

HISTORY OF SCIENCE (HIST SCI)

HIST SCI/ENVIR ST/HISTORY 125 – GREEN SCREEN: ENVIRONMENTAL PERSPECTIVES THROUGH FILM

3 credits.

From Teddy Roosevelt's 1909 African safari to the Hollywood blockbuster King Kong, from the world of Walt Disney to The March of the Penguins, cinema has been a powerful force in shaping public and scientific understanding of nature throughout the twentieth and twenty-first century. How can film shed light on changing environmental ideas and beliefs in American thought, politics, and culture? And how can we come to see and appreciate contested issues of race, class, and gender in nature on screen? Explore such questions and come to understand the role of film in helping to define the contours of past, present, and future environmental visions in the United States, and their impact on the real world struggles of people and wildlife throughout the world.

Requisites: None

Course Designation: Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2025

HIST SCI/HISTORY/MED HIST 132 – BEES, TREES, GERMS, AND GENES: A HISTORY OF BIOLOGY

3 credits.

How did today's biology emerge out of the diverse traditions of agriculture and natural history (bees and trees), biomedicine and molecular biology (germs and genes), which stretch back into the eighteenth century? Examines classic texts and "game-changers" in the history of biology, putting them into broader scientific and social contexts to see how these different ways of knowing intertwined, competed, and yielded novel approaches to the study of life that still shape today's life sciences.

Requisites: None

Course Designation: Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Summer 2025

HIST SCI 133 – BIOLOGY AND SOCIETY, 1950 – TODAY

3 credits.

From medical advancements to environmental crises and global food shortages, the life sciences are implicated in some of the most pressing social issues of our time. Explores events in the history of biology from the mid-twentieth century to today, and examines how developments in this science have shaped and are shaped by society. Investigates the origins of the institutions, technologies, and styles of practice that characterize contemporary biology, such as the use of mice as "model organisms" for understanding human diseases. Examines biological controversies such as the introduction of genetically modified plants into the food supply. Explores how biological facts and theories have been and continue to be used as a source for understanding ourselves.

Requisites: None

Course Designation: Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2024

Learning Outcomes: 1. Develop an appreciation for the ways in which the institutions, practices, and ways of thinking associated with contemporary biology are specific to a particular place and time, and have changed over time

Audience: Undergraduate

2. Identify and state the significance of key people and events in the recent history of biology

Audience: Undergraduate

3. Understand key theoretical frameworks for describing interactions between biology and society, and be able to apply these frameworks to new empirical cases

Audience: Undergraduate

4. Identify and evaluate the strength of the arguments and evidence used in an academic paper

Audience: Undergraduate

5. Extrapolate complex arguments to new contexts and assess how new information would change the argument

Audience: Undergraduate

HIST SCI 150 – THE DIGITAL AGE

3 credits.

An introduction to the history of the computer from the 1940s to the present day, major developments in computer science and technology in their historical contexts, and recent trends in computing and society. We learn about machines, but emphasize the study of people: the institutions, scientists, workers, and social movements that invented, facilitated, and transformed digital technology in the 20th and early 21st century.

Requisites: None

Course Designation: Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2024

Learning Outcomes: 1. Identify key technological developments, periods, and themes in the history of computing

Audience: Undergraduate

2. Analyze primary cultural and technical sources from the history of technology in the 20th century

Audience: Undergraduate

3. Engage ongoing developments in computer science and digital technology with historical and critical perspective

Audience: Undergraduate

4. Write and speak conscientiously about digital technology's effects in society

Audience: Undergraduate

5. Recognize factors that contribute to technological change

Audience: Undergraduate

HIST SCI 160 – ENGINEERING INEQUALITY: TECHNOLOGY AND INEQUITY THROUGHOUT HISTORY

3-4 credits.

Offers an introduction to the history of technology centered around the relationship between technology and various forms of social inequality. Addresses: 1) how gendered, racial, and class-based disparities have shaped the history of technology; 2) how forms of engineered inequity have intersected with state-building, colonial projects, environmental degradation, and revolutionary programs; 3) how technology has been implicated in attempts to imagine a more just society. Introduces central themes and concepts in the histories of science, medicine, and especially technology. Examines case-studies that are transnational in scope and move chronologically from the 17th century to the present. Also gives significant attention to histories of technology that originated outside of the U.S. and Europe.

