

SCIENCE IN SOCIETY PROGRAM (SISP)

SISP127F War and Technology (FYS)

In this class, we will discuss technological changes caused by war and accompanying social changes and ethical debates in both militaries and civilian societies. Topics will include technological changes in warfare and weapons, as well as the ways in which societies have responded to new injuries and health issues resulting from war. Subjects may include the development of machine guns, trench warfare, chemical warfare, nuclear warfare, drones, cyber-warfare, and surveillance technologies, in addition to the professionalization of nursing, military psychiatry, medical experimentation, environmental contamination, and disability and health issues for veterans and civilians. We will also talk about the implementation in the civilian world of technologies developed or expanded during war. We will discuss cases from across the globe, focusing chronologically on 1850 to the present. Readings may include selections from Margaret Humphreys, John Ellis, Carol Byerly, Warwick Anderson, Beth Linker, Paul Lerner, Jessica Adler, Edmund Russell, Charles Perrow, Susan Smith, Susan Lindee, Jessica Wang, Kelly Moore, Janet Abbate, Stephen Graham, and others.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP135F Skin, Sex, State, Software: Surveillance & Society (FYS)

Scopophilia is the derivation of pleasure from looking. What pleasures does the surveillance state gain from looking at us? From feeling and documenting us? How do privacy activists fight back against such surveillance, and what might be wrong with privacy rights discourse? Which groups are always already surveilled? In this class, students will play with notions of surveillance—including sousveillance, lateral surveillance, and counter surveillance—as engaged by queer and feminist studies, the cultural anthropology of expertise, and social studies of science and technology. We will draw on case studies ranging from police technologies, facial recognition software, Pornhub's data collection projects, TSA airport body scanners, Facebook ads, science fiction like Black Mirror, and more to understand how bodies, races, genders, and sexualities are made known and contested by activists, artists, corporations, and governments. Students will also collect data for a creative personal surveillance project culminating at the end of the quarter.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP201 Critical Global Health

This course explores the medical, social, political, and economic dimensions of the global health enterprise. Topics covered include (1) the history of the term "global health" and the field of science and practice to which it refers; (2) struggles over expertise, ethics, and governance that characterize the enterprise; (3) the unintended consequences of global health interventions for health and social life; and (4) alternative, decolonial epistemologies for fostering a healthier world.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP204 Extreme Landscapes of the Anthropocene

The "Anthropocene," a term coined to categorize the current geological epoch, has become a way in which social scientists can critically and creatively engage with the impact of humanity on the ecological well-being of the Earth. The interdisciplinary and uncertain nature of this subject matter provides space for experimental writing styles, innovative approaches to storytelling, and critical discussion and debate. This course is designed to explore and challenge the term "Anthropocene," questioning how narrative and drama are entangled in the dissemination of complex truths, for better or worse.

In this course, we will consider texts, short films, and other mixed media that investigate the everydayness of extreme landscapes, from "capitalist ruins" to the depleting seas. We will dive into the social, political, economic, and scientific power-scapes that influence narratives about the environment, from late liberal ideology to corporate influence on science and the news. Through the course materials and activities, we will question how to communicate complex information with a broad range of people, particularly surrounding issues of climate change, sustainability, and environmental justice. Each student will build their own writing portfolio of short essays for specific audiences. The class will collectively build and design a storytelling website where they can share their work. Students are encouraged to apply an ethics of care and the art of "non-judgmental attention" to their critical engagement with the Anthropocene.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Identical With: **WRCT204, ENVS204, ANTH204**

Prereq: **None**

SISP208 Technologies of Time

Tracking the rhythms, cycles, and ruptures of collective life is essential for studies of sociocultural and environmental dynamics. Yet such studies are mostly undertaken with the unquestioned assumption that Western apparatuses of time reckoning and historical periodization can be applied as universal and stable frames of reference for all kinds of phenomena. Temporal units of years, months, days, minutes are used, rendering insensible relations that do not align with such metrics. These simplifying moves limit our capacity to sense and understand continuity and change; they place many lives and landscapes at risk.

