

MEDICINE, SCIENCE, AND THE HUMANITIES

<http://krieger.jhu.edu/msh> (<http://krieger.jhu.edu/msh/>)

This is an interdisciplinary, humanities-based major using a cultural and historical context to explore scientific inquiry and the roots of medicine. The medicine, science, and the humanities major is ideal for students who plan to pursue careers in the health professions as well as those interested in issues of importance to science and medicine, and students who plan to pursue graduate work in a range of humanities, social science, or professional disciplines.

MSH Major Goals and Objectives

Goal

Medicine, science, and humanities majors will develop an interdisciplinary understanding of the cultural and historical roots of scientific inquiry and medicine, with the ability to apply these precepts to contemporary life.

Objectives

MSH majors will:

- Gain an introductory awareness of theory, interpretation, and methods in a specific humanistic topic related to science and medicine
- Acquire and develop skills of interpretation and analysis in a specific humanities discipline by focusing on primary and secondary sources such as literature, imagery, film, artifacts, and commentary
- Acquire fundamental skills of writing and oral presentation, emphasizing clear and logical exposition to enhance student readiness for subsequent graduate school, professional school, or the workforce
- Acquire knowledge and experience in the natural sciences
- Understand the advantages of multiculturalism through intermediate mastery of a language beyond English.

Affiliated Humanities Departments

- Anthropology (<http://anthropology.jhu.edu/>)
- Classics (<http://classics.jhu.edu/>)
- English (<http://english.jhu.edu/>)
- German and Romance Languages and Literatures (<http://grll.jhu.edu/>)
- History (<http://history.jhu.edu/>)
- History of Art (<http://arthist.jhu.edu/>)
- History of Science and Technology (<http://host.jhu.edu/>)
- Humanities Center (<http://humctr.jhu.edu/>)
- Near Eastern Studies (<http://neareast.jhu.edu/>)
- Philosophy (<http://philosophy.jhu.edu/>)
- The Writing Seminars (<http://writingseminars.jhu.edu/>)

Programs

- Medicine, Science, and the Humanities, Bachelor of Arts (<http://e-catalog.jhu.edu/arts-sciences/full-time-residential-programs/>)

[degree-programs/medicine-science-humanities/medicine-science-humanities-bachelor-arts/](http://e-catalog.jhu.edu/arts-sciences/full-time-residential-programs/degree-programs/medicine-science-humanities/medicine-science-humanities-bachelor-arts/))

For current course information and registration go to <https://sis.jhu.edu/classes/>

Courses

AS.145.101. Death and Dying in Art, Literature, and Philosophy: Introduction to Medical Humanities. 3 Credits.

In this course, four essential aspects of the theme of death and dying will be examined: Death and Medicine; Emotional Responses to Death; Burying and Commemorating the Dead; and Conceptions of Death. Specific topics relating to each of these aspects that will be covered include illness and causes of death; prevention of death; suicide; death and grief; burial practices; mourning the dead; public commemoration of the dead; life after death; and death and rebirth. Students will explore these topics from a historical-anthropological perspective with Paul Delnero, a specialist in the history and culture of the ancient Near East (Near Eastern Studies); from a literary perspective, by reading and writing poetry relating to these subjects with the acclaimed poet James Arthur (Writing Seminars); and from a musical perspective, through direct encounters with the music and creative process of the award-winning composer, Michael Hersch (Peabody).

Area: Humanities
Writing Intensive

AS.145.102. The Cosmic Imagination: How Literature Changes Our Understanding of the Universe. 3 Credits.

Since time immemorial humankind has looked to the skies for clues as to our origins, our destiny, and the nature of existence itself. In some ways, one of the hallmarks of western science has been a story of viewing the cosmos in ever-greater clarity and detail. Yet the very nature of the universe—its massive size, the distance and obscurity of its farthest reaches—requires the active intervention of our imaginations to picture it, no matter how powerful the technologies we use. In this course we will look at how western cultures from the middle ages to the present have deployed the literary and philosophical imagination to try to grasp the ungraspable, and how those attempts in some cases helped prepare intellectuals and scientists to make very real advances in understanding the universe.

Prerequisite(s): Students may not take and receive credit for AS.145.102 and AS.211.102.

Area: Humanities, Social and Behavioral Sciences
Writing Intensive

AS.145.103. Men, Women, and Melancholy: Premodern Physiologies of Madness. 3 Credits.