Requisites: None

Course Designation: Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2022

Learning Outcomes: 1. Identify and summarize key concepts in the history of technology

Audience: Undergraduate

2. Utilize historical methods and techniques and apply these to analyze primary sources including print media, visual art, film, web-based content, and technical materials

Audience: Undergraduate

3. Apply concepts from the history of technology to relevant present-day issues in engineering and technology policy

Audience: Undergraduate

4. Produce original arguments that demonstrate critical thinking skills and draw on course concepts, arguments specifically about the role of technology—as a collection of material, social, and political practices—and technological change in the contemporary world

Audience: Undergraduate

HIST SCI/HISTORY 171 – HISTORY OF MEDICINE IN FILM

3–4 credits.

Considers the social and cultural history of 20th and early 21st century American medicine through the depiction of health care practitioners and health care systems in Hollywood movies. View films that featured medicine, doctors, nurses, patients, and hospitals. Using these films as primary sources, seek to place these representations into a broader social and cultural context. Evaluate the extent to which popular understandings of medicine, health, and healing as portrayed in the films corresponded to actual practices of medicine and medical research at the time the films were first screened for mass audiences.

Requisites: None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Spring 2019

Learning Outcomes: 1. Identify key developments, actors, ideas, and institutions in the broad history of American medicine in the 20th century. Audience: Undergraduate

2. Speak and write critically about primary and secondary historical sources by examining diverse interpretations of past events and ideas in their historical contexts. Audience: Undergraduate

3. Ask analytic questions about the ways in which films express both cultural ideals and cultural anxieties about medicine within the constraints of "literary" genres: drama, horror, comedy, romance, tragedy and thriller. Audience: Undergraduate

4. Understand that, in addition to the deliberate choices of plot-lines, locations and character development, films reveal a great deal about what was taken for granted at the time of each film's production: gender and race relations, physicians' paternalism and patients' autonomy, medical technology and expectations for care and cure; ethical and professional norms for medical research and decision making in patient care. Audience: Undergraduate

HIST SCI 201 – THE ORIGINS OF SCIENTIFIC THOUGHT

3 credits.

Emergence of scientific method and scientific modes of thought out of ancient philosophical and religious traditions; the impact of ancient science on medieval Christendom; the origins and development of the Copernican–Newtonian world view.

Requisites: Not open to students with credit for ILS 201 or HIST SCI/HISTORY 323**Course Designation:** Breadth – Humanities Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Fall 2024**HIST SCI 202 – THE MAKING OF MODERN SCIENCE**

3 credits.

Major trends and developments in the sciences from the 17th century to the early 20th century. Emphasis on those with broad cultural and social implications.

Requisites: None**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Spring 2025**HIST SCI/ASTRON 206 – HISTORY OF ASTRONOMY AND COSMOLOGY**

3 credits.

The development of astronomical knowledge and cosmological views from the earliest times to the present, viewed in their social, philosophical, and technological contexts.

Requisites: None**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Summer 2024

Learning Outcomes: 1. Discuss the history of modern astronomy, with an emphasis on tracing how our current conception of the universe has developed. Audience: Undergraduate

2. Describe the ancient background to western European astronomy, the role of astronomy in the scientific revolution of the 16th and 17th centuries, the development of modern astrophysics, and Wisconsin's contributions to modern astronomy. Audience: Undergraduate

3. Engage actively and critically with primary historical sources, including Galileo's *Siderius Nuncius*, through reading, writing, discussion, and examination of rare books. Audience: Undergraduate

4. Evaluate historical subjects and works in their own contexts while also appreciating their significance for our own world view. Audience: Undergraduate

5. Demonstrate some familiarity with astronomical instruments, observatories, and technologies through actual use, visits, and class demonstrations. Audience: Undergraduate

HIST SCI 211 – THE HISTORIAN'S CRAFT: SCIENCE, MEDICINE, AND TECHNOLOGY

3-4 credits.

Conduct original historical research in the fields of history of science, medicine, or technology and convey the results to others. Become historical detectives through engagement with archival materials and disciplinary methodologies in the histories of science, medicine and technology; practice defining important historical questions, collecting and analyzing evidence, presenting original conclusions, and contributing to ongoing discussions. Confer individually with and receive feedback from instructors to improve skills of historical analysis and communication in written and other formats. May not be repeated for credit.

Requisites: Satisfied Communications A requirement. Not open to students with credit for HISTORY 201

Course Designation: Gen Ed - Communication Part B

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2025

Learning Outcomes: 1. Ask Questions: develop the habit of asking questions, including questions that may generate new directions for historical research.

Audience: Undergraduate

2. Find Sources: learn the logic of footnotes, bibliographies, search engines, libraries, and archives, and consult them to identify and locate source materials.

