all aspects of society, just as the question of public commemoration has vigorously and sometimes violently re-entered our country's public discourse, one question has remained surprisingly neglected: How do we remember epidemics? This course confronts this question through an analysis of traumatic epidemics in Philadelphia's history, and of the broader landscape of public memory. We devote special attention to the yellow fever epidemic of 1793, but we also consider the 1918-1919 influenza, AIDS, and COVID-19, among others. Students conduct archival, documentary, site-based, and other kinds of research in the process of analyzing the origins, course, and consequences of epidemics, as well as the nature of public commemoration.  
Fall or Spring  
Mutually Exclusive: HSSC 5437
1 Course Unit

HSOC 4517 The Lazaretto, the City, and the World: Public Health, Immigration, and Urban Growth, 18th-21st C.
Philadelphia's Lazaretto quarantine station was built in 1799 to protect the city after a series of catastrophic yellow fever epidemics. In its time, the Lazaretto was a gateway through which goods and people from many regions of the world passed before entering Philadelphia (sometimes after temporary detention). This course uses the Lazaretto as a gateway to the history of American public health, immigration, and urban growth. Our exploration of those histories is not limited to events that happened at the Lazaretto, nor to the period of its quarantine operations (1801-1895), nor even to Philadelphia, but rather uses the very local and very human stories of this unusual site as a point of entry into larger American and global stories. Coursework includes site visits to the Lazaretto and to a variety of local partner institutions, including the Historical Society of Pennsylvania, the Mutter Museum, Puentes de Salud, and Sayre Health Center. Students undertake extensive research projects covering some combination of the course's themes, including discussions of how historical interpretation can facilitate and enhance public engagement and activism.  
Not Offered Every Year  
1 Course Unit

HSOC 4528 Race and Medicine in America
Race has been, and remains, a central issue to the delivery and experience of healthcare in America. This course will examine a variety of issues and cases studies to examine how the patient-doctor has been negotiated, defined, and contested upon the basis of race. This course is designed to further develop students' research, analytical and writing skills in a collaborative atmosphere. 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 course, students will have honed skills in primary and secondary source research, and the construction of an academic, analytical argument and paper. Students will build an argument based on their analysis of primary sources, and appropriately situate their argument within the literature of the core HSOC disciplines (anthropology, sociology, and history). In addition, student will continue to develop skills in critical analysis through weekly reading assignments.  
Fall  
1 Course Unit

HSOC 4588 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.  
Not Offered Every Year  
1 Course Unit

HSOC 4595 Defining Disability
Live long enough, and you are almost certain to experience some kind of disability if you haven't already. What, then, does it mean to be 'disabled'? This capstone takes as its premise the idea that disability has meant different things to different stakeholders (e.g. activists, physicians, politicians, families, employers, artists, clergy, engineers) across cultures and over time. We will historicize and analyze these various definitions in order to better understand the complex socio-cultural construct of disability while simultaneously cultivating the research skills necessary for advanced work in the humanistic social sciences. Assignments will be scaffolded to help students write an original research paper of significant length by the end of the semester.  
Fall  
Also Offered As: STSC 4595  
1 Course Unit

HSOC 4980 Honors Thesis
Research and writing of a senior honors thesis under faculty supervision.  
Fall or Spring  
1 Course Unit

HSOC 4999 Capstone Independent Study
Independent primary research under faculty supervision to fulfill the capstone research requirement.  
Fall or Spring  
1 Course Unit