Definitions of madness change over time. From Antiquity through the Early Modern period, Melancholia was the predominant form of mental illness, thought to be caused by an imbalance in the bodily humors, resulting in an excess of black bile. The disturbed physiology adversely affected the imagination, which, with memory and intellect, was one of the three functions of the soul. Only gradually did imagination come to be identified with deliberate creativity: from about 1400 to 1800, there were two stereotypical victims of melancholia: male intellectuals and female witches. The disruption of society by witch-hunting was even more radical than the rise of the "man of genius." At stake were definitions of psychology ("science of the soul") and reality (whether witches and demons interacted "in the body" or only "in the imagination"). Readings from Plato to Freud.

Area: Humanities
Writing Intensive

AS.145.104. Science, Medicine, Media. 3 Credits.

Much of our understanding of science and medicine is filtered through what we casually refer to as “the media”: newspapers, magazines, television shows, films, and electronic social media. But the scientific world relies on its own media to produce and circulate knowledge: from scientific journals and conferences, to agar plates and petri dishes, cloud chambers and electrophoresis gels. Medical technologies from the stethoscope to the echocardiogram likewise mediate the perception of the body in health and disease, and increasingly our own understanding and perception of our bodies and our health is mediated via screens, scans, images — without which we cannot “imagine” our selves anymore. Students will learn several tools to critically assess the technologies that mediate our knowledge of our own bodies and the broader world.

Area: Humanities, Social and Behavioral Sciences

Writing Intensive

AS.145.105. Freshman Seminar. 3 Credits.

Freshman Seminar Course. Topics will vary semesterly. See class search for information for the current term.

Area: Humanities

Writing Intensive

AS.145.110. Exploring Medical Careers. 1 Credit.

Many people are unaware of the diversity of medical and health careers. This program introduces scientific knowledge and promotes awareness of a variety of medical and health careers, for example, multiple specialties of physicians, physician assistant, nurse careers, professional therapists (physical, occupational, respiratory, radiation), clinical nutritionist, pharmacist, genetic counselor, medical laboratory scientist, veterinarian, clinical trial professionals, clinical social worker, and public health related careers. Taught by diverse healthcare professionals currently working at Johns Hopkins Hospital System, students will gain meaningful scientific knowledge and practical career knowledge by participating in lectures, labs, hands-on/simulation activities, interviews, and workshops.

Area: Natural Sciences

AS.145.117. Freshman Seminar: Heart Matters. 3 Credits.

To the human imagination, the heart is more than a muscle and thumping pump keeping us alive. From the Renaissance to the present, writers have helped us make sense of our bodies, in health and in illness or pain. Our aim will be to trace the historical, cultural and subjective meanings our minds have given to this “sublime engine.” Our materials will involve a constellation of attentive readings of a literature involving poems, modern fiction as well as recent scientific prose.

Area: Humanities

Writing Intensive

AS.145.201. Clues: Unreasoning the Medical Mystery. 3 Credits.

Pioneering authors of detective fiction, including Edgar Allen Poe, Arthur Conan Doyle, and Pauline Hopkins, often used medical doctors and themes in their mystery plots. It’s no coincidence that medicine and crime fiction share a vocabulary of clues, evidence, and diagnosis. The mystery genre was integrally tied to the rise of scientific medicine as a respected profession. Indeed, classic detective stories are practically propaganda for the scientific method, showing readers how the powerful tools of observation and inference can solve any problem. Over the course of the 20th century, not only doctors, but also psychologists, social scientists and historians adopted the authoritative stance of the detective in constructing or reconstructing facts. However, as we study Sherlock Holmes and his modern proteges, such as TV doctor Gregory House, we will analyze how “medical mystery” narratives can limit our thinking about problems and solutions in medicine. We will consider post-modern detective stories that offer alternatives to the “Holmsian” model for understanding the complex clinical realities of today.

Area: Humanities, Social and Behavioral Sciences

Writing Intensive

AS.145.215. Representations of Pain and Suffering in Contemporary Culture. 3 Credits.

What does it mean to experience pain or encounter the suffering of another person in our post-truth era? This course explores the changing representation of pain and suffering in contemporary film, fiction, creative non-fiction, science and technology. Through analyses and close-readings of a variety of primary and secondary sources, we will consider the different ways twentieth- and twenty-first-century historical, cultural, and media representations have mediated pain and suffering. Such investigations allow us to understand the workings of pain in the present.

Area: Humanities

Writing Intensive

AS.145.217. Neurofictions: History and Literature of the Mind Sciences. 3 Credits.

Neuroscience has a long way to go from mapping neural connections to a precise account of memory, emotion, and consciousness. But the limits of science have never stopped us from imagining its possible futures. Engaging two centuries of debate in the mind sciences and in western culture at large, this course looks at historical attempts to explain and control human consciousness. By placing each period’s scientific texts in dialog with contemporaneous science fiction — from Edgar Allan Poe to Ursula K. Le Guin — we discover how theories about the brain can shape society while at the same time responding to social contexts.