This course draws from the social and ecological sciences, humanities, and arts to reimagine such simplifications. Through readings, creative exercises, and field trips, students are invited to notice, record, and engage with multiple temporalities of more-than-human worlds. For final projects, students will research and design speculative timekeeping devices or time machines for worlds otherwise.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Identical With: **IDEA301**

Prereq: **None**

SISP213 Calderwood Seminar in Public Writing: Writing Science, Writing Science Studies

This Calderwood Seminar in Public Writing will give students practice writing about science, technology, and medical studies for general audiences. It will also function as a capstone experience for SISP majors: students will have a chance to reflect on the methodologies and theories they have learned during their time in the program, while also using those methodologies and theories to analyze

issues and texts in our world today. Students will work collaboratively, editing each other's work, and significant class time will be spent workshopping student writing. The aim will be to produce publishable pieces of cultural analysis for the popular press.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Identical With: **ENGL211**

Prereq: **None**

SISP215 Metabolism and Technoscience

This course will investigate the scientific idea of metabolism through the lens of technoscience. Metabolism is a flexible and mobile scientific idea, one that has been applied at the micro-level of analysis within biological organisms, at the meso-level of social collectivities, and at the macro-level of global ecologies. Metabolism encompasses all of the biological and technosocial processes through which bodies (both human and not human) and societies (again, human and not) create and use nutrients, medicines, toxins, and fuels. The lens of technoscience enables us to investigate the technological and scientific practices that define and drive metabolic processes within sciences, cultures, and political economies. These processes implicate forces of production, consumption, labor, absorption, medicalization, appropriation, expansion, growth, surveillance, regulation, and enumeration. Accordingly, as we will learn, metabolism is also a profoundly political process that is inextricably linked to systems that create structural and symbolic violence as well as modes of resistance and struggle. In these contexts, we will interpret some of the most pressing metabolic crises facing human societies, including ecological disaster, industrial food regimes, metabolic health problems, and industrial-scale pollution.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Identical With: **ENVS222**

Prereq: **None**

SISP236 Race, Gender, and Medicine in U.S. History

This course will examine the intersections of race, gender, public health, and medicine in the United States, largely focusing on the 20th century. Topics will include the racialization of certain diseases, race and health care access, and the history of African Americans in health care professions and health care activism. Students will learn about the history of medicine and public health in the United States, African American history, and historical research methods. We will consider the built environment, the law, and federal and local politics as they relate to medical care in the United States. By the end of this course, you will gain further understanding of some of the major currents in the history of medicine and public health in the United States; you will make connections between race and health care experiences in the U.S.; you will be able to discuss historical research methods and appraise the values and limitations of various kinds of sources. Possible readings may include selections from Sowande' Mustakeem, Rana Hogarth, Sharla Fett, Deirdre Cooper Owens, Jim Downs, Tera Hunter, Samuel K. Roberts, Susan L. Smith, Natalia Molina, Nayan Shah, Wendy Kline, Vanessa Gamble, Jonathan Metzl, Susan Reverby, Alondra Nelson, Keith Wailoo, Jennifer Nelson, and Jennifer Brier.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP240 Research Methods in Science Studies

This seminar exposes students to qualitative research methods in science studies including ethnography, archival and discourse analysis, social worlds analysis, comparative historical analysis, narrative analysis, visual culture and

media analysis. The course will survey methodological traditions in science and technology studies, sociology and cultural studies, and feminist and critical race studies that guide the collection of evidence about scientific knowledge and practices, the relationships between users and technologies, and broader sociotechnical infrastructures. Coursework will culminate in small-scale individual and group research projects utilizing qualitative research methods.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP243 Commodities and Addiction

This course will examine several commodities that have often been described as addictive. We will use a case study approach and focus on the following substances: tobacco, sugar, opiates, and alcohol. We will also consider the history of the concepts of addiction and addiction treatment. The course will be largely focused on United States history but will also consider the global history of the production of these substances and the development of global consumer markets. Some of the subjects that we will discuss include colonization, slavery, agricultural and environmental history, advertising, public health, and criminalization of substance use.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP245 Ethnography and Design

Exercising humility and developing methods of meaningful engagement are essential to becoming an effective ethnographer and designer. Collaboration with users provides knowledge that allows designers to imagine artifacts, places, and systems that are thoughtfully enhanced or radically new. This course rethinks power dynamics to better understand how to design both for and with other people. With successful completion of this course students will be able to demonstrate competence in developing, refining, and communicating research interests in a committed, reflexive manner. They will gain an understanding of the strategic and tactical value of design and a sense of the practical problems involved in realizing design solutions and responses that are attuned to the needs of both an institution and individual users. Students will gain experience not only in theoretically framing social and political issues as these are expressed through design, but also in understanding the methodological tools needed to translate problems into creative interventions that are user-centered and compassionate.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Identical With: **CSPL245**