Audience: Undergraduate

3. Evaluate Sources: determine the perspective, credibility, and utility of source materials.

Audience: Undergraduate

4. Develop and Present an Argument: use sources appropriately to create, modify, and support tentative conclusions and new questions.

Audience: Undergraduate

5. Plan Further Research: draw upon preliminary research to develop a plan for further investigation.

Audience: Undergraduate

6. Communicate Findings Effectively: make formal and informal, written and oral presentations tailored to specific audiences.

Audience: Undergraduate

HIST SCI/MED HIST 212 – BODIES, DISEASES, AND HEALERS: AN INTRODUCTION TO THE HISTORY OF MEDICINE

3 credits.

A survey of different conceptions of how the body as a site of sickness has been understood from Antiquity to contemporary medicine. Includes consideration of the origins and evolution of public health, the changing social role of healers, and the emergence of the modern "standardized" body in health and illness.

Requisites: None

Course Designation: Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Summer 2025

HIST SCI/ENVIR ST 213 – GLOBAL ENVIRONMENTAL HEALTH: AN INTERDISCIPLINARY INTRODUCTION

3 credits.

Provides an introduction to the intersections of health and environment on a global scale. Exposes students to a range of problems in global environmental health, including climate change, disease ecology, and the globalization of disease.

Requisites: None

Course Designation: Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2025

Learning Outcomes: 1. Recognize the utility of humanistic methods for the study of global environmental health

Audience: Undergraduate

2. Develop critical thinking skills through techniques of close reading and written analysis

Audience: Undergraduate

3. Understand essential developments in the evolving relationship between the environment and public health on a global scale.

Audience: Undergraduate

4. Explain the social, economic, and/or environmental dimensions of the sustainability challenge(s) of global health issues in developing and industrialized countries

Audience: Undergraduate

5. Describe the social, economic, and environmental dimensions of climate change, agriculture, and the built environment and identify potential tradeoffs and interrelationships among these dimensions at a level appropriate to the course.

Audience: Undergraduate

HIST SCI 218 – HISTORY OF TWENTIETH CENTURY AMERICAN MEDICINE

3 credits.

Introduction to the development of the modern American medical care system.

Requisites: None

Course Designation: Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2025

Learning Outcomes: 1. Identify the social, cultural, and political factors that have shaped the health care system and health institutions in 20th century America.

Audience: Undergraduate

2. Analyze the changing interactions of patients, physicians, nurses, and other health care personnel over the last century.

Audience: Undergraduate

3. Describe how the experience of illness was transformed in the 20th century, and the changing role of technologies, pharmaceuticals, and medical research.

Audience: Undergraduate

4. Understand the ways in which assumptions about race, gender, and socio-economic factors affect the experience of illness and health outcomes over the long twentieth century.

Audience: Undergraduate

HIST SCI 222 – TECHNOLOGY AND SOCIAL CHANGE IN HISTORY

3 credits.

Topics in the history of technology. Themes include the social basis of technical change, the impact of technology on everyday life, and ethical issues in technology in the last four centuries.

Requisites: Sophomore standing or 3 credits in HISTORY or HIST SCI

Course Designation: Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2020

Learning Outcomes: 1. Identify and summarize key concepts in the history of technology

Audience: Undergraduate

2. Utilize historical methods and techniques and apply these to analyze primary sources including print media, visual art, film, web-based content, and technical materials

Audience: Undergraduate

3. Apply concepts from the history of technology to relevant present-day issues in engineering and technology policy

Audience: Undergraduate

4. Produce original arguments that demonstrate critical thinking skills and draw on course concepts, arguments specifically about the role of technology—as a collection of material, social, and political practices—and technological change in the contemporary world

Audience: Undergraduate

HIST SCI 250 – SPECIAL TOPICS IN HISTORY OF SCIENCE (INTRODUCTORY)

3 credits.

Special topics in the history of science, medicine, and technology.

Requisites: None

Course Designation: Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Summer 2024

HIST SCI/AFROAMER 275 – SCIENCE, MEDICINE, AND RACE: A HISTORY

3-4 credits.

Surveys the medical and scientific constructions of categories of race, placing the development of racial theories in a broad social and political context. Pays particular attention to the importance of racial science in slavery and colonialism.

Requisites: None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Summer 2025

Learning Outcomes: 1. Identify and analyze within their social, cultural and economic contexts key historical issues, and their significance, in the history of the idea of race as it relates to scientific and medical developments.

Audience: Undergraduate

2. Develop an understanding of the mutually shaping interactions between ideas about race and perceptions of social hierarchy, health, illness and medical and anthropological categories.

