

Stanford University

Department of Communication

Stanford University Courses – 2018/19 Approved For Communication Elective Credit

Communication Majors and Minors

Communication majors may take 10 units outside of the department. Minors may take 5 units outside of the department. All outside electives must be taken for a letter grade if offered. If a course also meets a GER or WAYS requirement, it may still be used towards the major or minor. However, a course may not be used for two majors or a major and a minor.

Taking SOC 180A instead of COMM 106 will count towards the units outside of the department.

Majors and minors have the option to petition approval for a course that is not listed below. To petition, please email the syllabus to the Student Services Manager at studentservices@commu.stanford.edu.

Communication Coterm Students, Media Studies Track

Coterm students following the media studies track may count up to 9 units outside of the department towards the 45 units for their MA. They may also petition their academic advisor for approval for coursework not listed below.

Units earned in courses below the 100 level may not be counted towards the minimum unit requirement for the master's degree.

Taking SOC 280A instead of COMM 106 or 206 will count towards the units outside of the department.

Communication Coterm Students, Journalism Track

Coterm students following the journalism track must adhere to the journalism MA curriculum and require approval from their academic advisor for any course outside of the department, including those listed below.

COURSES

Accepted as COMM 106 alternative

SOC 180A/280A: Foundations of Social Research

Formulating a research question, developing hypotheses, probability and non-probability sampling, developing valid and reliable measures, qualitative and quantitative data, choosing research design and data collection methods, challenges of making causal inference, and criteria for evaluating the quality of social research. Emphasis is on how social research is done, rather than application of different methods. Limited enrollment; preference to Sociology and Urban Studies majors, and Sociology coterm. Terms: Win | Units: 4 | UG Reqs: GER:DB-SocSci, WAY-SI | Grading: Letter (ABCD/NP)

Accepted as STATS 60/160 prereq alternatives

CS 109: Introduction to Probability for Computer Scientists

Topics include: counting and combinatorics, random variables, conditional probability, independence, distributions, expectation, point estimation, and limit theorems. Applications of probability in computer science including machine learning and the use of probability in the analysis of algorithms. Prerequisites: 103, 106B or X, multivariate calculus at the level of MATH 51 or CME 100 or equivalent.

Terms: Aut, Spr, Sum | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-AQR, WAY-FR | Grading: Letter or Credit/No Credit

ECON 102A: Introduction to Statistical Methods (Postcalculus) for Social Scientists

Probabilistic modeling and statistical techniques relevant for economics. Concepts include: probability trees, conditional probability, random variables, discrete and continuous distributions, correlation, central limit theorems, point estimation, hypothesis testing and confidence intervals for both one and two populations. Prerequisite: MATH 20 or equivalent.

Terms: Aut, Win | Units: 5 | UG Reqs: GER:DB-Math, WAY-AQR, WAY-SI | Grading: Letter or Credit/No Credit

HUMBIO 89: Introduction to Health Sciences Statistics

This course aims to provide a firm grounding in the foundations of probability and statistics, with a focus on analyzing data from the health sciences. Students will learn how to read, interpret, and critically evaluate the statistics in medical and biological studies. The course also prepares students to be able to analyze their own data, guiding them on how to choose the correct statistical test, avoid common statistical pitfalls, and perform basic functions in R deducer. Cardinal Course certified by the Haas Center.

Terms: Aut, Win, Spr | Units: 3 | UG Reqs: GER:DB-Math, WAY-AQR | Grading: Letter or Credit/No Credit

MS&E 120: Probabilistic Analysis

Concepts and tools for the analysis of problems under uncertainty, focusing on structuring, model building, and analysis. Examples from legal, social, medical, and physical problems. Topics include axioms of probability, probability trees, random variables, distributions, conditioning, expectation, change of variables, and limit theorems. Prerequisite: CME 100 or MATH 51.

Terms: Aut | Units: 5 | UG Reqs: GER:DB-EngrAppSci, WAY-AQR, WAY-FR | Grading: Letter or Credit/No Credit

STATS 101: Data Science 101

<http://web.stanford.edu/class/stats101/>. This course will provide a hands-on introduction to statistics and data science. Students will engage with the fundamental ideas in inferential and computational thinking. Each week, we will explore a core topic comprising three lectures and two labs (a module), in which students will manipulate real-world data and learn about statistical and computational tools. Students will engage in statistical computing and visualization with current data analytic software (Jupyter, R). The objectives of this course are to have students (1) be able to connect data to underlying phenomena and to think critically about conclusions drawn from data analysis, and (2) be knowledgeable about programming abstractions so that they can later design their own computational inferential procedures. No programming or statistical background is assumed. Freshmen and sophomores interested in data science, computing and statistics are encouraged to attend. Open to graduates as well.

Terms: Aut, Spr, Sum | Units: 5 | UG Reqs: GER: DB-NatSci, WAY-AQR | Grading: Letter or Credit/No Credit

STATS 110: Statistical Methods in Engineering and the Physical Sciences

Introduction to statistics for engineers and physical scientists. Topics: descriptive statistics, probability, interval estimation, tests of hypotheses, nonparametric methods, linear regression, analysis of variance, elementary experimental design. Prerequisite: one year of calculus.

Terms: Aut, Sum | Units: 4-5 | UG Reqs: GER:DB-Math, WAY-AQR, WAY-FR | Grading: Letter or Credit/No Credit

STATS 116: Theory of Probability

Probability spaces as models for phenomena with statistical regularity. Discrete spaces (binomial, hypergeometric, Poisson). Continuous spaces (normal, exponential) and densities. Random variables, expectation, independence, conditional probability. Introduction to the laws of large numbers and central limit theorem. Prerequisites: MATH 52 and familiarity with infinite series, or equivalent.

Terms: Aut, Spr, Sum | Units: 3-5 | UG Reqs: GER:DB-Math, WAY-AQR, WAY-FR | Grading: Letter or Credit/No Credit

Accepted as general elective credit

AFRICAAM 176B : Documentary Fictions NOT GIVEN IN 2018-19

More and more of our best fiction, plays, and comics are being created out of documentary practices such as in-depth interviewing, oral histories, and reporting. Novels like Dave Egger's *What is the What* and plays like Anna Deavere Smith's *Let Me Down Easy* act as both witnesses and translators of people's direct experience and push art into social activism in new ways. This course takes a close look at a diverse range of these contemporary works and explores how to adopt their research and aesthetic strategies for work of your own. We start with a brief look back at the recent origins of this trend and look at excerpts from forerunners such as Richard Wright, Truman Capote, and Bertolt Brecht. We then turn to the rise of documentary fictions in the last few decades and read works by Eggers, Adam Johnson, G.B. Tran, Maria Hummel, and Daniel Alarcon and watch performances by the Tectonic Theater Project and Elevator Repair Service. Students write one analytic essay and then conduct or study interviews to design a work of their own. The course will feature class visits by a number of our authors and a special half-day workshop with Smith.

AMSTUD 101: Black & Race Relations in American Fiction & Film (CSRE 41) NOT GIVEN IN 2018-19

Movies and the fiction that inspires them; power dynamics behind production including historical events, artistic vision, politics, and racial stereotypes. What images of black and white does Hollywood produce to forge a national identity? How do films promote equality between the races? What is lost or gained in film adaptations of books?

AMSTUD 114X: Reading Comics (FILMSTUD 114/314)

The modern medium of comics, a history that spans 150 years. The flexibility of the medium encountered through the genres of humorous and dramatic comic strips, superheroes, undergrounds, independents, journalism, and autobiography. Innovative creators including McCay, Kirby, Barry, Ware, and critical writings including McCloud, Eisner, Groenstee. Topics include text/image relations, panel-to-panel relations, the page, caricature, sequence, seriality, comics in the context of the fine arts, and relations to other media.

Terms: Aut | Units: 4 | UG Reqs: GER:DB-Hum, WAY-A-II | Grading: Letter (ABCD/NP)

AMSTUD 115: Asian American Film and Popular Culture

Since the later part of the nineteenth century, representations of Asian Americans in popular culture have played a defining role in shaping ideas of citizenship and national belonging in the United States. Tracing the evolution Asian American representations from the silent film era through the advent of online media, this course examines the economic, political, and cultural influence of Asian American screen images on U.S. society. Through a focus on both mainstream and independent productions, we discuss the work of Asian American actors, audience members, media producers, consumers, and activists. Films and TV shows to be discussed include *The Cheat* (1915), *Daughter of the Dragon* (1931), *Who Killed Vincent Chin?* (1989), *Sai-i-gu* (1993), *AKA Don Bonus* (1995), episodes of the *Mindy Project* and *Master of None*, and work by early Asian American YouTube stars including Michelle Phan and KevJumba.

