HEALTH & SOCIETIES (HSOC)

HSOC 000 Study Abroad
Activity: Lecture
1.0 Course Unit

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

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
1.0 Course Unit

HSOC 003 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.
For BA Students: Society Sector
Taught by: Benson
Course usually offered in spring term
Also Offered As: SOCI 033, STSC 003
Activity: Lecture
1.0 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." Also fulfills General Requirement in Science Studies for Class of 2009 and prior.
For BA Students: Humanities and Social Science Sector
Taught by: McKay
Course usually offered in spring term
Activity: Lecture
1.0 Course Unit
Notes: Also fulfills General Requirement in Science Studies for Class of 2009 and prior
HSOC 028 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.
Taught by: Truitt
Course usually offered in fall term
Also Offered As: STSC 028
Activity: Seminar
1.0 Course Unit

HSOC 031 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.
Taught by: McKay
Course usually offered in fall term
Activity: Seminar
1.0 Course Unit

HSOC 041 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.
Taught by: Linker
Course usually offered in fall term
Also Offered As: STSC 041
Activity: Seminar
1.0 Course Unit

HSOC 048 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.
Taught by: Barnes
Course usually offered in fall term
Also Offered As: STSC 048
Activity: Seminar
1.0 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
1.0 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
1.0 Course Unit
HSOC 082 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.
Taught by: Johnson
Course usually offered in fall term
Also Offered As: STSC 082
Activity: Seminar
1.0 Course Unit

HSOC 100 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.
Taught by: Wilde, Baker, Roth
One-term course offered either term
Also Offered As: SOCI 100
Activity: Lecture
1.0 Course Unit

HSOC 102 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.
Taught by: Cronic,M
Course not offered every year
Also Offered As: SOCI 101
Activity: Lecture
1.0 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
1.0 Course Unit

HSOC 112 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.
Taught by: Barnes,D
One-term course offered either term
Activity: Lecture
1.0 Course Unit

HSOC 131 Sustainability and Public Health
We know that wild animal populations are only as healthy as their habitats, but what about humans? This course explores how the health of ecosystems is intertwined with health of human populations. 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, environmental toxins, ecosystem destruction, species extinction, water availability, and food production through the lens of how these affect 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. Throughout the course, we will engage in contemplative and reflective practice with regard to our own beliefs and behaviors. What prevents us, collectively, from creating a more sustainable society? We will critically explore questions surrounding the concept of "sustainability." What makes a system sustainable, in ecological terms? Are there guiding principles that we can follow? Is a sustainable system by definition a healthy system? In what ways do these concepts differ? Why do we create unsustainable systems, human-made processes that undermine the ecosystems we depend upon? What is the relationship between academic environmental studies and environmental activism? What is the relationship between industrial culture and indigenous culture? What are the differences, philosophically speaking? We will draw on a wide variety of sources, including medical journals such as JAMA, on-line publications, academic books, general audience books, and articles in the popular press. We will also have the opportunity to engage in active learning experiences that ground the concepts in real world activity.
Taught by: MacKenzie
Course usually offered summer term only
Activity: Seminar
1.0 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
1.0 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
1.0 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
1.0 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: Lecture
1.0 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 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!
Taught by: Johnson
Course usually offered summer term only
Also Offered As: STSC 162
Activity: Seminar
1.0 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
1.0 Course Unit

HSOC 202 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
1.0 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
1.0 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’ an’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
1.0 Course Unit

HSOC 211 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.
Taught by: Ali
Course not offered every year
Also Offered As: SAST 211, SAST 611
Activity: Seminar
1.0 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
1.0 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
1.0 Course Unit

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**HSOC 219 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? This undergraduate course approaches fundamental questions about race and racism by examining how ideas about race developed in modern times. When did people begin to study human differences from a scientific perspective and to what end? How and why did scientists and other scholars attempt to make race a product of the natural world? And why did scientists eventually reject race as a valid scientific concept? By tracking scientific conceptions of race across time and space we will see that the creation and rejection of racial classifications was often a response to realignments in the global socioeconomic order including the European conquest of the Americas, the transatlantic slave trade, the two world wars, decolonization, and the rise of neoliberalism.

For BA Students: Humanities and Social Science S
Taught by: Gil-Riano
One-term course offered either term
Also Offered As: LALS 219, STSC 219
Activity: Seminar
1.0 Course Unit

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**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
1.0 Course Unit

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For BA Students: Humanities and Social Science S
Taught by: Gil-Riano
One-term course offered either term
Also Offered As: LALS 219, STSC 219
Activity: Seminar
1.0 Course Unit

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**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
1.0 Course Unit

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**HSOC 231 Insect Epidemiology Pests, Pollinators and Disease Vectors**

Malaria, 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 threaten 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, while general declines of insects threaten ecosystems. 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 course is not an entomology course but will cover a lot about insects. It is not a traditional epidemiology course but will explore the approaches and study designs that epidemiologists use to uncover associations and evaluate interventions. It is not a history course but will cover past epidemics and infestations that have changed the course of the history and reversed advancing armies.

