

Winter 2024 Course Descriptions

Please review the course descriptions below. You should select your <u>top five</u> classes. The course selection survey will open <u>Tuesday</u>, <u>October 24th at 11:50 AM</u> and closes <u>Monday</u>, <u>October 30th at 8:00 AM</u>. Course assignments will be sent via UC Davis email on Wednesday, November 1st.

- These courses are restricted to honors students and can only be accessed using a **Course Registration Number (CRN)** distributed by UHP. You cannot search for them in Schedule Builder.
- Each honors student must complete three UHP courses during the 2023-2024 academic year (one per quarter). Taking a second course during Winter 2024 does not waive another quarter's UHP course requirement unless approved by UHP.
- All the Honors courses are capped at 25 students each, except for DES 128A, ECH 1, IST 8A
 (Women in STEMM), MAT 17B, MAT 21C, and UWP 110 which are capped at 13, 24, 20, 30, 30, and 23, respectively.
- ECH 1 is part of a large general-population lecture; however, the lab section is taught by Professors Kuhl and Ristenpart instead of a TA and includes only UHP students.
- Honors courses must be taken for a letter grade and earn a minimum grade of C-; courses changed to P/NP grading will not count toward UHP requirements.
- All prerequisites listed in red text will not be waived for honors students. All courses with WE General Education credits require satisfaction of ELWR.

Note: Department course offering details--classrooms, days, and times—are subject to change. Schedule Builder provides the most accurate information to date.

COURSE OFFERINGS

TITLE	TERM	SUBJ	CRSE	SEC	CREDITS
Art, Architecture, and Human Rights	202401	АНІ	120A	0U2	4.000

INSTRUCTOR(S)TYPEDAYSTIMEBUILDROOMWatenpaugh, HeghnarLectureMW11:00 AM – 12:50 PMSHREM1001

Description: Lecture/Discussion – 4 hour(s). *Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR).* Study of human rights as they relate to art, architecture, and cultural heritage. Examines museums, art collections, and cultural-heritage management, their relation to the cultural prerogatives of communities and indigenous groups, and protection of cultural heritage during war and conflict. GE credit: AH or SS; DD; VL; WC; WE.

TITLETERMSUBJCRSESECCREDITSAmerican Neorealism: "The202401CDM1894.000

Rough Imperfect"

INSTRUCTOR(S)TYPEDAYSTIMEBUILDROOMSmith, AndrewLectureT3:10 PM - 6:00 PMCRUESS1107

Description:

Lecture/Discussion – 3 hour(s); Discussion/Laboratory – 3 hour(s). *Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR)*. Special topics in cinema & digital media. GE credit: AH, VL, WE.

The profound influence of Italian Neorealism on the postwar cinemas of Europe, Latin America, Africa and Asia is standard film history. In a nutshell, Rossellini (*Rome, Open City*), De Sica (*Bicycle Thieves*), Visconti (*La Terra Trema*) and others transformed Italy's postwar deprivations into production virtues as they sought to directly represent the social reality of their time. Their use of nonprofessional actors, location shooting, and open-ended story and visual structures formed a new cinematic language that Millicent Marcus described as "una nuova poesia morale," a new moral poetry.

This course will examine a lineage from the Italian Neorealists to their American counterparts, focusing on a flourishing of independent American cinema from the late 1950's through to the present day, a thread underscoring the importance of cinematic form in portraits of a complex world, and the influence of the neorealists in allowing compelling cinematic voices to be heard outside the Hollywood Studio system.

Particularly focused on work from underrepresented communities and makers, and alternative perspectives, we will track historical tributaries into the contemporary moment, exploring neorealist impulses in the filmmakers of today— and the next generation. By way of film analysis and through the context of film history, as well as touching on tenants of realist film theory, we will examine the social, cultural and political contexts of neorealism as we develop our skills to view films critically; develop interpretations of influences and epiphanies in style, form and content out of these viewings and readings; articulate this analysis in well-constructed and persuasive essays and/or in a collective film work that inherits tendencies of this tradition.

TITLE Major Works of the A World	ncient	TERM 202401	SUBJ COM	CRSE 001	SEC U01	CREDITS 4.000	
INSTRUCTOR(S) Parrish, Timothy	TYPE Lecture	DAYS e TR	TIME	– 11:50 AM	BUILD STORER	ROOM 01344	

Description: Lecture/Discussion – 4 hour(s). *Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR).* Introduction, through class discussion and frequent written assignments, to some of the major works of the ancient world (up to 5th century CE) such as The Odyssey, the Bible, Augustine's Confessions, and works by Plato and Confucius. Examined genres include religious texts, the epic, philosophy, drama, poetry. GE credit: AH, WC, WE.