Terms: Aut | Units: 5 | Grading: Letter (ABCD/NP)

AMSTUD 117: Race, Gender, and Sexuality in Contemporary American Film (FEMGEN 117F)

This course introduces students to the theoretical and analytical frameworks necessary to critically understand constructions of race, gender, and sexuality in contemporary American film. Through a sustained engagement with a range of independent and Hollywood films produced since the 1990s, students analyze the ways that cinematic representations have both reflected and constructed dominant notions of race, gender, and sexuality in the United States. Utilizing an intersectional framework that sees race, gender, and sexuality as always defined by one another, the course examines the ways that dominant notions of difference have been maintained and contested through film in the United States. Films to be discussed include *Better Luck Tomorrow*, *La La Land*, *Mosquita y Mari*, *Get Out*, and *Moonlight*.

Terms: Win | Units: 3-5 | Grading: Letter or Credit/No Credit

AMSTUD 118: Exploring Race and Ethnicity through Family History

Today, genealogy in the United States is a billion-dollar industry and one of the nation's most popular hobbies. Yet in a nation whose history is defined simultaneously by the rhetoric of equality and the legacies of slavery, immigration exclusion, and settler colonialism, the study of family history can teach us much more about ourselves than who our ancestors were. Drawing on theoretical and historical readings, class discussions, and student research into their own family histories, this course utilizes family history to examine issues of social power and difference in American society more broadly. Topics to be discussed will include the relationship between dominant ideas of race and normative ideas of family, family history as a counternarrative to dominant historical narratives, family photo collections as an archive for the production of identity, and oral history and family memory as sites through which dominant ideas of race and ethnicity are both contested and reinforced. Terms: Spr | Units: 3-5 | Grading: Letter or Credit/No Credit

AMSTUD 123X: Politics and Public Policy (POLISCI 102/123, PUBLPOL 101/ 201)

American political institutions (the Presidency, Congress, and the Court) and political processes (the formation of political attitudes and voting) have for some time now been criticized as inadequate to the task of making modern public policy.

Against the backdrop of American culture and political history we examine how public policy has been and is being made. We use theories from Political Science and Economics to assess the state of the American system and the policy making process. We use case studies and lectures to analyze contemporary issues including environmental policy, taxes and spending, gun control, economic growth and inequality and mobility. In some of these issue areas we use comparative data from other countries to see how the U.S. is doing relative to other countries. In addition to class room lecture and discussion, student groups are formed to analyze policy issues of relevance to them. Terms: Win | Units: 4-5 | UG Reqs: GER:DB-SocSci, WAY-SI | Grading: Letter or Credit/No Credit

AMSTUD 124A: THE AMERICAN WEST (ARTHIST 152, ENGLISH 124, HISTORY 151, POLISCI 124A)

The American West is characterized by frontier mythology, vast distances, marked aridity, and unique political and economic characteristics. This course integrates several disciplinary perspectives into a comprehensive examination of Western North America: its history, physical geography, climate, literature, art, film, institutions, politics, demography, economy, and continuing policy challenges. Students examine themes fundamental to understanding the region: time, space, water, peoples, and boom and bust cycles. Terms: Spr | Units: 5 | UG Reqs: GER:DB-Hum, GER:EC-AmerCul, WAY-A-II, WAY-SI | Grading: Letter (ABCD/NP)

AMSTUD 129: Animation and the Animated Film (FILMSTUD 129, 329) NOT GIVEN IN 2018-19

The fantasy of an image coming to life is ancient, but not until the cinema was this fantasy actualized. The history of the movies begins with optical toys, and contemporary cinema is dominated by films that rely on computer animation. This course considers the underlying fantasies of animation in art and lit, its phenomenologies, its relation to the uncanny, its status as a pure cinema, and its place in film theory. Different modes of production and style to be explored include realist animation, abstract animation; animistic animation; animated drawings, objects, and puppets; CGI, motion capture, and live/animation hybrids.

AMSTUD 140: Stand Up Comedy and the "Great American Joke" Since 1945 (CSRE 140C) NOT GIVEN IN 2018-19

Development of American Stand Up Comedy in the context of social and cultural eruptions after 1945, including the Borscht Belt, the Chitlin, Circuit, the Cold War, censorship battles, Civil Rights and other social movements of the 60s and beyond. The artistry of stories, monologues, jokes, impersonations, persona, social satire, scatology, obscenity, riffs, rants, shtick, and more by such artists as Lenny Bruce, Dick Gregory, Richard Pryor, George Carlin, Margaret Cho, Sarah Silverman, Jon Stewart, Stephen Colbert, as well as precursors such as Mark Twain, minstrelsy and vaudeville and related films, TV shows, poems and other manifestations of similar sensibilities and techniques.

AMSTUD 143X: Starstuff: Space and the American Imagination (ARTHIST 264B, FILMSTUD 264B)

Course on the history of twentieth and twenty-first century American images of space and how they shape conceptions of the universe. Covers representations made by scientists and artists, as well as scientific fiction films, TV, and other forms of popular visual culture. Topics will include the importance of aesthetics to understandings of the cosmos; the influence of media and technology on representations; the social, political, and historical context of the images; and the ways representations of space influence notions of American national identity and of cosmic citizenship.

Terms: Aut | Units: 5 | UG Reqs: WAY-A-II | Grading: Letter or Credit/No Credit

ANTHRO 141B: The Anthropology of Bits and Bytes: Digital Media in the Developing World NOT GIVEN IN 2018-19

Recent historical developments, including the widespread adoption of the mobile phone across Africa and Southeast Asia, the Arab Spring and the rise of technology sectors in cities such as Nairobi, Bangalore, and Accra, have turned digital technology in the global South into a topic of growing popular interest and increasing scholarly concern. This course attempts to make sense of these developments by interrogating diverse theoretical approaches to digital technology and assessing what these approaches reveal and obscure in specific cases of technology adoption in Africa, Asia, and Latin America. Students will be introduced to an overview of scholarly approaches to digital technology from anthropology, science and technology studies (STS), critical theory, geography, and communications studies. We will analyze the relative utility of these explanations through case studies of specific instances of technological production and/or use. These case studies will be drawn from both secondary texts and primary materials such as social media, digital maps, videos, blogs, and news reports. At the same time, we will examine how digital discourses and practices both draw upon and inform broader issues of context-specific political and cultural importance. Major topics to be discussed include development and the State, civil society and the public sphere, youth culture, gender politics, mobility, and globalization. Students will come away from the course with a strong understanding of the major issues at stake in the increasing digitalization of the global South, and the socio-cultural, political, and technical debates that frame them

ARTHIST 152: THE AMERICAN WEST (AMSTUD 124A, ENGLISH 124, HISTORY 151, POLISCI 124A)

The American West is characterized by frontier mythology, vast distances, marked aridity, and unique political and economic characteristics. This course integrates several disciplinary perspectives into a comprehensive examination of Western North America: its history, physical geography, climate, literature, art, film, institutions, politics, demography, economy, and continuing policy challenges. Students examine themes fundamental to understanding the region: time,

space, water, peoples, and boom and bust cycles. Terms: Spr | Units: 5 | UG Reqs: GER:DB-Hum, GER:EC-AmerCul, WAY-A-II, WAY-SI | Grading: Letter (ABCD/NP)

ARTHIST 164A/364A: Technology and the Visual Imagination (FILMSTUD 164A/364A) NOT GIVEN IN 2018-19

An exploration of the dynamic relationship between technology and the ways we see and represent the world. The course examines technologies from the Renaissance through the present day, from telescopes and microscopes to digital detectors that have changed and enhanced our visual capabilities as well as shaped how we imagine the world. We also consider how these technologies influenced and inspired the work of artists. Special attention is paid to how different technologies such as linear perspective, photography, cinema, and computer screens translate the visual experience into a representation; the automation of vision; and the intersection of technology with conceptions of time and space.

ARTHIST 165A/365A: Fashion Shows: From Lady Godiva to Lady Gaga (FILMSTUD 165A, FILMSTUD 365A) NOT GIVEN IN 2018-19

The complex and interdependent relationship between fashion and art. Topics include: the ways in which artists have used fashion in different art forms as a means to convey social status, identity, and other attributes of the wearer; the interplay between fashion designers and various art movements, especially in the 20th century; the place of prints, photography, and the Internet in fashion, in particular how different media shape how clothes are seen and perceived. Texts by Thorstein Veblen, Roland Barthes, Dick Hebdige, and other theorists of fashion.

ARTHIST 264A: Picturing the Cosmos NOT GIVEN IN 2018-19

This seminar explores the place of images in how we understand and imagine the universe. The course draws on art, science, and popular culture, and pays particular attention to the ways they inform each other. Examples include: star maps, science fiction films, appropriated astronomical images, and telescopic views of stars, planets, and nebulae. Using these representations as well as accompanying readings we will discuss the importance of aesthetics for conceptions of the cosmos; the influence of technology on representations; strategies for representing concepts that exceed the limits of human vision; and the ways that views of the universe reflect and shape their cultural context. Open to undergraduates and graduates.

ARTHIST 264B: Starstuff: Space and the American Imagination (AMSTUD 143X, FILMSTUD 264B)

Course on the history of twentieth and twenty-first century American images of space and how they shape conceptions of the universe. Covers representations made by scientists and artists, as well as scientific fiction films, TV, and other forms of popular visual culture. Topics will include the importance of aesthetics to understandings of the cosmos; the influence of media and technology on representations; the social, political, and historical context of the images; and the ways representations of space influence notions of American national identity and of cosmic citizenship.