Prereq: **None**

SISP250 Sociology of Knowledge

To map power-knowledge relationships, the sociology of knowledge grounds an analysis of knowledge in terms of social structures, the sets of patterned practices that define and give meaning to social life at individual, communal, and institutional levels. In the broadest sense, the sociology of knowledge is concerned with the relationship between the (epistemic) content and the social context of knowledge. How was knowledge produced and with what institutional resources? Who produced knowledge and why did they produce it? Who benefits from the circulation of knowledge? What effects in the world does knowledge engender? Our basic course objectives are to a) introduce sociology of knowledge as a form of critical inquiry, b) describe and distinguish the approaches and research methods associated with the sociology of knowledge,

and c) learn how to analyze knowledge and knowledge-making practices in their social context using these methods.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Identical With: **EDST251, SOC255**

Prereq: **None**

SISP264 Social and Cultural Studies of Science

This course provides a survey of theories and methods attending the social and cultural study of science and technology. Students will consider the role of design (such as by engineers) and use (such as by consumers), and will learn historical perspectives that frame the question of whether scientific and technological innovation, and the social and cultural configurations involved, are really "new."

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP300 Black Phoenix Rising: Death and Resurrection of Black Lives

The Black Lives Matter Movement has renewed our collective need to theorize the value of black lives within a deluge of death and disappearance in black communities. This movement is part of a deep transnational tradition in black radical praxis that aims to transform scholarly, activist, and public discourse and public policies concerning the systemic and epistemic effects of institutional racism and the prospects for antiracist futures. How might we envision a black radical praxis that simultaneously recognizes the vitality of black lives and challenges the cultural ideas and social practices that generate and justify black people's death and suffering? This seminar traces a genealogy of black radical praxis that interrogates the necropolitics of race and positions this system of power against the prospect of thriving black people. In doing so, the course erects an interdisciplinary theoretical framework that features scholarship in critical race science studies, intersectionality, and transnational cultural studies as they inform how a black radical praxis can contribute to the uprising and raising up of black communities.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **HA-CHUM**

Identical With: **AFAM300**

Prereq: **None**

SISP306 Precision Medicine: A Biomedical Revolution

Drawing insights from history, sociology, and anthropology, this course will examine the rise of precision medicine and its sociomedical implications. An emerging biomedical paradigm, the aim of precision medicine is to develop individually tailored approaches to disease prevention and treatment through the integration of genomic and other molecular sciences into research and practice. The course will explore the promises that have underpinned major worldwide investments in the precision approach, interrogate the concept of "precision" and the semantic work it performs within medicine and beyond, investigate the paradigm's implications for understandings of race and other key forms of human difference, and examine the challenges it presents for the pursuit of health justice.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP309 Multispecies Worldbuilding: The Chestnut Project

How do forests think (Kohn)? Do rocks listen (Povinelli)? Can insects speak (Mitchell)? How do fungi make history (Tsing)? Should trees have rights (Stone)? These are some of the most exciting questions percolating in the humanities, arts, and social/natural sciences today. They disrupt Western colonial notions of what it means to be human, while also calling for methods, theories, and apparatuses that might imagine and build more livable multispecies worlds.

This course has two goals: (1) introduce students to key texts on more-than-human, more-than-Western ontologies, particularly from the fields of multispecies/cyborg anthropology, science and technology studies, biology, and environmental humanities; (2) engage students in transdisciplinary research on the American chestnut (*Castanea dentata*), a tree species once known as the "queen of forests" from the Appalachian mountains to the Mississippi river until fungi wiped them out in the early twentieth century. This course will lay the groundwork for students to participate in current debates and projects to restore a transgenic version of the American chestnut in the eastern United States within the next five years.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **HA-SISP**

Prereq: **None**

SISP310 Botanical STS: Plants as Nature, Capital, Empire

Interest in the social and technoscientific lives of plants has been rising. Described as the Plant Turn or Critical/Transnational Plant Studies, this multidisciplinary field of study encompasses the social and environmental sciences, experimental humanities, and visual/sonic/literary arts. In this course, we will delve into contemporary works that situate the relationship between plants and botanical studies at the center of critical analysis and creative practice. What happens to notions of agency/intelligence, property/exchange, and power/knowledge when we think with and about plants? We will explore answers to these questions by engaging in three types of activities: readings and film screenings, field visits to botanical collections and agricultural stations, and online use of global plant databases.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP311 Media and Environment: In/Sensible Worlds

In this seminar, we will examine the relationship between media technologies, sensory apparatuses, and changing environments. How do various kinds of media shape perceptions and interactions with our surroundings, multispecies ecologies, and planet Earth? How might we study the environment AS media? These seemingly simple questions matter because, like never before, media and environment co-produce who/what becomes sensible or insensible--and, ultimately, available or not available for life. This seminar will include readings from the fields of Critical Media and Communication Studies, Feminist/Postcolonial Science, and Technology Studies, Environmental/Digital Arts, and Humanities. Importantly, we will examine a range of creative media projects that explore ecology, environment, and earthly survival: films, games, sensors, and web projects.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP317 Sexuality, Gender, and Science