TITLE		TERM	SUBJ	CRSE	SEC	CREDITS
Bio-Design Theory& BioDesign Challenge		202401	DES	128A	001	4.000
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD	ROOM
Cogdell, Christina	Lecture	W	9:00 AM -	11:50 AM	CRUESS	220

Description: Lecture/Discussion – 3 hour(s). Foundational principles of Bio design, with examples in textiles, fashion, graphics, lighting, products, and architecture. Team-based experience in Bio design intervention; first steps in a mini-entrepreneurial start-up experience. GE credit: AH.

In this unique pair of courses over two quarters – Winter and DES 128B in Spring 2024 – students will work closely with Design and faculty from other colleges in a hands-on, cross-disciplinary course to produce and showcase innovative new products that are functional, elegant, and sustainable. This is a two-quarter commitment, and students are required to enroll in both W24 DES 128A and SP24 DES 128B.

The BioDesign curriculum is based off the <u>BioDesign Challenge competition rules</u>. In the first quarter, interdisciplinary teams of undergraduates learn basic principles of BioDesign and develop their project ideas for a proposal, including an introduction to the lab work they'll need to get going in the next quarter. Then students put their approved plans in motion in the second quarter to create the novel designs coupled with promotional materials such as videos, websites, and product pitches. The series culminates in a local competition judged by UC Davis and visiting faculty as well community experts such as designers and entrepreneurs. Four years ago, UC Davis BioDesign students produced completely innovative <u>biodegradable zero-waste bandages</u> and a variety of other designs merging art and science.

The UCD teams were specifically challenged to use agricultural waste products, even tricking Kombucha SCOBY to produce new biodegradable polymers that can be incorporated into a whole host of applications.

TITLE Design of Coffee	TERM 20240:	1	SUBJ ECH	CRSE 001		SEC AU6	CREDITS 3.000	
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD		ROOM	
Kuhl, Tonya	Lecture	M	3:10 PM - 4:00	PM	MDSC	С	180	
Ristenpart, Bill	Laboratory	Т	10:00 AM - 11:5	MA 0	EVERSI	J	126	

Description:

Lectures – 1 hour(s); Laboratory – 2 hour(s); Project – 1 hour(s). Non-mathematical introduction to how chemical engineers think, illustrated by elucidation of the process of roasting and brewing coffee. Qualitative overview of the basic principles of engineering analysis and design. Corresponding experiments testing design choices on the sensory qualities of coffee. *Not open for credit to students who have completed ECH 001Y, ECM 001, ECM 005, or ECH 005.* GE credit: SE, SL, and VL.

Note: This course is a large 1-hour general population lecture, but Professors Tonya Kuhl and Bill Ristenpart will be teaching the small 24-person 2-hour lab.

TITLE		TERM	SUBJ	CRSE	9	SEC	CREDITS
Intermediate Macro	Theory	202401	ECN	101	(0U1	4.000
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD		ROOM
Geromichalos,	Lectur	e TR	1:40 PM -	- 3:30 PM	TLC		03213

Athanasios

Description: Lecture – 3 hour(s), Discussion –1 hour(s). *Prerequisite (s):* (Completed course with a C- or better) ECN 001A or ECN 001AV; ECN 001B or ECN 001BV; MAT 016A-B, MAT 017A-B, or MAT 021A-B. Theory of income, employment and prices under static and dynamic conditions, and long-term growth. GE credit: None.

Macroeconomics is the study of aggregate economic variables, the economy. This contrasts with microeconomics, the study of the economic behavior of individual consumers, firms, and industries. These two branches, however, are much closer than their standard separation into different courses would lead you to believe. Macroeconomists look at the individual behavior- the so-called "microfoundations"- in creating their theories of aggregate economic activity. In this course, we will study how economists model the relationships between aggregate economic variables and examine how various fiscal and monetary policies can affect the results. The main goal of this class will be to improve your ability to apply economic models to analyze and understand real-world events (e.g., theory of income, employment and prices under static and dynamic conditions, and long-term growth).

TITLE A Cultural History of Scriction	ience	TERM 202401	Ĺ	SUBJ HIS	CRSE 147A		SEC 0U1	CREDITS 4.000	
INSTRUCTOR(S) Saler, Michael	TYPE Lecture	9	DAYS TR	TIME 1:40 PM – 3:0	00 PM	BUILD GROVE		ROOM 1283	

Description: Lecture – 3 hour(s); Term Paper. *Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR).* GE credit: AH or SS; WC, WE.

Saler's course is an historical survey of the origin and development of "science fiction," both as a genre and a set of myths for a modern age conflicted about its immersion in science, technology, reason, and secularism. We will discuss the genre in terms of its historical contexts, major authors, seminal publications, key themes, and diverse styles, and analyze how it has developed during the past century.

Among the issues we will address are: Can we find a common way to define such a protean body of works and themes, which include escapist "planetary romance"; "hard SF" (emphasizing the natural sciences); "soft SF" (emphasizing the social sciences); "New Wave SF" (employing modernist literary techniques and concerns), Utopian and Dystopian SF? Is there such a thing as "science fiction"? Why has science fiction been deemed "escapist" on the one hand, and politically engaged on the other? Might it have a particular social function, in contrast to other genres (e.g., westerns, romances, mysteries)?