Area: Humanities

AS.145.301. Naturalizing the Human Body in Early Modern France: the Confrontation of Literature, Science and Politics. 3 Credits.

Literature in early modern Europe was essential to the naturalizing of the human body, a partner in the reshaping of the cultures and disciplines around it. This course looks at several shifts within major literary works of the 17th and 18th centuries, a time of great intellectual upheaval, a moment when the interpenetration of the literary, scientific and political cultures was such that "art for art's sake" would have been considered irresponsible. The primary goals of the course are to allow students to understand the intrinsic literary value of the texts, but equally to show how that literary activity, both of writing and of reading, was the vehicle for the elaboration of the modern mind set. We will focus on three cases: vision, the body's "economy" and Body of the State, and the "scandal" of smallpox vaccination. Texts will include, for example, extracts from: Newton's Opticks, Cyrano de Bergerac's The States and Empires of the Sun, Montesquieu's Persian Letters and Spirit of the Laws, Voltaire's English Letters, Rousseau's The New Eloise, Laclos' Dangerous Liaisons, Guillotine's text inventing the guillotine. For more information, please see the full course description at <http://www.wilda.org/Courses/CourseVault/Undergrad/Naturalizing/Description.html>. This course and texts will be in English, but readings will also be available in French.

Area: Humanities, Social and Behavioral Sciences
Writing Intensive

AS.145.401. In Search of the Human: Ways of Remembering. 3 Credits.

Studying narrative as a way of understanding the complex emotions associated with illness and the lifecycle has long been recognized as an important part of clinical training. This course focuses on autobiographical memory as a particularly important part of forming a personal narrative. These memories can offer foundations on which to build an approach to life and its challenges, and they can also be constraining. The course readings will illustrate how authors of fiction and scientists have grappled with the task of remembering and studied the configurations of autobiographical recollection.

Area: Humanities, Social and Behavioral Sciences
Writing Intensive

AS.145.502. Medicine, Science & the Humanities Internship. 3 Credits.

An internship in Medicine, Science & the Humanities approved by the director of the program.

Prerequisite(s): You must request Independent Academic Work using the Independent Academic Work form found in Student Self-Service: Registration > Online Forms.

Area: Humanities, Social and Behavioral Sciences

AS.145.510. Medicine, Science & the Humanities Independent Research. 1 - 3 Credits.

This course is for students in the Medicine, Science & the Humanities doing independent research. Course can be taken up to 3 credits with approval from the director.

Prerequisite(s): You must request Independent Academic Work using the Independent Academic Work form found in Student Self-Service: Registration > Online Forms.

Area: Humanities, Social and Behavioral Sciences
Writing Intensive

AS.145.511. Medicine, Science & the Humanities Independent Research. 1 - 3 Credits.

This class is for the MSH majors completing their research project. Instructor approval required.

Prerequisite(s): You must request Independent Academic Work using the Independent Academic Work form found in Student Self-Service: Registration > Online Forms.

Area: Humanities, Social and Behavioral Sciences

AS.145.512. Medicine, Science and the Humanities Independent Research. 1 - 3 Credits.

This course is for students in the Medicine, Science & the Humanities doing independent research. Course can be taken up to 3 credits with approval from the director.

Cross Listed Courses**Classics****AS.040.109. Freshman Seminar: The Greeks and Their Emotions. 3 Credits.**

This seminar is meant as an introduction to the study of ancient emotions, with a particular emphasis on how the ancient Greeks conceptualized, portrayed and lived their emotions through linguistic, literary and artistic expression. After an analysis of how the ancient Greek emotional experience differs from our own, we shall focus on the phenomenon of emotion as deeply rooted in the physical body, and in light of this we will contemplate (and question) its universality. You will also learn how to research and write a paper. Texts will be read in translation. No knowledge of ancient Greek required.

Area: Humanities
Writing Intensive

AS.040.152. Medical Terminology. 3 Credits.

This course investigates the Greek and Latin roots of modern medical terminology, with additional focus on the history of ancient medicine and its role in the development of that terminology.

Area: Humanities

AS.040.238. Freshman Seminar: Magic and Miracles from Antiquity to the Renaissance. 3 Credits.

This freshman seminar will explore concepts of magic and miracles and their different forms from ancient Greece and Rome and early Christianity through the Middle Ages up to the Renaissance. Dean's Prize Teaching Fellowship Course.