Audience: Undergraduate

3. Analyze the role of social factors like gender and class, among others, in shaping cultural realities related to race and body normativity.

Audience: Undergraduate

4. Identify the role that scientists, physicians, patients, healthcare providers, scientific institutions and the state play in modeling, ideas about race.

Audience: Undergraduate

5. Discern the impact of programs of global science as they intersect with international politics in the shaping of ideas about human rights, ethnicity, and race.

Audience: Undergraduate

HIST SCI 280 – HONORS SEMINAR: STUDIES IN SCIENCE, TECHNOLOGY, MEDICINE

3 credits.

Intensive exploration of issues in the history of science. Emphasis on developing critical thinking about science through formal and informal writing.

Requisites: Satisfied Communications A requirement and declared in an Honors program**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

Repeatable for Credit: No**Last Taught:** Fall 2023**HIST SCI 286 – HONORS SEMINAR: STUDIES IN SCIENCE, TECHNOLOGY, MEDICINE**

3 credits.

Intensive exploration of issues in the history of science. Emphasis on developing critical thinking about science through discussion of readings and written exercises.

Requisites: Declared in an Honors program**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

Repeatable for Credit: Yes, unlimited number of completions**Last Taught:** Spring 2019

HIST SCI/AGROECOL 301 – (HORTI)CULTURAL ROOTS: HUMAN HISTORIES OF PLANTS AND SCIENCE

4 credits.

Dig into the history of plant sciences to understand why plants and humans have the relationships they do today. Focus on the experiences of Indigenous Americans and People of Color to understand the roots of inequities in horticulture, agriculture, and other plant sciences. Practice skills as a translator of science and history through engagement with scientific publications, library resources, and archival materials. Define important societal questions, collect and analyze evidence, present original conclusions, and contribute to ongoing discussions about the relationship of people and plants.

Requisites: Satisfied Communications A requirement

Course Designation: Gen Ed – Communication Part B

Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2024

Learning Outcomes: 1. Compare and contrast plant-human systems in multiple historical contexts with an emphasis on the impact of racism

Audience: Undergraduate

2. Produce written and spoken work that incorporates critical reading, logical thinking, and use of evidence that is appropriate to the plant sciences

Audience: Undergraduate

3. Recognize ethnic, racial, and religious minorities' historical and ongoing marginalization in horticulture, agriculture, botany, and other plant-related disciplines

Audience: Undergraduate

4. Effectively participate in a multicultural society through written and spoken contributions to ongoing discussions

Audience: Undergraduate

5. Translate current research into a written and spoken format that is relevant and understandable to a public audience and scholars in other disciplines

Audience: Undergraduate

6. Apply core library resources to research and communication about human-plant systems

Audience: Undergraduate

HIST SCI/ECON 305 – DEVELOPMENT OF ECONOMIC THOUGHT

3-4 credits.

Development of economic thought from the middle ages to the present; emphasis on major schools of thought including Classical, Marxian, Neo-Classical, and Keynesian schools.

Requisites: (ECON 101 and 102) or (ECON 102 and A A E 101 or 215 prior to Fall 2024) or ECON 111

Course Designation: Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2021

HIST SCI/HISTORY 323 – THE SCIENTIFIC REVOLUTION: FROM COPERNICUS TO NEWTON

3 credits.

An introduction to the formative period of modern science, including major ideas and events in the physical and life sciences from Copernicus to Newton.

Requisites: Junior standing or (graduate/professional standing and concurrent enrollment in HIST SCI 623)

Course Designation: Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2024

HIST SCI/MED HIST/RELIG ST 331 – SCIENCE, MEDICINE AND RELIGION

3 credits.

Introduction to the study of religion, science, and medicine. Focus on how religion, science, and medicine have shaped practices of knowledge production and meaning making with respect to human life, by considering theories of human history and racial progress; how logics of contagion structure human relationships and communal boundaries; the variety of ways of understanding and caring for bodies; and the place of humans within broader ecologies.