Terms: Aut | Units: 5 | UG Reqs: WAY-A-II | Grading: Letter or Credit/No Credit

ARTHIST 273: Visual Culture of the Arctic (FILMSTUD 273) NOT GIVEN IN 2018-19

In what ways does contemporary art address the slowly unfolding catastrophes of melting ice and thawing permafrost in the Arctic due to climate change? How might contemporary art and experimental cinema help us come to grips with the emotional disturbance of living amidst the deep-seated changes that are happening in our environment? These are the key questions this course attempts to answer. The first part of the class attempts to outline the complex history of Arctic visual and cultural representations through an interdisciplinary lens. The second part focuses on the more recent artistic and cinematic responses to climate change in the arctic. For their final projects, students will be able to combine analytical writing with creative projects that could take the form of photography, installation art, web-based art, fiction, video or poetry.

ARTSINST 150: The Changing World of Popular Music (MUSIC 150P)

This course will cover changes in the business, economics, and practices of the popular music industry. It will provide a brief historical overview of the industry and its business models. The majority of the course will focus on the industry as it works today and on forces that are causing it to change rapidly. The course will feature guest artists and executives with current experience in the field, as well as project-based assignments designed to give students hands-on experience. Topics will include: Economics and business models of commercial music business, Technology and music production, Technology and music distribution, Technology and marketing, Leadership in the music industry: case studies, Managing creative projects, Copyright and legal issues. Attendance at first class required. Enrollment will be determined on the first day through a simple application process.

Terms: Spr | Units: 2 | Grading: Letter or Credit/No Credit

ARTSTUDI 174B: Creativity in the Age of Facebook: Making Art for and from Networks

This class explores the history, practice and technique of creating art on and for the internet. Discussions, projects and readings focus on the ways in which internet art embodies changing ideas about artistic creation, technology, and interactivity as a way of blurring the line between artist and audience. Setting recent work against the backdrop of earlier moments in contemporary art (found object art, photomontage), this course also situates internet art in the pre-internet

tradition of finding new perspectives on, and meanings in, overfamiliar or banal media surroundings. In collaborative and individual projects, students will create visual compositions on online platforms such as NewHive and explore social media interventions, Twitter experiments, crowdsourced work, collections of online found imagery, supercuts, GIFs, and "choose your own adventure"- style online storytelling.

Terms: Win | Units: 4 | UG Reqs: WAY-CE | Grading: Letter or Credit/No Credit

ARTSTUDI 266: Sculptural Screens / Malleable Media

In this upper level studio course, students will experiment with video and computational outputs embedded in physical scenarios. What new physical formats are made possible by contemporary screen and projection-mapping technologies? How can we make expressive use of LCD screens, pico projectors, i-pad arrays, and LEDs? The class will address the screen as sculptural medium by examining established artists like Nam June Paik, Michael Snow, Tony Oursler, and Pipilotti Rist, as well as exploring emerging contemporary artists tackling this medium. Prerequisites include one of the following: Intro to Digital/Physical Design, Embodied Interfaces, Media Archaeologies, Making it with Arduino, Digital Art 1, Electronic Art or permission of instructor.

Terms: Spr | Units: 4 | UG Reqs: WAY-CE | Grading: Letter (ABCD/NP)

CS 101: Introduction to Computing Principles

Introduces the essential ideas of computing: data representation, algorithms, programming "code", computer hardware, networking, security, and social issues. Students learn how computers work and what they can do through hands-on exercises. In particular, students will see the capabilities and weaknesses of computer systems so they are not mysterious or intimidating. Course features many small programming exercises, although no prior programming experience is assumed or required. CS101 is not a complete programming course such as CS106A. CS101 is effectively an alternative to CS105. A laptop computer is recommended for the in-class exercises.

Terms: Aut | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-FR | Grading: Letter or Credit/No Credit

CS105: Introduction to Computers

For non-technical majors. What computers are and how they work. Practical experience in programming. Construction of computer programs and basic design techniques. A survey of Internet technology and the basics of computer hardware. Students in technical fields and students looking to acquire programming skills should take 106A or 106X. Students with prior computer science experience at the level of 106 or above require consent of instructor. Prerequisite: minimal math skills.

Terms: Aut | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-FR | Grading: Letter or Credit/No Credit

CS106A: Programming Methodology (ENGR 70A)

Introduction to the engineering of computer applications emphasizing modern software engineering principles: object-oriented design, decomposition, encapsulation, abstraction, and testing. Emphasis is on good programming style and the built-in facilities of respective languages. No prior programming experience required. Summer quarter enrollment is limited. Alternative versions of CS106A are available which cover most of the same material but in different programming languages. Terms: Aut, Win, Spr, Sum | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-FR | Grading: Letter or Credit/No Credit

CS 106AJ: Programming Methodology in JavaScript

Introduction to the engineering of computer applications emphasizing modern software engineering principles: object-oriented design, decomposition, encapsulation, abstraction, and testing. Uses the JavaScript programming language. Emphasis is on good programming style and the built-in facilities of the JavaScript language. No prior programming experience required. This course covers most of the same material as CS106A Section 1 in Java and CS 106A Section 3 in Python, but this course uses the JavaScript programming language. To enroll in this class, enroll in CS 106A Section 2 for Fall Qtr. May be taken for 3 units by grad students. Terms: Aut | Units: 3-5 | Grading: Letter or Credit/No Credit

CS 106B: Programming Abstractions (ENGR 70B)

Abstraction and its relation to programming. Software engineering principles of data abstraction and modularity. Object-oriented programming, fundamental data structures (such as stacks, queues, sets) and data-directed design. Recursion and recursive data structures (linked lists, trees, graphs). Introduction to time and space complexity analysis. Uses the programming language C++ covering its basic facilities. Prerequisite: 106A or equivalent. Summer quarter enrollment is limited. Terms: Aut, Win, Spr, Sum | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-FR | Grading: Letter or Credit/No Credit

CS 106X: Programming Abstractions (Accelerated) (ENGR 70X)

Intensive version of 106B for students with a strong programming background interested in a rigorous treatment of the topics at an accelerated pace. Significant amount of additional advanced material and substantially more challenging projects. Some projects may relate to CS department research. Prerequisite: excellence in 106A or equivalent, or consent of instructor. Terms: Aut, Win | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-FR | Grading: Letter or Credit/No Credit

CS147: Introduction to Human-Computer Interaction Design

Introduces fundamental methods and principles for designing, implementing, and evaluating user interfaces. Topics: user-centered design, rapid prototyping, experimentation, direct manipulation, cognitive principles, visual design, social software, software tools. Learn by doing: work with a team on a quarter-long design project, supported by lectures, readings, and studios. Prerequisite: 106B or X or equivalent programming experience. Recommended that CS Majors have also taken one of 142, 193P, or 193A. Terms: Aut | Units: 3-5 | Grading: Letter (ABCD/NP)

CS 181: Computers, Ethics, and Public Policy

Primarily for majors entering computer-related fields. Ethical and social issues related to the development and use of computer technology. Ethical theory, and social, political, and legal considerations. Scenarios in problem areas: privacy, reliability and risks of complex systems, and responsibility of professionals for applications and consequences of their work. Prerequisite: 106B or X. To take this course, students need permission of instructor and may need to complete an assignment due at the first day of class.

Terms: Aut, Win | Units: 4 | UG Reqs: GER:EC-EthicReas, WAY-ER | Grading: Letter or Credit/No Credit

CS247: Human-Computer Interaction Design Studio

Project-based focus on interaction design process, especially early-stage design and rapid prototyping. Methods used in interaction design including needs analysis, user observation, sketching, concept generation, scenario building, and evaluation. Prerequisites: 147 or equivalent background in design thinking; 106B or equivalent background in programming. Terms: Win, Spr | Units: 3-4 | Grading: Letter (ABCD/NP)

CSRE 41: Black & Race Relations in American Fiction & Film (AMSTUD 101) NOT GIVEN IN 2018-19

Movies and the fiction that inspires them; power dynamics behind production including historical events, artistic vision, politics, and racial stereotypes. What images of black and white does Hollywood produce to forge a national identity? How do films promote equality between the races? What is lost or gained in film adaptations of books?

Terms: Spr | Units: 3-5 | UG Reqs: GER:DB-Hum, GER:EC-AmerCul, WAY-A-II, WAY-ED | Grading: Letter (ABCD/NP)

CSRE 140C: Stand Up Comedy and the "Great American Joke" Since 1945 (AMSTUD 140) NOT GIVEN IN 2018-19

Development of American Stand Up Comedy in the context of social and cultural eruptions after 1945, including the Borscht Belt, the Chitlin, Circuit, the Cold War, censorship battles, Civil Rights and other social movements of the 60s and beyond. The artistry of stories, monologues, jokes, impersonations, persona, social satire, scatology, obscenity, riffs, rants, shtick, and more by such artists as Lenny Bruce, Dick Gregory, Richard Pryor, George Carlin, Margaret Cho, Sarah Silverman, Jon Stewart, Stephen Colbert, as well as precursors such as Mark Twain, minstrelsy and vaudeville and related films, TV shows, poems and other manifestations of similar sensibilities and techniques.