Area: Humanities
Writing Intensive

AS.040.241. The Greeks and Their Emotions. 3 Credits.

This seminar is meant as an introduction to the study of ancient emotions, with a particular emphasis on how the Greeks of the Archaic, Classical and Hellenistic periods conceptualized, portrayed and lived their emotions through linguistic, literary and artistic expression. After an analysis of how the ancient Greek terminology for the emotions differs from our own, we shall focus on the phenomenon of emotion as deeply rooted in the physical body, and in light of this we will contemplate (and question) its universality. Texts will be read in translation. No knowledge of ancient Greek required.

Area: Humanities
Writing Intensive

Comparative Thought and Literature**AS.300.139. Introduction to Intellectual History. 3 Credits.**

This course offers a conceptual and historical introduction to Intellectual History. What makes the "history of ideas" different from the history of other objects? What, if anything, distinguishes the history of ideas from the history of philosophy? What is it exactly that we call "ideas"? In what sense do they have a history? These are examples of the kind of questions addressed in the course.

Area: Humanities

AS.300.325. American Madness – History of the Treatment of the Mentally Ill. 3 Credits.

As mental illnesses became a social issue during the 18th century, community institutions were created in order to handle the needs of individuals with such illnesses collectively. This course will investigate the history of these institutions in the USA from the seemingly quiet, secluded, and peaceful private asylums in country settings, at the beginning of the 19th century, through the notorious crowded public, so-called “psychopathic hospitals” in mid-20th century, to the crisis-services, short-term acute psychiatric units, and out-patient services that followed the “death of the asylum” at the end of the 20th century. The history of the institutional care of the mentally ill in America is also the story of American psychiatry changing attitudes towards these individuals. Reading will include selections from 200 years of writings of asylum superintendents, psychiatrists, patients, and historians of psychiatry such as Foucault, Goffman, Grob, Scull, Lunbeck, Micale, and Mora.

Area: Humanities

AS.300.334. Love and its maladies. 3 Credits.

Much of what we know about love and desire we owe to fiction’s ability to evoke these experiences. Consider for example that the publication, in Germany, of *The Sorrows of Young Werther* inspired young men across Europe to dress and behave just like this lover. Just as nowadays film and television represent, as well as mold our conceptions of love, love-stories from the eighteenth-century onwards have given shape to gendered subjectivities in ways that still matter now. As, intriguingly, illness is a recurrent theme in many modern love stories, we will be prompted to decipher signs and symptoms in the bodies of mind of our protagonists. Why is it that in Western cultures, passion is tightly interwoven with a landscape of pain, suffering, and disease? In studying texts that represent major aspects of a romantic sensibility, we are indeed invited to trace the steps of a history of the body increasingly defined by gender and by medical knowledge. The readings for this class (all available in English) include: Austen, *Persuasion*; Balzac, *The Unknown Masterpiece*; Barthes, *Lover’s Discourse*; Goethe; *The Sorrows of Young Werther*; Mann, *Death in Venice*; Winterson, *Written on the Body*.

Area: Humanities

AS.300.342. Imagining Climate Change. 3 Credits.

Climate change poses an existential threat to human civilization. Yet the attention and concern it receives in ordinary life and culture is nowhere near what science tells us is required. What are the causes of this mismatch between crisis and response? What accounts for our collective inability to imagine and grasp this new reality, and how can it be overcome? In pursuit of these questions, we will look at texts from politics, philosophy, literary theory, and religion that frame climate change as a fundamental challenge not only to humanity but to the humanities: the disciplines and modes of thought that we rely on to make sense of the human condition. The second part of the course will examine works of literature and film for examples of how contemporary artists attempt to make the climate crisis visible and intelligible to us.

Area: Humanities

AS.300.402. What is a Person? Humans, Corporations, Robots, Trees. 3 Credits.

Knowing who or what counts as a person seems straightforward, until we consider the many kinds of creatures, objects, and artificial beings that have been granted—or demanded or denied—that status. This course investigates recent debates about being a person in literature and law. Questions examined will include: Should trees have standing? Can corporations have religious beliefs? Could a robot sign a contract? Although our explorations will be focused on these questions, the genre of materials examined will be wide-ranging (including legal essays, philosophy, contemporary novels, and film). Texts will include novels by William Gibson and Lydia Millet, essays by John Dewey and Daniel Dennett, and films such as *Ex Machina* and *Her*.

Area: Humanities

AS.300.439. Stories of hysteria. 3 Credits.