Requisites: Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Spring 2024**Learning Outcomes:** 1. read and interpret critically primary and secondary source texts about religion, science, and medicine

Audience: Both Grad & Undergrad

2. access and utilize a variety of resources and methods for critical inquiry and research in religious studies, history of science and medicine, and science and religion

Audience: Both Grad & Undergrad

3. categorize, analyze, and compare core concepts in religious studies, the history of science and medicine, and science and religion, such as the conflict thesis; knowledge production; creation/evolution; eugenics; race; gender; embodiment; care; health/healing; capitalism; and progress narratives

Audience: Both Grad & Undergrad

4. identify, evaluate, and interpret the interrelationships and impact of religious and scientific worldviews as related to health, bodies and communities

Audience: Both Grad & Undergrad

5. perform textual analysis, primary source research and synthesis of scholarly ideas, in persuasive writing, oral communication, active listening, and with critical empathy

Audience: Both Grad & Undergrad

6. create conversations about complex topics that seek academic excellence, honesty, and integrity

Audience: Both Grad & Undergrad

7. engage with the academic literature on religion, science, and medicine that is pertinent to the student's specific research area and apply it to facilitate original primary source analysis

Audience: Graduate

HIST SCI 343 – THE DARWINIAN REVOLUTION

3 credits.

Scientific, social, religious and related dimensions of the evolution hypothesis from predarwinian speculation and Darwin's own work to later support, criticism and continuing investigation. Coverage reaches into the twentieth century.

Requisites: Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Spring 2020**HIST SCI 350 – SPECIAL TOPICS IN THE HISTORY OF SCIENCE**

2-3 credits.

Readings/discussion of varying topics in History of Science, Medicine, and Technology.

Requisites: Sophomore standing or 3 credits in HIST SCI**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions**Last Taught:** Spring 2025**HIST SCI 360 – HEALTH INEQUALITIES IN THE LONG 20TH CENTURY**

3 credits.

Analyze historical factors impacting healthcare cost, access, and services with focus on social determinants of health in the United States across the long 20th century. Evaluate current state of the field through literature reviews and conversations with guest lecturers. Apply historical analysis in consideration of current disparities in health resources. Produce original research project and policy proposal at intersection of public health, medical history, and health law and policy.

Requisites: Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Fall 2023**Learning Outcomes:** 1. Analyze changing concepts, measurements, and markers of health across time and place.

Audience: Undergraduate

2. Understand contemporary challenges in addressing healthcare disparities drawing upon historical context and the development of research norms and practices in the field.

Audience: Undergraduate

3. Articulate informed, well-researched arguments, and situate within the context of the field.

Audience: Undergraduate

4. Conduct and present original research, analyze and synthesize findings to others.

Audience: Undergraduate

HIST SCI/S&A PHM 401 – HISTORY OF PHARMACY

2 credits.

Pharmaceutical field, from antiquity to modern medical care; professional; structuring in principal countries of the West.

Requisites: Junior standing

Course Designation: Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2024

Learning Outcomes: 1. Outline the key theoretical issues in the history of medicine and pharmacy

Audience: Undergraduate

2. Explain the relationship, using models of change, between medicines, pharmacy practice, and society

Audience: Undergraduate

3. Assess critically the historiographies of the history of medicine and pharmacy

Audience: Undergraduate

4. Evaluate the reputations of pharmacy practices, organizations, and key actors

Audience: Undergraduate

5. Communicate effectively conclusions regarding the history of medicines and pharmacy

Audience: Undergraduate

6. Apply historical understandings to contemporary issues regarding pharmacy, drug regulation, and political conflicts

Audience: Undergraduate

HIST SCI 404 – A HISTORY OF DISEASE

3-4 credits.

What is disease? Who decides? What are the consequences of labeling a behavior a disease? Can disease be a tool of liberation? Can disease be an instrument of oppression? How do race, class, and gender affect our understandings of and experiences with illness? How have diseases shaped American history? Illustrates the various ways disease operates in America and examines the role of disease on at least four levels--political, social, cultural, and personal--to demonstrate that diseases are not merely bodily afflictions; they are also participants in the body politic. Each disease covered is chosen to illustrate a different point about the social and cultural lives of disease in the history of the United States. Though diseases are covered in a chronological fashion, this coverage is not meant as a narrative history of disease.

Requisites: Sophomore standing

Course Designation: Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2023

Learning Outcomes: 1. Recognize how diseases and responses to diseases have shaped elements of American society and analyze the claim that disease is socially constructed

Audience: Undergraduate

2. Discover and analyze how politics and diseases have intersected in American history

Audience: Undergraduate

3. Describe and analyze how patients have shaped the medical responses, personal reactions and social meanings of disease

Audience: Undergraduate

4. Recognize and describe how race, class, and gender have influenced the experience, meaning, and understanding of disease

Audience: Undergraduate

5. Develop research skills to perform primary source historical research and analyze primary sources to develop a historical argument

Audience: Undergraduate

6. Recognize and describe general trends in the history and the historiography of disease

Audience: Graduate

7. Write a book review suitable for publication in historical journals

Audience: Graduate

8. Identify and analyze historical arguments in historical monographs

Audience: Graduate

9. Sharpen historical research skills and deepen analysis of primary sources in the service of an argument

Audience: Graduate

HIST SCI/MATH 473 – HISTORY OF MATHEMATICS

3 credits.