CSRE 141E : Counterstory in Literature and Education (EDUC 141/341, LIFE 124)

Counterstory is a method developed in critical legal studies that emerges out of the broad "narrative turn" in the humanities and social science. This course explores the value of this turn, especially for marginalized communities, and the use of counterstory as analysis, critique, and self-expression. Using an interdisciplinary approach, we examine counterstory as it has developed in critical theory, critical pedagogy, and critical race theory literatures, and explore it as a framework for liberation, cultural work, and spiritual exploration.

Terms: Win | Units: 3 | UG Reqs: WAY-CE, WAY-ED | Grading: Letter or Credit/No Credit

CSRE 148: Comparative Ethnic Conflict (SOC 148/248) NOT GIVEN IN 2018-19

Causes and consequences of racial and ethnic conflict, including nationalist movements, ethnic genocide, civil war, ethnic separatism, politics, indigenous peoples' movements, and minority rights movements around the world.

EARTHSYS 135/235: Podcasting the Anthropocene NOT GIVEN IN 2018-19

The Anthropocene refers to the proposed geologic age defined by the global footprint of humankind. It's an acknowledgement of the tremendous influence people and societies exert on Earth systems. Students taking the course will identify a subject expert, workshop story ideas with fellow students and instructors, conduct interviews, iteratively write audio scripts, and learn the skills necessary to produce final audio podcast as their final project. Our expectation is that the final projects will be published on the award-winning Generation Anthropocene podcast, with possible opportunities to cross post in collaboration with external media partners. Students taking EARTHSYS 135/235 are strongly encouraged to take EARTHSYS 135A/235A beforehand.

EARTHSYS 149/249: Wild Writing

What is wilderness and why does it matter? In this course we will interrogate answers to this question articulated by influential and diverse American environmental thinkers of the 19th, 20th, and 21st centuries, who through their writing transformed public perceptions of wilderness and inspired such actions as the founding of the National Park System, the passage of the Wilderness Act and the Clean Air and Water Acts, the establishment of the Environmental Protection Agency, and the birth of the environmental and climate justice movements. Students will also develop their own responses to the question of what is wilderness and why it matters through a series of writing exercises that integrate personal

narrative, wilderness experience, and environmental scholarship, culminating in a ~3000 word narrative nonfiction essay. This course will provide students with knowledge, tools, experience, and skills that will empower them to become more persuasive environmental storytellers and advocates.

Terms: Spr | Units: 3 | Grading: Letter (ABCD/NP)

ECON 150: Economic Policy Analysis (PUBLPOL 104/204)

The relationship between microeconomic analysis and public policy making. How economic policy analysis is done and why political leaders regard it as useful but not definitive in making policy decisions. Economic rationales for policy interventions, methods of policy evaluation and the role of benefit-cost analysis, economic models of politics and their application to policy making, and the relationship of income distribution to policy choice. Theoretical foundations of policy making and analysis, and applications to program adoption and implementation. Prerequisites: ECON 50 and ECON 102B. Terms: Win | Units: 4-5 | UG Reqs: WAY-AQR | Grading: Letter or Credit/No Credit

EDUC 141/341: Counterstory in Literature and Education (CSRE 141E, LIFE 124)

Counterstory is a method developed in critical legal studies that emerges out of the broad "narrative turn" in the humanities and social science. This course explores the value of this turn, especially for marginalized communities, and the use of counterstory as analysis, critique, and self-expression. Using an interdisciplinary approach, we examine counterstory as it has developed in critical theory, critical pedagogy, and critical race theory literatures, and explore it as a framework for liberation, cultural work, and spiritual exploration.

Terms: Win | Units: 3 | UG Reqs: WAY-CE, WAY-ED | Grading: Letter or Credit/No Credit

EDUC 358: Learning, Sharing, Publishing, and Intellectual Property NOT GIVEN IN 2018-19

This course explores the educational, historical, legal, economic, technical, and ethical issues entailed in the digital-era openness and sharing of intellectual properties associated with learning (including books, websites, games, journals, etc.). The course provides students with the skills and knowledge for finding, developing, and evaluating resources at all educational levels, based on a grasp of the opportunities and challenges of increasing access to learning in this way. As part its global focus on open learning, the course will be run in conjunction with the MOOC ¿OpenKnowledge Changing the Global Course of Learning¿ (search for it online), offering students the option of both experiencing and studying a MOOC on this theme, which is being co-taught in Mexico, Ghana, Canada, and the US (Stanford and Fordham) in English and Spanish.

EDUC 374: Philanthropy and Civil Society (POLISCI 334, SOC 374)

Cross-listed with Law (LAW 781), Political Science (POLISCI 334) and Sociology (SOC 374). Associated with the Center for Philanthropy and Civil Society (PACS). Year-long workshop for doctoral students and advanced undergraduates writing senior theses on the nature of civil society or philanthropy. Focus is on pursuit of progressive research and writing contributing to the current scholarly knowledge of the nonprofit sector and philanthropy. Accomplished in a large part through peer review. Readings include recent scholarship in aforementioned fields. May be repeated for credit for a maximum of 9 units.

Terms: Aut, Win, Spr | Units: 1-3 | Repeatable for credit | Grading: Satisfactory/No Credit

ENGLISH 90: Fiction Writing

The elements of fiction writing: narration, description, and dialogue. Students write complete stories and participate in story workshops. May be repeated for credit. Prerequisite: PWR 1 (waived in summer quarter).

Terms: Aut, Win, Spr, Sum | Units: 5 | UG Reqs: WAY-A-II, WAY-CE | Repeatable for credit | Grading: Letter or Credit/No Credit

ENGLISH 90V: Fiction Writing

Online workshop course that explores the ways in which writers of fiction have used language to examine the world, to create compelling characters, and to move readers. We will begin by studying a selection of stories that demonstrate the many techniques writers use to create fictional worlds; we'll use these stories as models for writing exercises and short assignments, leading to a full story draft. We will study figurative language, character and setting development, and dramatic structure, among other elements of story craft. Then, each student will submit a full draft and receive feedback from the instructor and his/her classmates. This course is taught entirely online, but retains the feel of a traditional classroom. Optional synchronous elements such as discussion and virtual office hours provide the student direct interaction with both the instructor and his/her classmates. Feedback on written work - both offered to and given by the student - is essential to the course and creates class rapport.

Terms: Sum | Units: 5 | UG Reqs: WAY-CE | Grading: Letter or Credit/No Credit

ENGLISH 91: Creative Nonfiction

Historical and contemporary as a broad genre including travel and nature writing, memoir, biography, journalism, and the personal essay. Students use creative means to express factual content. May be repeat for credit

Terms: Aut, Win, Spr, Sum | Units: 5 | UG Reqs: WAY-A-II, WAY-CE | Repeatable for credit | Grading: Letter or Credit/No Credit

ENGLISH 124: The American West (AMSTUD 124A , ARTHIST 152, HISTORY 151, POLISCI 124A)

The American West is characterized by frontier mythology, vast distances, marked aridity, and unique political and economic characteristics. This course integrates several disciplinary perspectives into a comprehensive examination of Western North America: its history, physical geography, climate, literature, art, film, institutions, politics, demography, economy, and continuing policy challenges. Students examine themes fundamental to understanding the region: time, space, water, peoples, and boom and bust cycles. Terms: Spr | Units: 5 | UG Reqs: GER:DB-Hum, GER:EC-AmerCul, WAY-A-II, WAY-SI | Grading: Letter (ABCD/NP)

ENGR 70A: Programming Methodology (CS 106A)

Introduction to the engineering of computer applications emphasizing modern software engineering principles: object-oriented design, decomposition, encapsulation, abstraction, and testing. Emphasis is on good programming style and the built-in facilities of respective languages. No prior programming experience required. Summer quarter enrollment is limited. Alternative versions of CS106A are available which cover most of the same material but in different programming languages. Terms: Aut, Win, Spr, Sum | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-FR | Grading: Letter or Credit/No Credit

ENGR 70B: Programming Abstractions (CS 106B)

Abstraction and its relation to programming. Software engineering principles of data abstraction and modularity. Object-oriented programming, fundamental data structures (such as stacks, queues, sets) and data-directed design. Recursion and recursive data structures (linked lists, trees, graphs). Introduction to time and space complexity analysis. Uses the programming language C++ covering its basic facilities. Prerequisite: 106A or equivalent. Summer quarter enrollment is limited. Terms: Aut, Win, Spr, Sum | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-FR | Grading: Letter or Credit/No Credit

ENGR 70X: Programming Abstractions (Accelerated) (CS 106X)

Intensive version of 106B for students with a strong programming background interested in a rigorous treatment of the topics at an accelerated pace. Significant amount of additional advanced material and substantially more challenging projects. Some projects may relate to CS department research. Prerequisite: excellence in 106A or equivalent, or consent of instructor. Terms: Aut, Win | Units: 3-5 | UG Reqs: GER:DB-EngrAppSci, WAY-FR | Grading: Letter or Credit/No Credit

ENGR 130: Science, Technology, and Contemporary Society NOT GIVEN IN 2018-19

Key social, cultural, and values issues raised by contemporary scientific and technological developments; distinctive features of science and engineering as sociotechnical activities; major influences of scientific and technological developments on 20th-century society, including transformations and problems of work, leisure, human values, the fine arts, and international relations; ethical conflicts in scientific and engineering practice; and the social shaping and management of contemporary science and technology.