Many are the stories that recount episodes of hysteria, and we owe them not only to medicine. To the modern observer, they are a puzzle, involving strange beliefs about wandering wombs, demonic possession, and female virtue (or lack thereof). Closer to our time, contemporary media, as well as accounts in the social and clinical sciences have evoked cases of “mass hysteria” in America and across the globe. Marriage, it was thought for a long time, might be the best cure, which might be the reason case-studies of this illness can be as intriguing and troubling as novels. Against a backdrop of medical and historical materials, we will examine a selection of stories, from the 17th century onward, that evoke aspects of hysteria. They serve as our case-studies and as prompts to study an illness born at the convergence of histories and myths, of medical science, and of cultural and gender assumptions. Among the notions we will explore: The birth of psychoanalysis, trauma and PTSD, the concept of repression, the visual aspects of an illness and its spread in the arts, including cinema.

Area: Humanities

AS.300.618. What is a Person? Humans, Corporations, Robots, Trees..

Knowing who or what counts as a person seems straightforward, until we consider the many kinds of creatures, objects, and artificial beings that have been granted—or demanded or denied—that status. This course investigates recent debates about being a person in literature and law. Questions examined will include: Should trees have standing? Can corporations have religious beliefs? Could a robot sign a contract? Although our explorations will be focused on these questions, the genre of materials examined will be wide-ranging (including legal essays, philosophy, contemporary novels, and film). Texts will include novels by William Gibson and Lydia Millet, essays by John Dewey and Daniel Dennett, and films such as *Ex Machina* and *Her*.

Area: Humanities

Writing Intensive

English**AS.060.108. Time Travel. 3 Credits.**

Why is time travel such a consistent and perplexing theme in literature and film over the last 150 years? Why is modernity so concerned with peering backwards or forwards? This course will examine the history of time-travel fiction, from its beginning in utopian fiction through its box-office dominance in the 1980s, and into today. Writers will likely include Mark Twain, Edward Bellamy, Harold Steele Mackay, Ray Bradbury, Robert Heinlein, and Philip K. Dick. Movies will include **The Terminator**, **Back to the Future**, and **Primer**.

Area: Humanities

Writing Intensive

German Romance Languages Literatures

AS.210.313. Medical Spanish. 3 Credits.

Medical Spanish is a comprehensive examination of vocabulary and grammar for students who either work or intend to work in medicine and health-related fields in Spanish-speaking environments. The student will be able to participate in conversations on topics such as contrasting health systems, body structures, disorders and conditions, consulting your doctor, physical and mental health, first-aid, hospitalization and surgery on completion of this course. In completing the course's final project students will apply, synthesize, and reflect on what has been learned in the class by creating a professional dossier individualized to their professional interests. There is no final exam. May not be taken satisfactory/unsatisfactory. Not open to native speakers of Spanish. No new enrollments permitted after the third class session.

Prerequisite(s): AS.210.311 OR AS.210.312 or appropriate Spanish placement exam score.

Area: Humanities

AS.211.137. Freshman Seminar: Borges and Scientific Knowledge. 3 Credits.

A survey of the stories and essays of the great Argentine writer Jorge Luis Borges focusing on the theory of knowledge he developed over his long career. Special attention will be paid to the implications his ideas have for the mathematical and physical sciences, in particular cosmology.

Area: Humanities

AS.211.247. Freshman Seminar: Tortured Body, Tortured Soul: Pain in Early Modern Europe. 3 Credits.

This Freshman seminar provides an interdisciplinary exploration of pain and the body in pre-modern Europe. Using classical and early modern sources of philosophy, literature, anthropology and medicine, students will analyze the ways in which cultural perceptions shape our responses to suffering.

Area: Humanities

AS.211.259. Introduction to Medical and Mental Health Interpreting. 3 Credits.

This course is a broad introduction to the fields of medical and mental health interpreting. Modules will include: (1) Three-way communication: managing role expectations and interpersonal dynamics; (2) Basic interpreting skills and techniques in a healthcare setting; (3) Ethical principles, dilemmas, and confidentiality; (4) Elements of medical interpreting; (5) Elements of mental health interpreting; (6) Trauma-informed interpreting: serving the refugee population. The course is taught in English, and has no foreign language pre-requisites.

Area: Humanities

AS.211.477. Witchcraft and Demonology in Literature and the Arts. 3 Credits.

Who were the witches? Why were they persecuted for hundreds of years? Why were women identified as the witches par excellence? How many witches were put to death between 1400 and 1800? What traits did European witch-mythologies share with other societies? After the witch-hunts ended, how did "The Witch" go from being "monstrous" to being "admirable" and even "sexy"? Answers are found in history and anthropology, but also in theology, literature, folklore, music, and the visual arts, including cinema.