An historical survey of the main lines of mathematical development.

Requisites: Consent of instructor

Course Designation: Breadth – Either Humanities or Natural Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2024

Learning Outcomes: 1. Recall and state the formal definitions of the mathematical objects and their properties used in various mathematical topics throughout history (e.g., content from number theory, analysis, algebra, etc.).

Audience: Undergraduate

2. Use such definitions to argue that a mathematical object does or does not have the condition of being a particular type or having a particular property in the context of these topics.

Audience: Undergraduate

3. Recall and state the standard theorems from these topics, and recall the arguments for these theorems and the underlying logic of their proofs.

Audience: Undergraduate

4. Prove or disprove statements related to the above definitions, properties, and theorems using techniques of mathematical argument (direct methods, indirect methods, constructing examples and counterexamples, induction, etc.).

Audience: Undergraduate

5. Convey arguments in oral and written forms using English and appropriate mathematical terminology, notation, and grammar.

Audience: Undergraduate

6. Explain mathematical ideas and describe their historical contexts.

Audience: Undergraduate

HIST SCI/HISTORY/MED HIST 508 – HEALTH, DISEASE AND HEALING II

3-4 credits.

Medicine in Europe from the 18th century to mid-20th century, investigating changes in disease and demography, state interest in health care, the medical professions, and both scientific and alternative medical ideas.

Requisites: Junior standing

Course Designation: Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2023

Learning Outcomes: 1. Recognize the utility of humanistic methods for the study of medicine and public health

Audience: Undergraduate

2. Develop critical thinking skills through techniques of close reading and written analysis

Audience: Undergraduate

3. Understand essential developments in the evolving relationship between medicine and public health in modern societies.

Audience: Undergraduate

HIST SCI/MED HIST 509 – THE DEVELOPMENT OF PUBLIC HEALTH IN AMERICA

3 credits.

Health problems in the U.S. from the colonial period to the twentieth century; efforts made toward their solutions.

Requisites: Junior standing

Course Designation: Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2024

Learning Outcomes: 1. Identify major historical trends in the history of public health in the United States.

Audience: Undergraduate

2. Understand the tensions between individual rights and population health as they have played out in the past.

Audience: Undergraduate

3. Analyze the social, political, and cultural factors that have influenced societal responses to epidemics and pandemics in American history.

Audience: Undergraduate

4. Develop critical thinking skills by engaging with both primary sources and secondary texts to understand how historians have written the history of public health.

Audience: Undergraduate

5. Evaluate the ways in which understanding the past history of public health can shape policy making in the present.

Audience: Undergraduate

HIST SCI/GEOSCI 514 – HISTORY OF GEOLOGIC THOUGHT

3 credits.

Major concepts from earliest to modern times.

Requisites: GEOSCI 204 or graduate/professional standing

Course Designation: Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2024

HIST SCI/AFROAMER/MED HIST 523 – RACE, AMERICAN MEDICINE AND PUBLIC HEALTH

3 credits.

Provides historical perspectives on current dilemmas facing black patients and health care professionals.

Requisites: Junior standing

Course Designation: Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2025

Learning Outcomes: 1. Identify key developments, actors, ideas, and institutions in the broad history of race, medicine and public health in America between 1700 and 2000.

Audience: Both Grad & Undergrad

2. Analyze and write critically about primary and secondary historical sources by examining diverse interpretations of past events and ideas in their historical contexts.

Audience: Both Grad & Undergrad

3. Evaluate the ways in which ideas about race and assumptions about the meaning of racial difference influenced the care patients of color received and how they experienced their illnesses and injuries.

Audience: Both Grad & Undergrad

4. Understand how conceptions of race profoundly influenced the medical and nursing professions, as well as medical institutions (dispensaries, hospitals, and blood donation centers).

Audience: Both Grad & Undergrad

5. Evaluate the different methodological approaches historians have used to analyze the multiple histories of race, medicine, and public health in the United States in the last two centuries.

Audience: Graduate

HIST SCI/ENGL/MED HIST 525 – HEALTH AND THE HUMANITIES
 3 credits.