ENGR 281: Designing Media that Matters

The combination of always-on smartphones, instant access to information and global social sharing is changing behavior and shifting cultural norms. How can we design digital experiences that make this change positive? Join the d.media team and find out! This course is project-based and hands-on. Three projects will explore visual design, interaction design and behavioral design all in the context of today's technology landscape and in service of a socially positive user experience. See <http://dmedia.stanford.edu>, Admission by application. See dschool.stanford.edu/classes for more information. Terms: Win | Units: 2-3 | Grading: Letter or Credit/No Credit

FILMPROD 101: Screen Writing I: Visual Writing NOT GIVEN IN 2018-19

A writing workshop that is an exploration of visual storytelling. Beginning with visual literacy, the class progresses from basic cinematic techniques through scene exercises to revisions and ultimately to connecting scenes in order to build sequences of script pages. Open to all majors.

FILMPROD 104/304: Screenwriting II: Intermediate Screenwriting

Priority to Film and Media Studies majors and minors, and seniors. Craft, form, and approaches to writing for the screen. Students will write, workshop and rewrite the first act of a feature screenplay and create rough outline material for the rest of the film. Prerequisites: FP101, FP101T or ENGL190F and consent of the instructor. Terms: Spr | Units: 5 | Grading: Letter (ABCD/NP)

FILMPROD 105/305: Script Analysis

Analysis of screenplay and film from the writer's perspective, with focus on ideation, structure, and dramatic tension in narrative features. Sources include screenplays and screenings. Terms: Aut | Units: 4 | Grading: Letter or Credit/No Credit

FILMPROD 106: Image and Sound: Filmmaking for the Digital Age

Despite the rise of emerging forms like two-minute YouTube videos, six second Vines, or interactive storytelling modules, many core principles of visual storytelling remain unchanged. In this hands-on film production class students will learn a broad set of filmmaking fundamentals (basic history, theory, and practice) and will apply them creating film projects using tools such as iPhones, consumer cameras and FCPX.

Terms: Aut, Win, Spr | Units: 3 | UG Reqs: WAY-CE | Grading: Letter (ABCD/NP)

FILMPROD 110: Screen Writing III: Advanced Screenwriting NOT GIVEN IN 2018-19

Advanced writing workshop in which students develop and complete a feature-length screenplay. Prerequisites: FP101 Screenwriting and approval of the instructor. Enrollment is limited.

FILMPROD 114: Introduction to Film and Video Production

Hands-on. Techniques of film and video making including conceptualization, visualization, story structure, cinematography, sound recording, and editing. Enrollment limited to 12 students. Priority to junior/senior Film & Media Studies majors. Admission determined on the first day of class.

Terms: Aut, Spr | Units: 5 | UG Reqs: WAY-CE | Grading: Letter (ABCD/NP)

FILMSTUD 4: Introduction to Film Study

This course will introduce you to formal, historical, and cultural issues in the study of film. We will study the technological and social history of cinema and engage with philosophical and theoretical questions pertaining to film as a medium and as a cultural product, even as we undertake the formal analysis of fiction, documentary, and experimental films.

Terms: Win | Units: 5 | UG Reqs: GER:DB-Hum, WAY-A-II | Grading: Letter (ABCD/NP)

FILMSTUD 4S: Language of Film

This course familiarizes students with various elements of film language (cinematography, editing, sound, etc.) and introduces them to a range of approaches to cinematic analysis (authorship, genre, close formal reading, socio-historical considerations). Different types of films (narrative, documentary, and experimental) will be surveyed. Classical narrative cinema will be compared with alternative modes of story-telling.

Terms: Sum | Units: 3 | Grading: Letter (ABCD/NP)

FILMSTUD 6: Introduction to Media

What is a medium? This course starts from the assumption that the answer to this question is not as obvious as it might at first appear. Clearly, we know some media when we see them: radio, film, and television are in many ways paradigmatic media of the twentieth century. But what about the computational, networked media of the twenty-first century? Are these still media in the same sense, or has the nature of media changed with the emergence of digital technologies? And what, for that matter, about pre-technical media? Is painting a medium in the same sense that oil or acrylic are media, or in the sense that we speak of 'mixed media'? Is language a medium? Are numbers? Is the body? As we shall see, the question of what a medium is raises a number of other questions of a theoretical or even philosophical nature. How is our experience of the world affected or shaped by media? Are knowledge and perception possible apart from media, or are they always mediated by the apparatuses, instruments, or assemblages of media? What is the relation between the forms and the contents of media, and how does this relation bear on questions of aesthetics, science, technology, or politics? The lecture-based course addresses these and other questions and seeks in this way to introduce a way of thinking about media that goes beyond taken-for-granted ideas and assumptions, and that has a potentially transformative effect on a wide range of theoretical and practical interests.

Terms: Aut | Units: 5 | UG Reqs: WAY-A-II | Grading: Letter (ABCD/NP)

FILMSTUD 7: Introduction to Television Studies NOT GIVEN IN 2018-19

Television is arguably the most influential and ubiquitous mass medium of the last half century. Because of its familiarity and popularity, it is also often the medium most overlooked, dismissed, and maligned. Drawing from the history of television and of television scholarship, this course builds a theoretical framework for understanding this pivotal cultural form. We will cover interdisciplinary approaches to studying TV texts, TV audiences, and TV industries, including questions of the boundaries of "television" (from independent and avant-garde video to convergence). In the process, we'll develop our own methodological tools as critical television viewers.

FILMSTUD 114/314: Reading Comics (AMSTUD 114X)

The modern medium of comics, a history that spans 150 years. The flexibility of the medium encountered through the genres of humorous and dramatic comic strips, superheroes, undergrounds, independents, journalism, and autobiography. Innovative creators including McCay, Kirby, Barry, Ware, and critical writings including McCloud, Eisner, Groenstee. Topics include text/image relations, panel-to-panel relations, the page, caricature, sequence, seriality, comics in the context of the fine arts, and relations to other media.

Terms: Aut | Units: 4 | UG Reqs: GER:DB-Hum, WAY-A-II | Grading: Letter (ABCD/NP)

FILMSTUD 129/329: Animation and the Animated Film (AMSTUD 129) NOT GIVEN IN 2018-19

The fantasy of an image coming to life is ancient, but not until the cinema was this fantasy actualized. The history of the movies begins with optical toys, and contemporary cinema is dominated by films that rely on computer animation. This course considers the underlying fantasies of animation in art and lit, its phenomenologies, its relation to the uncanny, its status as a pure cinema, and its place in film theory. Different modes of production and style to be explored include realist animation, abstract animation; animistic animation; animated drawings, objects, and puppets; CGI, motion capture, and live/animation hybrids. Terms: Aut | Units: 4 | Grading: Letter or Credit/No Credit

FILMSTUD 164A/364A: Technology and the Visual Imagination (ARTHIST 164A/364A) NOT GIVEN IN 2018-19

An exploration of the dynamic relationship between technology and the ways we see and represent the world. The course examines technologies from the Renaissance through the present day, from telescopes and microscopes to digital detectors, that have changed and enhanced our visual capabilities as well as shaped how we imagine the world. We also consider how these technologies influenced and inspired the work of artists. Special attention is paid to how different technologies such as linear perspective, photography, cinema, and computer screens translate the visual experience into a representation; the automation of vision; and the intersection of technology with conceptions of time and space.

FILMSTUD 165A/365A: Fashion Shows: From Lady Godiva to Lady Gaga (ARTHIST 165A/365A) NOT GIVEN IN 2018-19

The complex and interdependent relationship between fashion and art. Topics include: the ways in which artists have used fashion in different art forms as a means to convey social status, identity, and other attributes of the wearer; the interplay between fashion designers and various art movements, especially in the 20th century; the place of prints, photography, and the Internet in fashion, in particular how different media shape how clothes are seen and perceived. Texts by Thorstein Veblen, Roland Barthes, Dick Hebdige, and other theorists of fashion.

FILMSTUD 251: Media in Transition NOT GIVEN IN 2018-19

In a culture obsessed with "new" media, we're bombarded with hype about the present as a revolutionary phase of convergence. But everything old was once new, and pioneering media of the past also had to negotiate existing technologies, ideologies, and fantasies. This seminar is organized around case studies of transitional media moments. In exploring the material and discursive aspects of remediation through theoretical, historical, and media archaeological readings, we'll ask: what is a medium and how do they emerge and evolve?