Taught by: Levy
Course usually offered in spring term
Also Offered As: STSC 231
Activity: Seminar
1.0 Course Unit

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**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
1.0 Course Unit
1.0 Course Unit
Taught by: Womack
a mixture of readings, lectures, class discussion, short essays and a
and particular groups of patients. You will examine these issues through
context and cultural representation of health and illness, both in culture
practitioner relations; 6) the construction of disease, or the broader social
and regulation; 5) patient experiences of health, illness, and patient-
in medicine; 4) changes in medical and pharmaceutical research
role of institutions, like hospitals and universities, in medical education
patterns of health, disease, and death); 2) the growing and changing
The course is organized around six topics: 1) demography (changing
and consider where current trends in American medicine might lead.
looks the way it does, how it developed, and what it offers (and takes)
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 globalization processes.
Taught by: Petryna
Course not offered every year
Also Offered As: ANTH 273
Activity: Seminar
1.0 Course Unit
HSOC 240 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.
Taught by: Womack
Course usually offered in spring term
Activity: Seminar
1.0 Course Unit
HSOC 249 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 globalization processes.
Taught by: Petryna
Course not offered every year
Also Offered As: ANTH 273
Activity: Seminar
1.0 Course Unit
HSOC 248 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.
Taught by: McKay
One-term course offered either term
Activity: Seminar
1.0 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: Mammen
Course usually offered in spring term
Activity: Seminar
1.0 Course Unit
HSOC 252 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.
Taught by: Dick
Course usually offered in fall term
Also Offered As: STSC 252
Activity: Seminar
1.0 Course Unit
HSOC 258 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.
Taught by: Mukharji
One-term course offered either term
Activity: Seminar
1.0 Course Unit

HSOC 260 Social Determinants of Health
Over the last century, we have witnessed dramatic historical change in population health, e.g. rising numberries 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.
Taught by: Johnson,A
Course not offered every year
Also Offered As: SOCI 259
Activity: Seminar
1.0 Course Unit

HSOC 262 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 cobbledstone 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.
Taught by: Womack
Course usually offered in fall term
Activity: Seminar
1.0 Course Unit

HSOC 271 Greek & Roman Medicine
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
1.0 Course Unit

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
Activity: Lecture
1.0 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: ENVS 279, HIST 320, STSC 279
Activity: Seminar
1.0 Course Unit
HSOC 299 Independent Study
Approved independent study under faculty supervision.
Activity: Independent Study
1.0 Course Unit

HSOC 320 Radiation Risk and the Global Nuclear Order
People 100,000 years in the future may not know much about our political systems, our art and literature, or our social organization. They will, however, know about our radioactive waste, which will be a medical and environmental problem for them just as it is for us. This research seminar considers the broad human and medical experience of radiation risk since 1945 with special attention to people exposed, including Navajo uranium miners, indigenous groups in Australia, atomic bomb survivors at Hiroshima and Nagasaki, Marshall Islanders, residents near Three Mile Island, Chernobyl and Fukushima, and other groups affected by military and medical accidents and disasters. We will consider the long-term environmental consequences of the rise of nuclear culture, and explore artistic and literary responses to the nuclear age. Students will gain perspectives on biomedical risk, human rights, and environmental contamination, and acquire analytical tools that cross disciplines and can be applied across technoscientific issues. Taught by: Lindee
Course offered spring; even-numbered years
Also Offered As: STSC 320
Activity: Seminar
1.0 Course Unit

HSOC 323 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. Taught by: Abney Salomon
Course usually offered in spring term
Also Offered As: STSC 323
Activity: Seminar
1.0 Course Unit

HSOC 329 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. Taught by: Mukharji
Course usually offered in fall term
Also Offered As: STSC 329
Activity: Seminar
1.0 Course Unit
HSOC 331 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.
Taught by: Gearhart; Bartolomei
Course usually offered in spring term
Activity: Seminar
1.0 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
1.0 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 member sof the school administration, teachers, staff, parents and community member sin the SHC and SHI process ith a special focus on encouraging participation from the schools' students. In this model for the use of Penn service-learning teams is successful, it will form the basis of on 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
1.0 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
1.0 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
1.0 Course Unit

HSOC 339 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.
Taught by: DiMeo
Course not offered every year
Activity: Seminar
1.0 Course Unit