Prerequisite(s): Students who have already taken AS.214.171 cannot take AS.211.477.

Area: Humanities
Writing Intensive

AS.212.696. Literature Confronts Science: Zola.

Zola worked with the theories of heredity of his time in the Rougon-Macquart novels. But he also attempted to use his understanding of biology and thermodynamics to reform the theory of the novel in general. This course will examine these two different effects of science on literature and try to see what leads an author to undertake such a project. For a more extended description, please see <http://www.wilda.org/Courses/CourseVault/Grad/Zola/Syllabus.html>. Advanced undergraduates with sufficient background may register for this course with permission of the instructor.

AS.214.477. Magic, Marvel, and Monstrosity in the Renaissance. 3 Credits.

Magic, Monstrosity, and Marvels or Wonders call into question what we see and experience: what is reality, what is illusion; what's natural and what's supernatural? What's human and what's more, or less, than human? During the Renaissance, ideas about the nature of reality were bound up with questions and issues very different from those of our time. With the exact sciences still being invented, the nature of the world was much less hard and fast for Renaissance people than it is for the modern educated person. The literary masterpieces of the Italian Renaissance provide vivid illustrations of the early modern sense of wonder. Foremost among these are the theatrical comedies which Italian authors revived in imitation of the ancients, and the romances, especially Ariosto's *Orlando furioso* (1532) and Tasso's *Gerusalemme liberata* (1581). These and other works influenced ideas about magical and marvelous phenomena across Europe for centuries to come. Works will be read and discussed in English. Italian majors and graduate students (who should enroll in section 2) will attend a weekly supplemental discussion in Italian and compose their written work in Italian.

Area: Humanities

Writing Intensive

History

AS.100.249. From Darwin to Babar: Animals and Humans in Historical Perspective. 3 Credits.

This course explores perspectives on the animal/human boundary from the eighteenth century through today. Topics will include biological classification, mosquito-borne diseases, animal rights movements, evolutionary theory, colonialism, Nazism, and conservation.

Area: Humanities, Social and Behavioral Sciences

AS.100.291. Medicine in an Age of Empires, 1500-1800. 3 Credits.

How did medicine emerge as a distinctive body of knowledge and a profession in the early modern period? The answers lie in the histories of disease, empire, and global commerce.

Area: Humanities, Social and Behavioral Sciences

AS.100.331. Reading through Things: Early Modern Chinese Medicine, Technology, and Art. 3 Credits.

This course introduces the history of late imperial China from the perspective of medicine, technology, and the arts.

Area: Humanities, Social and Behavioral Sciences

Writing Intensive

History of Art

AS.010.208. Leonardo da Vinci: The Renaissance Workshop in the Formation of Scientific Knowledge. 3 Credits.

How does a notary's son trained as a painter come to claim expertise in the construction of machines and acquire knowledge of the principles of optics, human anatomy, the flight of birds, the dynamics of air and water? The course will focus critically on the myth of Leonardo's singularity and explore his achievements with regard to the artisanal culture of his time, as well as the problems of authority in the recognition of artisanal knowledge as scientific discovery.

Area: Humanities

AS.010.212. Mirror Mirror: Reflections in Art from Van Eyck to Velázquez. 3 Credits.

Explores the different ways Early Modern painters and printmakers incorporated mirrors and optical reflections into their works for the sake of illusion and metaphor, deception and desire, reflexivity and truth-telling. Connecting sense perception and ethical knowledge, embedded mirror images often made claims about the nature of the self, the powers of art, and the superiority of painting in particular.

Area: Humanities

AS.010.235. Art, Medicine, and the Body: Middle Ages to Modernity. 3 Credits.

This course explores seven centuries of fruitful collaboration between physicians and artists, uncovering the shared discourses, diagnostic techniques and therapeutic agendas that united the art of picture-making with the art of healing. Topics include the origin and development of medical illustration; the long, cross-cultural history of the therapeutic artefact; the anatomical investigations of Renaissance artists such as Leonardo and Michelangelo; depictions of bodily pain and disease in the art of Matthias Grünewald and psychosomatic syndromes like melancholy in the work of Albrecht Dürer; the spectacularization of the body in Enlightenment science and the ethics of medical specimen display today – all in order to bring the complex intersections of the history of medicine and the history of art into view.

Area: Humanities

History of Science, Medicine, and Technology

AS.140.105. History of Medicine. 3 Credits.

Course provides an overview of the medical traditions of six ancient cultures; the development of Greek and Islamic traditions in Europe; and the reform and displacement of the Classical traditions during the Scientific Revolution.