FILMSTUD 259/459: Game Studies

This course aims to introduce students to the emerging, interdisciplinary field of game studies. We will investigate what games (including but not limited to digital games) are, why we play them, and what the functions of this activity might be. The bulk of the course will be devoted specifically to digital games, which we will approach from a variety of perspectives: from historical, cultural, industrial/commercial, media-theoretical, and formal (narratological/ludological) perspectives, among others. Thus, we will seek to understand the contexts in which video games emerged and evolved, the settings in which they have been played, and the discourses and practices that have determined their place in social and cultural life. In addition, we will ask difficult questions about the mediality of digital games: What is the relation of digital to non-digital games? Are they both games in the same sense, or do digital media redefine what games are or can be? How do digital games relate to other (digital as well as non-digital) non-game media, such as film, television, print fiction, or non-game computer applications? Of course, to engage meaningfully with these questions at all will require us to investigate theories of mediality (including inter- and transmediality) more generally. Finally, though, we will be interested in the formal and experiential parameters that define (different types of) digital games in particular. What does it feel like to play (various) digital games? What are the relations between storytelling and the activity of gameplaying in them? What is the relation between these aspects and the underlying mechanics of digital games, as embodied in hardware and software? What is the role of the human body? Because these questions can only be approached on the basis of personal experience, students will be expected to spend some time playing digital games and reflecting critically on their gameplay. Terms: Aut | Units: 5 | UG Reqs: WAY-A-II | Grading: Letter or Credit/No Credit

FILMSTUD 264B: Starstuff: Space and the American Imagination (AMSTUD 143X, ARTHIST 264B)

Course on the history of twentieth and twenty-first century American images of space and how they shape conceptions of the universe. Covers representations made by scientists and artists, as well as scientific fiction films, TV, and other forms of popular visual culture. Topics will include the importance of aesthetics to understandings of the cosmos; the influence of media and technology on representations; the social, political, and historical context of the images; and the ways representations of space influence notions of American national identity and of cosmic citizenship. Terms: Aut | Units: 5 | UG Reqs: WAY-A-II | Grading: Letter or Credit/No Credit

FILSTUD 273: Visual Culture of the Arctic (ARTHIST 273) NOT GIVEN IN 2018-19

In what ways does contemporary art address the slowly unfolding catastrophes of melting ice and thawing permafrost in the Arctic due to climate change? How might contemporary art and experimental cinema help us come to grips with the emotional disturbance of living amidst the deep-seated changes that are happening in our environment? These are the key questions this course attempts to answer. The first part of the class attempts to outline the complex history of Arctic

visual and cultural representations through an interdisciplinary lens. The second part focuses on the more recent artistic and cinematic responses to climate change in the arctic. For their final projects, students will be able to combine analytical writing with creative projects that could take the form of photography, installation art, web-based art, fiction, video or poetry.

HISTORY 151: THE AMERICAN WEST (AMSTUD 124A , ARTHIST 152, ENGLISH 124, POLISCI 124A)

The American West is characterized by frontier mythology, vast distances, marked aridity, and unique political and economic characteristics. This course integrates several disciplinary perspectives into a comprehensive examination of Western North America: its history, physical geography, climate, literature, art, film, institutions, politics, demography, economy, and continuing policy challenges. Students examine themes fundamental to understanding the region: time, space, water, peoples, and boom and bust cycles. Terms: Spr | Units: 5 | UG Reqs: GER:DB-Hum, GER:EC-AmerCul, WAY-A-II, WAY-SI | Grading: Letter (ABCD/NP)

HISTORY 254: Popular Culture and American Nature NOT GIVEN IN 2017-18

Despite John Muir, Aldo Leopold, and Rachel Carson, it is arguable that the Disney studios have more to do with molding popular attitudes toward the natural world than politicians, ecologists, and activists. Disney as the central figure in the 20th-century American creation of nature. How Disney, the products of his studio, and other primary and secondary texts see environmentalism, science, popular culture, and their interrelationships.

Terms: Aut | Units: 5 | UG Reqs: GER:DB-Hum, WAY-A-II, WAY-SI | Grading: Letter or Credit/No Credit

LIFE 124: Counterstory in Literature and Education (CSRE 141E, EDUC 141/341)

Counterstory is a method developed in critical legal studies that emerges out of the broad "narrative turn" in the humanities and social science. This course explores the value of this turn, especially for marginalized communities, and the use of counterstory as analysis, critique, and self-expression. Using an interdisciplinary approach, we examine counterstory as it has developed in critical theory, critical pedagogy, and critical race theory literatures, and explore it as a framework for liberation, cultural work, and spiritual exploration.

Terms: Win | Units: 3 | UG Reqs: WAY-CE, WAY-ED | Grading: Letter or Credit/No Credit

LINGUIST 35: Minds and Machines (PHIL 99, PSYCH 35, SYMSYS 1)

(Formerly SYMSYS 100). An overview of the interdisciplinary study of cognition, information, communication, and language, with an emphasis on foundational issues: What are minds? What is computation? What are rationality and intelligence? Can we predict human behavior? Can computers be truly intelligent? How do people and technology interact, and how might they do so in the future? Lectures focus on how the methods of philosophy, mathematics, empirical research, and computational modeling are used to study minds and machines. Undergraduates considering a major in symbolic systems should take this course as early as possible in their program of study.

Terms: Win | Units: 4 | UG Reqs: GER:DB-SocSci, WAY-FR | Grading: Letter or Credit/No Credit

ME101: Visual Thinking

Lecture/lab. Visual thinking and language skills are developed and exercised in the context of solving design problems. Exercises for the mind's eye. Rapid visualization and prototyping with emphasis on fluent and flexible idea production. The relationship between visual thinking and the creative process. Limited enrollment, attendance at first class required.

Terms: Aut, Win, Spr | Units: 4 | UG Reqs: GER:DB-EngrAppSci, WAY-CE | Grading: Letter or Credit/No Credit

ME 302: The Future of the Automobile NOT GIVEN IN 2018-19

This quarter, the seminar will take a specific focus on "Vehicle Communication Systems", which connect vehicles to the outside world and with one another. Respective concepts include online media and services in the vehicle, vehicles communicating with a centralized traffic management infrastructure, and vehicles communicating among themselves to avoid collisions and improve traffic flow. This class consists in the first half of lectures by an industry expert and in the second half of group work when students will develop scenarios for vehicle communication systems. The goal of the course is to develop a technical understanding as well as an understanding for the interactions of technology, business, and society with a specific automotive focus.

MUSIC 8A: Rock, Sex, and Rebellion

Development of critical listening skills and musical parameters through genres in the history of rock music. Focus is on competing aesthetic tendencies and subcultural forces that shaped the music. Rock's significance in American culture, and the minority communities that have enriched rock's legacy as an expressively diverse form. Lectures, readings, listening, and video screenings. Attendance at all lectures is required. Terms: Spr | Units: 3 | UG Reqs: GER:DB-Hum, GER:EC-AmerCul, WAY-A-II, WAY-ED | Grading: Letter or Credit/No Credit

MUSIC 150P: The Changing World of Popular Music (ARTSINST 150)

This course will cover changes in the business, economics, and practices of the popular music industry. It will provide a brief historical overview of the industry and its business models. The majority of the course will focus on the industry as it works today and on forces that are causing it to change rapidly. The course will feature guest artists and executives with

current experience in the field, as well as project-based assignments designed to give students hands-on experience. Topics will include: Economics and business models of commercial music business, Technology and music production, Technology and music distribution, Technology and marketing, Leadership in the music industry: case studies, Managing creative projects, Copyright and legal issues. Attendance at first class required. Enrollment will be determined on the first day through a simple application process.

Terms: Spr | Units: 2 | Grading: Letter or Credit/No Credit

OB 110N: Savvy: Learning How to Communicate with Purpose

Our seminar is designed for students interested in improving their communication skills. Right now, you probably don't spend much time thinking about the way you communicate, nor are you likely, in the academic setting, to get much feedback on the messages you send. Yet the quality of your communication will have a large impact on your overall effectiveness in building relationships and getting things done, both in the university setting and later in your career. Each of the sessions in our seminar will help you appreciate the nature and complexity of communication and provide guidelines for both improving your communication style and recognizing the unique styles of others. In each class session, we'll consider a number of well-studied forms of interpersonal communication. And, we'll rely heavily on experiential learning to bring the concepts to life. For example, to better understand the dynamics of unstructured, spontaneous communication, we will participate in an improvisational theatre workshop, taught by one of the artists-in-residence at the Groundlings Theater in Los Angeles. To better understand persuasive communication tactics, we'll participate in role-play exercises, competitive games, and negotiation simulations. For each tactic, we'll talk about why it works, when it works best, and what its limitations might be. We'll discuss how you can put these approaches to work in order to support your goals. After taking this course, you will be better able to: (1) identify strategies for crafting effective communication in the form of everyday conversation, written work, and public presentations, (2) develop techniques for building strong, long-term relationships with your peers, and (3) become more persuasive in advancing an agenda, acquiring resources, or gaining support from others. These skills will be invaluable to you as you grow and develop here at Stanford and beyond.