HSOC 344 The Future of Disability and the Afterlives of Epidemics
It has been less than a year since the emergence of a new and deadly virus, Sars-CoV-2, but already this novel disease has upended our lives and all indicators suggest that things may never be the same. Mired in the middle of this ongoing crisis, the stories we write, read, tell, and hear about the present and the future are rife with grief, uncertainty, and fear as illness and death seem to permeate the very air we breathe. From this standpoint, it is difficult to see beyond the powerful dichotomies of health/illness, sick/better, and life/death that frame our perspectives of the ongoing crisis. In this course, we will learn instead 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 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 our current situation and to think in novel and critical ways about how our ideas about wellness, disability, and society have already begun to shift as a result of COVID-19.
Taught by: Martucci
One-term course offered either term
Activity: Seminar
1.0 Course Unit

HSOC 348 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.
Taught by: Womack
Course usually offered in fall term
Activity: Seminar
1.0 Course Unit
**HSOC 352 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.

Taught by: Gil-Riano

One-term course offered either term

Also Offered As: LALS 352

Activity: Seminar

1.0 Course Unit

**HSOC 357 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.

Taught by: Gil-Riano

Course offered spring; even-numbered years

Also Offered As: STSC 370

Activity: Seminar

1.0 Course Unit

**HSOC 358 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 experimentation, 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.

Taught by: Womack

Activity: Seminar

1.0 Course Unit


This is a class about the live(s) and afterlives of information from 1850 to the present. Not only can information be reproduced (in a variety of material conditions); it can be repurposed and funneled through a variety of different applications, some of them serving radically different purposes than the first purpose of gathering it. Thoreau’s journals of plant flowering, for instance, have become important indicators of climate change. More controversial is the sale of biomedical information by personal genomics services for drug discovery, or the construction of forensic databases consisting of the DNA of suspects arrested as a result of racial profiling. We will study the ways in which data has become a way for us to understand and define change, stability, place, and time, beginning in the mid-nineteenth century, a period of accelerated and increasingly systematic gathering of data, particularly medical, forensic, and environmental data. The class will proceed both chronologically and thematically in three units, from the gathering and use of biomedical data as a way to make patient populations “legible” (to borrow from James Scott), to data as a way to make the environment understandable, and finally to data as a tool for producing and reproducing social relations. As a final project, students will trace a particular data set from its original gathering to its latest usage. Students will also have an opportunity to create their own course content in the final three weeks of class.

Taught by bergman

One-term course offered either term

Also Offered As: STSC 379

Activity: Seminar

1.0 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

1.0 Course Unit
HSOC 381 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.
Taught by: Dahlberg
Also Offered As: STSC 381
Activity: Seminar
1.0 Course Unit

HSOC 382 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.
Taught by: Sorenson
Course not offered every year
Activity: Seminar
1.0 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
1.0 Course Unit

HSOC 405 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.
Taught by: Barnes
Course not offered every year
Also Offered As: HSSC 605
Activity: Seminar
1.0 Course Unit
HSOC 409 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.
Taught by: Martucci
One-term course offered either term
Also Offered As: STSC 409
Activity: Seminar
1.0 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 research project. 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 determine 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
1.0 Course Unit

HSOC 418 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 undergraduate majors 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.
Taught by: Kaplan
Course usually offered in fall term
Also Offered As: STSC 418
Activity: Seminar
1.0 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: Crnic
Course usually offered in spring term
Activity: Seminar
1.0 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
1.0 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
1.0 Course Unit

HSOC 432 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.
Taught by: Barnes
One-term course offered either term
Activity: Seminar
1.0 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
1.0 Course Unit

HSOC 443 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.
Taught by: Barnes, Wunsch
Course usually offered in spring term
Also Offered As: HSPV 620, LARP 771
Activity: Seminar
1.0 Course Unit

HSOC 448 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.
Taught by: Martucci
Course usually offered in fall term
Activity: Seminar
1.0 Course Unit

HSOC 452 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
Taught by: Cnnc
Course usually offered in fall term
Activity: Seminar
1.0 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
1.0 Course Unit

HSOC 459 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.
Taught by: Kaplan
Course usually offered in fall term
Activity: Seminar
1.0 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
1.0 Course Unit

HSOC 482 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, ethics 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.
Taught by: Kaplan, J
One-term course offered either term
Also Offered As: STSC 482
Activity: Seminar
1.0 Course Unit

HSOC 498 Honors Thesis
Research and writing of a senior honors thesis under faculty supervision.
One-term course offered either term
Activity: Independent Study
1.0 Course Unit

HSOC 499 Capstone Independent Study
Independent primary research under faculty supervision to fulfill the capstone research requirement.
One-term course offered either term
Activity: Independent Study
1.0 Course Unit