This course will consider how the concepts of gender and sexuality have been treated in scientific fields, focusing primarily on the 19th and 20th centuries. We will examine the history of ideas about gender and sexuality as reflected in the development of sexology, theories of homosexuality, psychology, and endocrinology. We will also discuss contraceptive and reproductive technologies, the inclusion of women in clinical trials, women in scientific professions, and recent studies that use algorithmic predictions of sex or sexual orientation. Readings may include selections from Sigmund Freud, Siobhan Somerville, Emily Martin, Sarah Igo, Laura Briggs, Ronald Bayer, Sandra Morgen, David Serlin, Allan Bérubé, Dorothy Roberts, Johanna Schoen, Jennifer Terry, Carolyn Herbst Lewis, Steven Epstein, Riley Snorton, Rebecca Jordan-Young, Mar Hicks, and Safiya Noble.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Identical With: **FGSS317**

Prereq: **None**

SISP325 TechnoPrisons: Corrections, Technology, and Society

The United States currently incarcerates more of its citizens than any other nation, and most of them are members of disadvantaged social groups. How does our government practically accomplish mass incarceration? This first-year seminar (FYS) examines prisons as technologies and the role that specific technologies play in the U.S. prison system. To say that prisons are technologies means that prisons operate as an architectural system that is designed to hold people captive within enclosed social spaces. At the same time, prisons are the location for multiple kinds of technological systems including surveillance systems, biomedical technologies, classification and administrative technologies, and military technologies. This seminar introduces basic concepts within science and technology studies (STS), criminology, and sociology to investigate how prison happens.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP331 Decolonizing Ecocinema: Aesthetics and Politics of Disaster

This seminar will focus on twelve experimental documentary films as critical texts that situate, theorize, and decolonize representations of disaster. What the films share is an insistence that struggles for social and environmental justice are deeply entangled and thus require "new figures and tactics" (Povinelli). We will consider how representation is composed from choices made at two levels: aesthetic forms and specialized languages articulated through the camera and editing software; and political calls for accountability and embodied, embedded, inherited praxis. We will unpack how the medium of film alters and stylizes engagements between subjects positioned behind, in front of, prior to, and after the camera frames, records, and plays back images and sounds.

The films will take us to more-than-human worlds, questioning how we engage with species and landscapes, history and technology, power and language. A partial list of characters includes wild bees in Hawaii (Swarm Season, Christman 2019); steel mines in Mongolia (Behemoth, Liang 2015); colonial waters in Tierra del Fuego (Pearl Button, Guzman 2015); shepherds in Montana (Sweetgrass, Barbash and Castaing-Taylor 2010); farmers in Thailand (Agrarian Utopia, Raksasad 2009); and stray cats in Istanbul (Kedi, Torun 2016). As companions to the films, we will read essays from post/decolonial media/science studies, visual anthropology, and environmental humanities.

Offering: **Host**

Grading: **A-F**

Credits: **1.00**

Gen Ed Area: **SBS-SISP**

Prereq: **None**

SISP356 Afro-Caribbean Philosophy

This seminar focuses on the philosophical production of Afro-Caribbean thinkers since the middle of the twentieth-century. We focus on close readings of Frantz Fanon, Édouard Glissant, and Sylvia Wynter alongside others to consider a Caribbean approach to questions and problems of modernity, relationality, space, race, belonging, the human, creolization, language, anti-colonialism, and liberation. We consider the roots of some of these questions in the work of earlier thinkers such as Aimé Césaire, as well as contemporary influences of their work across and beyond the Caribbean. We will work beyond the linguistic divisions of the Francophone, Hispanophone, or Anglophone Caribbean to consider conversations in common across the archipelago, in a multiplicity of languages.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-PHIL**

Prereq: **None**

SISP357 AI, Algorithms, & Power

This course explores artificial intelligence (AI) as a cultural, sociopolitical, and literary object. Course readings will begin with the observations of anthropologists at the post-WWII Macy Conferences on cybernetics. Students will put algorithmic data mining and machine learning in historical context, exploring classification systems and intelligence testing. Students will also examine the reanimation of the artificial human in newer discourses of AI, such as big data and predictive policing, virtual reality and drone strikes in commercial and military operations, health and assistive technology, and play and labor on platforms like Mechanical Turk. Course texts will include speculative fiction on artificial life, social theories of simulation and virtuality, and new work from queer studies and critical race studies interrogating algorithmic bias and the testing and classification of humanity.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **HA-CHUM**