Explores how a humanistic perspective can broaden our understanding of health and medicine. Specifically, we will examine the role of language and culture in the creation and circulation of biomedical knowledge; our lived experiences with illness (physical and mental); the intricate intersections of race, gender, sexuality, disability and medicine; the political dimensions of diagnosis, disease, and epidemics, and the role that fiction, creative non-fiction, comics, and film play in shaping our experiences with health and medicine as health care providers and as patients. The course does not assume any background in science or medicine. One of our recurrent topics, in fact, will be to consider how non-experts interact with medicine and its technical vocabularies. Although the primary objective of the course is to understand the cultural, social, and political dimensions of health and medicine, a secondary objective is for students to become more savvy patients and, for the few students who might emerge on the other side of the stethoscope one day, more well rounded health care professionals.

Requisites: Declared in the Health and the Humanities certificate

Course Designation: Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2024

HIST SCI/GEN&WS/MED HIST 531 – WOMEN AND HEALTH IN AMERICAN HISTORY
 3 credits.

Women as patients and as health professionals in America from the colonial period to the present.

Requisites: Sophomore standing

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Summer 2025

HIST SCI/GEN&WS/MED HIST 532 – THE HISTORY OF THE (AMERICAN) BODY
 3 credits.

This course demonstrates that human bodies have social and cultural histories. It will highlight the social values placed on different bodies, the changing social expectations bodies create, and the role of science and medicine in creating the cultural meanings of bodies.

Requisites: Sophomore standing

Course Designation: Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2023

HIST SCI/GEN&WS 537 – CHILDBIRTH IN THE UNITED STATES
 3 credits.

Using a reproductive justice framework, analyze contexts, experiences, practices, ideologies, and historiographies of childbirth in the United States from roughly the 17th century to the present, with the heaviest emphasis on the 20th and 21st century. Examines the ways that colonization, genocide, enslavement, racism, capitalism, heterosexism, patriarchy, and ableism have shaped all of these aspects of childbirth. Inquire how key movements and groups resisting some of these forms of oppression have had the power to reshape birth, as well as locating in birth a source of transformational power.

Requisites: Sophomore standing

Course Designation: Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2024

HIST SCI/MED HIST/POP HLTH 553 – INTERNATIONAL HEALTH AND GLOBAL SOCIETY
 3 credits.

Major problems in international health from 1750 to the present. Focus on disease epidemiology and ecology; political economy of health; migration; quarantine; race, ethnicity, and health care; international health research; cross-cultural healing; mental and maternal health; growth of international health organizations.

Requisites: Junior standing

Course Designation: Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2021

Learning Outcomes: 1. Recognize the utility of humanistic methods for the study of modern international health

Audience: Undergraduate

2. Develop critical thinking skills through techniques of close reading and written analysis

Audience: Undergraduate

3. Understand essential developments in the evolving relationship between global history, politics, and public health on a global scale.

Audience: Undergraduate

HIST SCI 555 – UNDERGRADUATE SEMINAR IN HISTORY OF SCIENCE
 3 credits.

Advanced research in History of Science.

Requisites: HISTORY 201 or 3 Credits in HIST SCI

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2021

HIST SCI/HISTORY/MED HIST 564 – DISEASE, MEDICINE AND PUBLIC HEALTH IN THE HISTORY OF LATIN AMERICA AND THE CARIBBEAN

3 credits.

Examines the history of illness and medical practice in Latin America and the Caribbean from the colonial era until the present. Using an interdisciplinary set of sources, students will explore the different meanings of disease, body normativity, medical practice, and ideas about public health across different historical circumstances in the region.

Requisites: Junior standing

Course Designation: Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2019

Learning Outcomes: 1. Identify and analyze within their social, cultural and economic contexts key historical issues, and their significance, in the history of healing practices and public health in Latin America from the fifteenth century to the present.

Audience: Both Grad & Undergrad

2. Develop an understanding of the mutually shaping interactions between perceptions of health, illness and medical practices and culture and society in different Latin American historical scenarios.

Audience: Both Grad & Undergrad

3. Analyze the role of social factors -- race, gender, ethnicity, class, and sexual orientation, among others -- in shaping cultural realities related to body normativity, health, medical practice, public health and medical education in Latin America.

Audience: Both Grad & Undergrad

4. Analyze and synthesize information, provide evidence-based interpretations about the past, and develop arguments regarding social and cultural differences related to health and body concepts in different Latin American societies.

Audience: Both Grad & Undergrad

5. Identify the role patients, healthcare providers, institutions and the state played in modeling medical practice, ideas about the body, public health policies, and medical education in Latin America.