Area: Humanities, Social and Behavioral Sciences

AS.140.146. History of Public Health in East Asia. 3 Credits.

This course examines the history of disease, epidemics, and public health responses in East Asia from the 17th-20th centuries. This public health history emphasizes the interactions, connections, and comparisons among China, Japan, Korea, and Taiwan.

Area: Humanities, Social and Behavioral Sciences

Writing Intensive

AS.140.176. Public Health in East Asia Through Films & Documentaries. 1 Credit.

This course uses contemporary films and documentaries to address issues in public health in East Asia, past & present. Topics covered include medicine in turn-of-the-twentieth century Japan and China, revolutionary medicine, STDS, mental illness, HIV/AIDs in China, industrial pollution, the politics of universal health care insurance, and pandemics in East Asia.

Area: Humanities, Social and Behavioral Sciences

AS.140.302. Rise Of Modern Science. 3 Credits.

Survey of major scientific developments from the eighteenth-century Age of Enlightenment to the Cold War era of Big Science.

Area: Humanities, Social and Behavioral Sciences

AS.140.314. Experimental Bodies: Histories of Human Subjects Research in the 19th and 20th Centuries. 3 Credits.

This course traces the history of human subjects research as a medical and scientific practice. It will focus on the human subjects themselves, and how their experiences intersect with the histories of race, class, gender, sexuality, and disability.

Area: Humanities, Social and Behavioral Sciences

AS.140.321. Scientific Revolution. 3 Credits.

How did the Western understanding of nature change between 1500 and 1720? We'll study the period through the works of astronomers and astrologers, naturalists and magi, natural philosophers and experimentalists, doctors and alchemists & many others.

Area: Humanities, Social and Behavioral Sciences

AS.140.346. History of Chinese Medicine. 3 Credits.

Students will study the most recent anthropological, philosophical, and historical scholarship on medicine in traditional and modern Chinese society. They will approach the topic from several angles including medical pluralism, the range of healers, domestic and literate medicine, gender, emergence of new disciplines, public health and the history of disease. The course relies on secondary sources and primary sources in English translation. Cross-listed with East Asian Studies.

Area: Humanities, Social and Behavioral Sciences

Writing Intensive

AS.140.390. Science and Technology in Latin America. 3 Credits.

The course surveys the development of western science and technology in Hispanic America (1492 to the present). We begin studying the hybridization of scientific practices between European and Native American cultures during the early colonial era and end with the transfer of technologies and industrialization of the 20th century. We emphasize the role on science and technology in state formation, the acculturation of foreign ideas in colonial and postcolonial societies, and the role of intellectual elites in modernization programs.

Area: Humanities, Social and Behavioral Sciences

AS.140.391. Individualized Medicine from Antiquity to the Genome Age. 3 Credits.

A seminar for advanced undergraduates. We explore the notion of the individual in medicine over twenty-five centuries, from the Hippocratics to the invention of the case study during the Renaissance to the current JHU medical curriculum. The history of medicine survey, AS.140.105 or AS.140.106, is recommended though not required. Graduate students are welcomed but should expect to do additional work and readings.

Area: Humanities, Social and Behavioral Sciences

Writing Intensive

AS.140.398. Godzilla and Fukushima: Japanese Environment in History and Films. 3 Credits.

Japan is often described as “nature-loving,” and is considered to be one of world leaders in environmental protection policies. Yet current environmental successes come on the heels of numerous environmental disasters that plagued Japan in the past centuries. Juxtaposing Japanese environmental history and its reflection in popular media, the course will explore the intersection between technology, environment, and culture. Students are encouraged to enroll in AS.140.198, “Technology and Environment in Japanese Films and Anime” (1 credit) to attend movie screenings accompanying the course.

Area: Humanities, Social and Behavioral Sciences
Writing Intensive

AS.140.411. Senior Research Seminar. 2 Credits.

Area: Humanities, Social and Behavioral Sciences

AS.140.435. Ways of Knowing: New Histories of Science, Medicine, and Technology. 3 Credits.

What does it mean for science to have a history? Comparing newer approaches with classic works, we will explore different strategies for placing science, medicine, and technology in social context.

Area: Humanities, Social and Behavioral Sciences
Writing Intensive

Near Eastern Studies**AS.130.259. Ancient Science. 3 Credits.**

A survey of scientific practices and technological innovations in the ancient world, including astronomy, medicine, law, and divination. Special attention will be devoted to the relationship between magic and science during the periods covered.

Area: Humanities, Social and Behavioral Sciences

AS.130.420. Seminar in Research Methods in Near Eastern Studies: Religion and Science. 3 Credits.