Units: 3 | UG Reqs: WAY-SI | Grading: Letter (ABCD/NP)

OSPFLOR 11: Film, Food and the Italian Identity

Food in Italian cinema staged as an allegory of Italy's social, political and cultural milieu. Intersections between food, history and culture as they are reflected in and shaped by Italian cinema from the early 1900s until today. Topics include: farmer's tradition during Fascism; lack of food during WWII and its aftermath; the Economic Miracle; food and the Americanization of Italy; La Dolce Vita; the Italian family; ethnicity, globalization and the re-discovery of regional culinary identity in contemporary Italy. Impact of cinema in both reflecting and defining the relationship between food and culture.

Terms: Aut | Units: 4 | UG Reqs: GER:DB-Hum, GER:EC-GlobalCom, WAY-A-II, WAY-ED | Grading: Letter (ABCD/NP)

OSPFLOR 49: On-Screen Battles: Filmic Portrayals of Fascism and World War II

Structural and ideological attributes of narrative cinema, and theories of visual and cinematic representation. How film directors have translated history into stories, and war journals into visual images. Topics: the role of fascism in the development of Italian cinema and its phenomenology in film texts; cinema as a way of producing and reproducing constructions of history; film narratives as fictive metaphors of Italian cultural identity; film image, ideology, and politics of style. Terms: Win | Units: 5 | UG Reqs: GER:DB-Hum, WAY-A-II | Grading: Letter (ABCD/NP)

OSPFLOR 67: The Celluloid Gaze: Gender, Identity and Sexuality in Cinema

Film in the social construction of gender through the representation of the feminine, the female, and women. Female subjects, gaze, and identity through a historical, technical, and narrative frame. Emphasis is on gender, identity, and sexuality with references to feminist film theory from the early 70s to current methodologies based on semiotics, psychoanalysis, and cultural studies. Advantages and limitations of methods for textual analysis and the theories which inform them.

Terms: Spr | Units: 4 | UG Reqs: GER:DB-Hum, GER:EC-Gender, WAY-A-II, WAY-ED | Grading: Letter (ABCD/NP)

OSPPARIS 30: The Avant Garde in France through Literature, Art, and Theater

Multiple artistic trends and esthetic theories from Baudelaire to the Nouveau Roman, from the Surrealists to Oulipo, from the theater of cruelty to the theater of the absurd, from the Impressionists to Yves Klein. Interdisciplinary approach to reflect on the meaning of avant garde and modernity in general, and on the question of why revolutionary artists in France remained in search of institutional recognition, nonetheless.

Terms: Aut | Units: 4 | UG Reqs: GER:DB-Hum, WAY-A-II | Grading: Letter (ABCD/NP)

OSPSANTG 118X: Artistic Expression in Latin America

Elite, mass-media, and popular cultural changes in Chile under conditions of economic and political liberalization. The reception of cultural meanings from the center of the world social system (U.S., EU, and Japan), reformulation to respond to local conditions, and export in the shape of cultural artifacts. Innovative elements rooted in the regional and local culture. Terms: Sum | Units: 5 | UG Reqs: GER:DB-SocSci, GER:EC-GlobalCom, WAY-ED | Grading: Letter (ABCD/NP)

PHIL 99: Minds and Machines (LINGUIST 35, PHIL 99, PSYCH 35, SYMSYS 1)

(Formerly SYMSYS 100). An overview of the interdisciplinary study of cognition, information, communication, and language, with an emphasis on foundational issues: What are minds? What is computation? What are rationality and intelligence? Can we predict human behavior? Can computers be truly intelligent? How do people and technology interact, and how might they do so in the future? Lectures focus on how the methods of philosophy, mathematics, empirical research, and computational modeling are used to study minds and machines. Undergraduates considering a major in symbolic systems should take this course as early as possible in their program of study.

Terms: Win | Units: 4 | UG Reqs: GER:DB-SocSci, WAY-FR | Grading: Letter or Credit/No Credit

POLISCI 102: Politics and Public Policy (AMSTUD 123X, PUBLPOL 101/ 201)

American political institutions (the Presidency, Congress, and the Court) and political processes (the formation of political attitudes and voting) have for some time now been criticized as inadequate to the task of making modern public policy. Against the backdrop of American culture and political history we examine how public policy has been and is being made. We use theories from Political Science and Economics to assess the state of the American system and the policy making process. We use case studies and lectures to analyze contemporary issues including environmental policy, taxes and spending, gun control, economic growth and inequality and mobility. In some of these issue areas we use comparative data from other countries to see how the U.S. is doing relative to other countries. In addition to class room lecture and discussion, student groups are formed to analyze policy issues of relevance to them.

Terms: Win | Units: 4-5 | UG Reqs: GER:DB-SocSci, WAY-SI | Grading: Letter or Credit/No Credit

POLISCI 124A: THE AMERICAN WEST (AMSTUD 124A, ARTHIST 152, ENGLISH 124, HISTORY 151)

The American West is characterized by frontier mythology, vast distances, marked aridity, and unique political and economic characteristics. This course integrates several disciplinary perspectives into a comprehensive examination of Western North America: its history, physical geography, climate, literature, art, film, institutions, politics, demography, economy, and continuing policy challenges. Students examine themes fundamental to understanding the region: time, space, water, peoples, and boom and bust cycles. Terms: Spr | Units: 5 | UG Reqs: GER:DB-Hum, GER:EC-AmerCul, WAY-A-II, WAY-SI | Grading: Letter (ABCD/NP)

POLISCI 334: Philanthropy and Civil Society (EDUC 374, SOC 374)

Cross-listed with Law (LAW 781), Political Science (POLISCI 334) and Sociology (SOC 374). Associated with the Center for Philanthropy and Civil Society (PACS). Year-long workshop for doctoral students and advanced undergraduates writing senior theses on the nature of civil society or philanthropy. Focus is on pursuit of progressive research and writing contributing to the current scholarly knowledge of the nonprofit sector and philanthropy. Accomplished in a large part through peer review. Readings include recent scholarship in aforementioned fields. May be repeated for credit for a maximum of 9 units. Terms: Aut, Win, Spr | Units: 1-3 | Repeatable for credit | Grading: Satisfactory/No Credit

PSYCH 35: Minds and Machines (LINGUIST 35, PHIL 99, PSYCH 35, SYMSYS 1)

(Formerly SYMSYS 100). An overview of the interdisciplinary study of cognition, information, communication, and language, with an emphasis on foundational issues: What are minds? What is computation? What are rationality and intelligence? Can we predict human behavior? Can computers be truly intelligent? How do people and technology interact, and how might they do so in the future? Lectures focus on how the methods of philosophy, mathematics, empirical research, and computational modeling are used to study minds and machines. Undergraduates considering a major in symbolic systems should take this course as early as possible in their program of study.

Terms: Win | Units: 4 | UG Reqs: GER:DB-SocSci, WAY-FR | Grading: Letter or Credit/No Credit

PSYCH 75: Introduction to Cultural Psychology NOT GIVEN IN 2018-19

The cultural sources of diversity in thinking, emotion, motivation, self, personality, morality, development, and psychopathology.

PUBLPOL 101/ 201: Politics and Public Policy (AMSTUD 123X, POLISCI 102/123)

American political institutions (the Presidency, Congress, and the Court) and political processes (the formation of political attitudes and voting) have for some time now been criticized as inadequate to the task of making modern public policy. Against the backdrop of American culture and political history we examine how public policy has been and is being made. We use theories from Political Science and Economics to assess the state of the American system and the policy making process. We use case studies and lectures to analyze contemporary issues including environmental policy, taxes and spending, gun control, economic growth and inequality and mobility. In some of these issue areas we use comparative data from other countries to see how the U.S. is doing relative to other countries. In addition to class room lecture and discussion, student groups are formed to analyze policy issues of relevance to them. (This course has merged with Political Science 2.) Terms: Win | Units: 4-5 | UG Reqs: GER:DB-SocSci, WAY-SI | Grading: Letter or Credit/No Credit

PUBLPOL 104/204: Economic Policy Analysis (ECON 150)

The relationship between microeconomic analysis and public policy making. How economic policy analysis is done and why political leaders regard it as useful but not definitive in making policy decisions. Economic rationales for policy

interventions, methods of policy evaluation and the role of benefit-cost analysis, economic models of politics and their application to policy making, and the relationship of income distribution to policy choice. Theoretical foundations of policy making and analysis, and applications to program adoption and implementation. Prerequisites: ECON 50 and ECON 102B. Terms: Win | Units: 4-5 | UG Reqs: WAY-AQR | Grading: Letter or Credit/No Credit

SINY 116: Off the iPhone and Into the City: Creating a Photography Project

Learn components of photography projects and image making including content selection, intention, context, and audience. Talks by professional photographers; field trips to in the city. Two response papers about an exhibition, publication, or long-form web project during their time in New York.