Prereq: **None**

SISP366 Bodies, Machines, and Meaning: Cultural Studies of the Sciences

Cultural studies of the sciences shift the focus of interdisciplinary science studies from understanding the sciences as producing and justifying knowledge to understanding them as meaning-making and world-transforming practices. Cultural studies attend to scientific meaning-making at multiple levels, and to the interactions among them: concrete material relations among bodies, technologies, and their settings or situations; verbal, visual, corporeal, mathematical, and other expressive performances; and social, cultural, or political institutions, practices, boundaries, and movements across and within them. Cultural studies of science also emphasizes political engagement with scientific practices and their broader cultural entanglements. This course explores what it means to do cultural studies of science, with a focus on three interrelated themes: alternative conceptions of what it means to make claims and reason about what happens in "nature"; case studies in how scientific meaning and understanding are embodied and prosthetically extended technologically; and some specific conceptual and material relations among scientific understandings of life, bodies, sex, reproduction, and being human.

Offering: **Host**

Grading: **OPT**

Credits: **1.00**

Gen Ed Area: **SBS-PHIL**

Identical With: **PHIL366**

Prereq: **None**

SISP401 Individual Tutorial, Undergraduate

Topic to be arranged in consultation with the tutor.

Offering: **Host**

Grading: **OPT**

SISP402 Individual Tutorial, Undergraduate

Topic to be arranged in consultation with the tutor.

Offering: **Host**

Grading: **OPT**

SISP403 Department/Program Project or Essay

Project to be arranged in consultation with the tutor.

Offering: **Host**

Grading: **OPT**

SISP404 Department/Program Project or Essay

Project to be arranged in consultation with the tutor.

Offering: **Host**

Grading: **OPT**

SISP407 Senior Tutorial (downgraded thesis)

Downgraded Senior Thesis Tutorial - Project to be arranged in consultation with the tutor. Only enrolled in through the Honors Coordinator.

Offering: **Host**

Grading: **A-F**

SISP408 Senior Tutorial (downgraded thesis)

Downgraded Senior Thesis Tutorial - Project to be arranged in consultation with the tutor. Only enrolled in through the Honors Coordinator.

Offering: **Host**

Grading: **A-F**

SISP409 Senior Thesis Tutorial

Topic to be arranged in consultation with the tutor.

Offering: **Host**

Grading: **OPT**

SISP410 Senior Thesis Tutorial

Topic to be arranged in consultation with the tutor.

Offering: **Host**

Grading: **OPT**

SISP411 Group Tutorial, Undergraduate

Topic to be arranged in consultation with the tutor.

Offering: **Host**

Grading: **OPT**

SISP412 Group Tutorial, Undergraduate

Topic to be arranged in consultation with the tutor.

Offering: **Host**

Grading: **OPT**

SISP419 Student Forum

Student-run group tutorial, sponsored by a faculty member and approved by the chair of a department or program.

Offering: **Host**

Grading: **Cr/U**

SISP420 Student Forum

Student-run group tutorial, sponsored by a faculty member and approved by the chair of a department or program.

Offering: **Host**

Grading: **Cr/U**

SISP420A Student Forum

Student-run group tutorial, sponsored by a faculty member and approved by the chair of a department or program.

Offering: **Host**

Grading: **Cr/U**

SISP465 Education in the Field, Undergraduate

Students must consult with the department and class dean in advance of undertaking education in the field for approval of the nature of the responsibilities and method of evaluation.

Offering: **Host**

Grading: **OPT**

SISP466 Education in the Field, Undergraduate

Students must consult with the department and class dean in advance of undertaking education in the field for approval of the nature of the responsibilities and method of evaluation.

Offering: **Host**

Grading: **OPT**

SISP469 Education in the Field, Undergraduate

Students must consult with the department and class dean in advance of undertaking education in the field for approval of the nature of the responsibilities and method of evaluation.

Offering: **Host**

Grading: **Cr/U**

Credits: **1.00**

Gen Ed Area: **None**

Prereq: **None**

SISP491 Teaching Apprentice Tutorial

The teaching apprentice program offers undergraduate students the opportunity to assist in teaching a faculty member's course for academic credit.

Offering: **Host**

Grading: **OPT**

SISP492 Teaching Apprentice Tutorial

The teaching apprentice program offers undergraduate students the opportunity to assist in teaching a faculty member's course for academic credit.

Offering: **Host**

Grading: **OPT**