This writing intensive seminar examines the relationship between religion and science in ancient Mesopotamia and the rest of the Near East from the 4th millennium to the Hellenistic period. Using a variety of case studies, and through engagement with scholarly literature pertaining to the topic of the course, students will develop skills in specific research skills such as critical reading, analysis, and interpretation.

Area: Humanities
Writing Intensive

Philosophy**AS.150.136. Philosophy & Science: An Introduction to Both. 3 Credits.**

Philosophers and scientists raise important questions about the nature of the physical world, the mental world, the relationship between them, and the right methods to use in their investigations of these worlds. The answers they present are very different. Scientists are usually empiricists, and want to answer questions by experiment and observation. Philosophers don't want to do this, but defend their views a priori. Why? Can both be right? Readings will present philosophical and scientific views about the world and our knowledge of it. They will include selections from major historical and contemporary figures in philosophy and science. The course has no prerequisites in philosophy or science.

Area: Humanities, Natural Sciences

AS.150.219. Introduction to Bioethics. 3 Credits.

Introduction to a wide range of moral issues arising in the biomedical fields, e.g. physician-assisted suicide, human cloning, abortion, surrogacy, and human subjects research. Cross listed with Public Health Studies.

Area: Humanities, Social and Behavioral Sciences
Writing Intensive

AS.150.245. Philosophy of Mind. 3 Credits.

Our minds are often thought to be exhaustively and intimately known to us. Despite this philosophers deeply disagree about the natures of the mental states and events which make up our minds. And there is equally little agreement as to what makes such states and events count as mental in the first place. This course will investigate the nature of different aspects of mind and their interrelations. Students will explore debates and puzzles about the nature of perception, memory, imagination, dreaming, pain and bodily sensation, emotion, action, volition and those states commonly classed as propositional attitudes: knowledge, belief, desire and intention. This will put us in a position to ask what if anything unifies such phenomena as mental.

Area: Humanities

AS.150.474. Justice and Health. 3 Credits.

Course will consider the bearing of theories of justice on health care. Topics will include national health insurance, rationing and cost containment, and what justice requires of researchers in developing countries.

Area: Humanities

AS.150.476. Philosophy and Cognitive Science. 3 Credits.

This year's topic is perception. Questions will include: In what ways might perceptual states be like and unlike pictures? Does what we believe affect what we perceive? Is linguistic comprehension a kind of perception?

Area: Humanities, Social and Behavioral Sciences

Program in Museums and Society**AS.389.201. Introduction to the Museum: Past and Present. 3 Credits.**

This course surveys museums, from their origins to their most contemporary forms, in the context of broader historical, intellectual, and cultural trends including the social movements of the 20th century. Anthropology, art, history, and science museums are considered. Crosslisted with Archaeology, History, History of Art, International Studies and Medicine, Science & Humanities.

Area: Humanities, Social and Behavioral Sciences

Sociology**AS.230.341. Sociology of Health and Illness. 3 Credits.**

This course introduces students to core concepts that define the sociological approach to health, illness and health care. Topics include: health disparities, social context of health and illness, and the Sociology of Medicine.

Area: Social and Behavioral Sciences

Writing Seminars**AS.220.206. Writing about Science I: Daily News Journalism. 3 Credits.**

This course is designed to teach students the skills of daily news reporting, with a focus on covering science news. Students will learn how turn scientific discoveries into lively and engaging prose for the general public, interview sources, and pitch stories to news organizations. The skills taught are applicable to all areas of journalism, not just science journalism.

Area: Humanities
Writing Intensive

AS.220.317. Writing about Science II: Feature Writing Journalism. 3 Credits.

This course is designed to teach students the skills of long-form narrative journalism, with a focus on covering science news. Skills taught will include how to compose scenes, create three-dimensional characters, create narrative tension, and conduct on-site reporting. Class speakers will include award-winning science journalists from New York to DC, who will share the secrets of their craft. The primary writing assignment will be a 3,000-word feature piece that is pitched, reported, and workshopped throughout the course of the class. "Writing About Science I" is recommended as a prerequisite for this course. If you have not taken this, please contact instructor (dgrimm5@jhu.edu) to enroll.

Area: Humanities

Writing Intensive

AS.220.424. Science as Narrative. 3 Credits.

Class reads the writings of scientists to explore what their words would have meant to them and their readers. Discussion will focus on the shifting scientific/cultural context throughout history. Authors include Aristotle, Copernicus, Galileo, Descartes, Newton, Darwin, Freud, Einstein, Heisenberg, Bohr, Crick and Watson.

Area: Humanities

Writing Intensive