Audience: Both Grad & Undergrad

6. Discern the impact of international politics, acting through European and American programs of medical research and humanitarianism, in the shaping of ideas about race, medical hierarchies and public health policies in Latin American and Caribbean nations.

Audience: Both Grad & Undergrad

7. Understand the different methodological approaches and research strategies that historians, anthropologists, and other scholars have used to examine the histories of the medicine in Latin America from the sixteenth century to the present.

Audience: Graduate

HIST SCI/ENGL/MED HIST 599 – DIRECTED STUDY IN HEALTH AND THE HUMANITIES

1 credit.

Offers students enrolled in the Health and the Humanities certificate an opportunity to conduct independent research under the guidance of a faculty member. It allows students who have enrolled in or completed a Health and the Humanities Capstone an opportunity to go into greater depth on a topic covered in the capstone course. In consultation with a faculty member, students will design a project that builds on lessons learned or work completed as part of their capstone experience.

Requisites: Consent of instructor

Course Designation: Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2020

Learning Outcomes: 1. Design scholarly research questions based on their knowledge of the existing literature

Audience: Undergraduate

2. Conduct original primary research by identifying, accessing, and interpreting appropriate sources

Audience: Undergraduate

3. Effectively convey the results of their research through writing or other creative media

Audience: Undergraduate

4. Work independently and manage a large project through to completion

Audience: Undergraduate

HIST SCI 623 – STUDIES IN EARLY MODERN SCIENCE

1 credit.

Advanced readings in primary and secondary literature of the history of the 16th-17th century European science, with emphasis on current historiographic issues.

Requisites: Consent of instructor

Course Designation: Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2024

HIST SCI 681 – SENIOR HONORS THESIS

3 credits.

Honors thesis on topics in History of Science, Medicine, and Technology.

Requisites: Consent of instructor

Course Designation: Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2025

HIST SCI 682 – SENIOR HONORS THESIS

3 credits.

Honors thesis on topics in History of Science, Medicine, and Technology. Continuation of HIST SCI 681.

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2025

HIST SCI 691 – SENIOR THESIS

3 credits.

Senior thesis on topics in History of Science, Medicine, and Technology.

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2007

HIST SCI 692 – SENIOR THESIS

3 credits.

Senior thesis on topics in History of Science, Medicine, and Technology. Continuation of HIST SCI 691.

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2008

HIST SCI 698 – DIRECTED STUDY

1-3 credits.

Directed study under the supervision of a faculty member on topics in History of Science, Medicine, and Technology. Graded on a Cr/N basis.

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2024

HIST SCI 699 – DIRECTED STUDY

1-3 credits.

Directed study under the supervision of a faculty member on topics in History of Science, Medicine, and Technology. Graded on a lettered basis.

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2017

HIST SCI 720 – PROSEMINAR: HISTORIOGRAPHY AND METHODS

3 credits.

Philosophies, methods, and sources in the history of science, and their relations to the current state of scholarship.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2024

HIST SCI 903 – SEMINAR: MEDIEVAL, RENAISSANCE, AND 17TH CENTURY SCIENCE

3 credits.

Readings and/or research on the history of medieval, Renaissance, and/or 17th-century science. Topics vary.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2025

HIST SCI 907 – SEMINAR: HISTORY OF TECHNOLOGY

3 credits.

Research and readings on a topic of current interest in history of technology.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023

HIST SCI 909 – HISTORY OF BIOLOGY AND MEDICINE

3 credits.

Readings and/or research on the history of biology and medicine. Topics vary.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2022

HIST SCI 911 – SEMINAR-EIGHTEENTH CENTURY SCIENCE

3 credits.

Readings and/or research on the history of science in the 18th century. Topics vary.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2025

HIST SCI/MED HIST 919 – GRADUATE STUDIES IN MEDICAL HISTORY

3 credits.

Analyzes the scientific and social aspects of the development of modern medicine and public health in Europe and America.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2024

Learning Outcomes: 1. Apply, analyze, or evaluate advanced theories, concepts, or methods in Medical History

Audience: Graduate

HIST SCI 921 – SEMINAR-SPECIAL TOPICS

3 credits.

Readings and/or research on the history of science, medicine, and technology. Topics vary.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2025

HIST SCI 990 – RESEARCH AND THESIS

1-3 credits.

Independent research and writing of a thesis under the supervision of a faculty member.

Requisites: Consent of instructor

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Summer 2025

HIST SCI 999 – INDEPENDENT WORK

1-3 credits.

Directed study under the supervision of a faculty member.

Requisites: Consent of instructor

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2025