Terms: Aut, Win | Units: 4 | Grading: Letter or Credit/No Credit

SINY 122: The Agile City

Examine the economic, cultural and environmental forces transforming the urban experience globally and understand how cities become agile to adapt to rapidly evolving urban challenges. This course would draw from case studies in New York and elsewhere, using guest experts and site visits or walking tours.

Terms: Aut | Units: 4 | UG Reqs: WAY-A-II, WAY-SI | Grading: Letter or Credit/No Credit

SINY 124: New York and the Art World NOT GIVEN IN 2018-19

In an influential essay of 1964 responding to the work of Andy Warhol and Jasper Johns, the philosopher Arthur Danto defined an "artworld" as "an atmosphere of artistic theory." More generally, the term art world has come to mean a social, cultural and economic milieu consisting of art professionals (artists, collectors, dealers, historians, educators and critics) and institutions (the media, museums, galleries, schools, auction houses and other markets, such as art fairs). Since the end of World War II and the migration of European artists associated with the School of Paris, New York has been considered the capital of the art world. This course considers the definitions and practices associated with the New York art world through readings in history and theory and extensive on-the-ground engagement with its pivotal figures and sites. Field trips to museums, galleries and other cultural institutions showcase the wider implications and professional aspects of current art making, as well as the exhibition, distribution and reception of contemporary art. Some background in art history is helpful but not required.

SINY 130: Disrupting the News: How Technology is Transforming the Media

Examine how technology has transformed the way news is produced, delivered and consumed from disruption in business models to changes in access. Students read works by leading media scholars, study user data from news organizations and meet key executives in New York City's digital-media market.

Terms: Win | Units: 4 | Grading: Letter or Credit/No Credit

SINY 132: Ingenious Entrepreneurship

Examine factors impacting entrepreneurship, including idea generation, writing a business plan, raising capital, developing products or services, the art of marketing and incorporating an entrepreneurial mindset into internships, coursework and future employment. An emphasis will be on media and marketing and leveraging the resources of a major city such as New York. Terms: Win | Units: 4 | Grading: Letter or Credit/No Credit

SOC 120/220: Interpersonal Relations NOT GIVEN IN 2018-19

Forming ties, developing norms, status, conformity, deviance, social exchange, power, and coalition formation; important traditions of research have developed from the basic theories of these processes. Emphasis is on understanding basic theories and drawing out their implications for change in a broad range of situations, families, work groups, and friendship groups.

SOC 148/248: Comparative Ethnic Conflict (CSRE 148) NOT GIVEN IN 2018-19

Causes and consequences of racial and ethnic conflict, including nationalist movements, ethnic genocide, civil war, ethnic separatism, politics, indigenous peoples' movements, and minority rights movements around the world.

SOC 374: Philanthropy and Civil Society (EDUC 374, POLISCI 334)

Cross-listed with Law (LAW 781), Political Science (POLISCI 334) and Sociology (SOC 374). Associated with the Center for Philanthropy and Civil Society (PACS). Year-long workshop for doctoral students and advanced undergraduates writing senior theses on the nature of civil society or philanthropy. Focus is on pursuit of progressive research and writing contributing to the current scholarly knowledge of the nonprofit sector and philanthropy. Accomplished in a large part through peer review. Readings include recent scholarship in aforementioned fields. May be repeated for credit for a maximum of 9 units. Terms: Aut, Win, Spr | Units: 1-3 | Repeatable for credit | Grading: Satisfactory/No Credit

STATS 101: Data Science 101

<http://web.stanford.edu/class/stats101/> . This course will provide a hands-on introduction to statistics and data science. Students will engage with the fundamental ideas in inferential and computational thinking. Each week, we will explore a

core topic comprising three lectures and two labs (a module), in which students will manipulate real-world data and learn about statistical and computational tools. Students will engage in statistical computing and visualization with current data analytic software (Jupyter, R). The objectives of this course are to have students (1) be able to connect data to underlying phenomena and to think critically about conclusions drawn from data analysis, and (2) be knowledgeable about programming abstractions so that they can later design their own computational inferential procedures. No programming or statistical background is assumed. Freshmen and sophomores interested in data science, computing and statistics are encouraged to attend. Open to graduates as well.

Terms: Aut, Spr, Sum | Units: 5 | UG Reqs: GER: DB-NatSci, WAY-AQR | Grading: Letter or Credit/No Credit

STS 181: Techno-metabolism: technology and society in the Anthropocene

In the Anthropocene epoch, humanity has become a geological force. As the sum of all technological systems and their human components, the technosphere metabolizes energy, materials, and information. Techno-metabolism's waste products- greenhouse gases, microplastics, nuclear waste, etc. - are transforming the biosphere and the geosphere, with radically different effects on disparate peoples and places. Scientists, historians, and others have proposed new ways to conceptualize techno-metabolism in order to reduce energy requirements and material waste. Meanwhile, "data exhaust" - the "waste" data generated by individual activity, from web searches to Facebook and Instagram - is increasingly "recycled" to detect patterns, trends, and individual preferences. In this project-centered course, students will seek creative ways to visualize, understand, and change the interplay of energy, materials, information, and waste.

Assignments include reading logs and a term-long group project. Terms: Aut | Units: 3-4 | Grading: Letter (ABCD/NP)

SYMSYS 1: Minds and Machines (LINGUIST 35, PHIL 99, PSYCH 35)

(Formerly SYMSYS 100). An overview of the interdisciplinary study of cognition, information, communication, and language, with an emphasis on foundational issues: What are minds? What is computation? What are rationality and intelligence? Can we predict human behavior? Can computers be truly intelligent? How do people and technology interact, and how might they do so in the future? Lectures focus on how the methods of philosophy, mathematics, empirical research, and computational modeling are used to study minds and machines. Undergraduates considering a major in symbolic systems should take this course as early as possible in their program of study.

Terms: Win | Units: 4 | UG Reqs: GER:DB-SocSci, WAY-FR | Grading: Letter or Credit/No Credit

SYMSYS 209: Battles Over Bits NOT GIVEN IN 2018-19

The changing nature of information in the Internet age and its relationship to human behavior. Philosophical assumptions underlying practices such as open source software development, file sharing, common carriage, and community wireless networks, contrasted with arguments for protecting private and commercial interests such as software patents, copy protection, copyright infringement lawsuits, and regulatory barriers. Theory and evidence from disciplines including psychology, economics, computer science, law, and political science. Prerequisite: PSYCH 40, 55, 70, or SYMSYS 202.

SYMSYS 210: Learning Facial Emotions: Art & Psychology NOT GIVEN IN 2018-19

Artistic and psychological learning approaches for emotion recognition from facial expressions. The advantages of learning by image-based microexpressions, subtle expressions, macro expressions, art drawing and actor mimicry when there are cognitive deficits due to conditions such as autism. Comparative analysis uses brain studies, learning theory, and human-computer interaction. Studio component conveys the artistic and psychological approaches. Prerequisites: PSYCH 1, SYMSYS 100 or consent of instructor. Go to www.stanford.edu/~dwilkins/Symsys210Enroll.doc to sign up for a Permission Number.

SYMSYS 211: Learning Facial Emotions: Art, Psychology, Human-Computer Interaction NOT GIVEN IN 2018-19

Learning to recognize facial emotions by drawing a live model versus the psychology method of using classified images of subtle and micro expressions. Dimensions of analysis include cognitive modeling and neuroscience. The design of human-computer interaction systems for people with cognitive deficits such as autism and Aspergers, which integrate the art and psychology approaches using methods such as robot heads, avatars, and facial recognition software.

Prerequisites: PSYCH 1 or consent of instructor.

TAPS 178C/278C: Writing a Full-Length Play

Instructor Young Jean Lee is a playwright and director who will have two plays premiering on Broadway in 2018-2019. This workshop will guide students through the process of writing a full-length play, and will focus on helping students to find their own voices. Students will be required to write every week and share their work with the class, completing a full-length first draft by the end of the term. This class will be geared towards generating new material, rather than on editing in response to critiques, which will be covered in a spring course, EDITING A FULL-LENGTH PLAY. Topics to be discussed: the relationship between naturalistic and experimental theater; writing about unfamiliar subjects; and writing what you are afraid to write. Students must contact the instructor at yjl@stanford.edu ASAP in order to obtain an application for the class, which will be due on December 1. Terms: Win | Units: 2-4 | UG Reqs: WAY-CE | Grading: Letter (ABCD/NP)

TAPS 253T: Virtual Realities: Art, Technology, Performance NOT GIVEN IN 2018-19

Contemporary virtual reality extends a long-standing quest to create a fully immersive, multisensory environment, a quest that may go back to the earliest cave paintings and includes such projects as cathedrals, operas, panoramas, theme parks, video games, and multimedia happenings. What is VR's relation to this long and varied history? What are the ethics, aesthetics, promises, and perils of this new medium? What is meant by immersion, interactivity, and presence, and how is VR changing those terms? How might VR relate to contemporary immersive theater and installation art, as well as to the mediatization of society more generally?

END