Science fiction has often been opposed to literary realism, defined instead as a subset of fantasy. But might we consider contemporary science fiction as a form of realism, given the enormous pace of scientific and technological change and its effects on our daily lives, as well as the pervasive nature of science fiction ideas and imagery in modern culture? Could we call our everyday perceptions of the world a form of "science-fictionality"? (Might the current vogue for fantasy in the media reflect a reaction against science fiction, which has become so omnipresent in our daily lives that it no longer elicits the "sense of wonder" that characterized it in the first half of the twentieth century?)

Finally, we will trace how the genre began in the 1920s and 1930s as a relatively homogeneous form, created largely (but not exclusively) in the West by white men (many of them teenage fans) and has since become a truly diverse and global phenomenon. We will also follow how it went from being condemned by critics as juvenile and unsophisticated to being acclaimed as literature, produced by Nobel prize winners and fan fiction writers alike.

TITLE History of Sexuality in America	TERM 20240		SUBJ HIS	CRSE 184		SEC 0U1	CREDITS 4.000	
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD		ROOM	
Materson, Lisa	Lecture	TR	1:40 PM - 3:00	0 PM	BAINER		1134	

Description: Lecture – 3 hour(s); Extensive Writing. *Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR).* History of sexuality in America from pre-European through the late-20th century. Topics include birth control, marriage, sexual violence, prostitution, inter-racial relationships, heterosexuality and homosexuality, the feminist, gay, and lesbian liberation movements, AIDS, commercialization of sexuality. GE credit: AH or SS; ACGH, DD, WE.

This course explores the diverse sexual systems that have populated North America and the United States from the fifteenth century to the present. Students will learn about the relationship between these sexual systems and the histories of colonialism, enslavement, nation-building, and capitalism. Topics include the histories of procreative and recreational sex, battles over reproductive rights and justice, the construction of heterosexuality and homosexuality, transgender representations and identities, and the roles of sexual violence and knowledge in creating racial, gender, and class categories.

TITLE An Honors Student Experience	TERM 202401	SUBJ HNR	CRSE 190X	SEC 001	CREDITS 1.000
INSTRUCTOR(S)	ТҮРЕ	DAYS	TIME	BUILD	ROOM
Stephensen, Kate Andrup	Lecture	Т	12:10 PM - 1:00 PM	EDWF/	AC 02016

Description:

Discussion – 1 hour(s). May be repeated for credit. GE Credit: None.

According to the UHP Mission, "UHP facilitates student learning opportunities to amplify experiential knowledge and distinct histories; engage discourse and self-awareness; and reframe problems and solutions for a more equitable and just society." Through a collaborative experience supported by the UHP Director, students in this course will engage in a Socratic Seminar style

discussions on topics from fostering "Inclusive Excellence" to Freedom of Speech on college campuses, to best practices to assess student learning. Collectively the students will seek to determine how the UC Davis Honors Program experience compares to regional and national peer institutions in addition to "high impact best practices" set by the AAC&U and the NCHC.

TITLE Women in STEMM	TERM 20240	1	SUBJ IST	CRSE 8A		SEC 0U1	CREDITS 4.000	
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD		ROOM	
Bauman, Melissa	Lecture	TR	10:00 AM – 11	:50 AM	GROVE		1360	

Description: Lecture -3 hour(s), Discussion -1 hour(s). Group study of a special topic in natural sciences and mathematics. Varies with topic offered. *May be repeated for credit*. GE credit: SE, SL.

Although the absolute number of women earning STEMM (science, technology, engineering, mathematics, and medicine) has increased over time, women continue to be progressively under-represented as they advance through the career pipeline. This course is designed to explore structural, cultural, and institutional patterns of bias, discrimination, and inequity that contribute to the underrepresentation of women in STEMM careers. This discussion-based course will provide a brief overview of the history of women in science and medicine, highlight their contributions to various fields, and examine current career obstacles, allowing students to think critically about intersectionality, privilege, and disparity in the STEMM fields. The class structure will include discussion of current events, group presentations, reading primary research papers, and short (1-2 page) written assignments. Students will also have the opportunity to learn more about STEMM careers through small group interactions with guest lecturers. Students will design and present an intervention for their final group project to increase STEMM participation of women. The final project will include a written proposal to quantitatively evaluate the success of their intervention by applying the scientific method to gather and analyze data and make conclusions based on hypothetical outcomes.

TITLE Hypothesis Testing with Bird Song	h	TERM 202401	L	SUBJ IST	CRSE 8A		SEC 0U2	CREDITS 4.000	
INSTRUCTOR(S) Coombs-Hahn, Thomas	TYPE Lecture	9	DAYS W	TIME 2:10 PM – 5:00	0 PM	BUILD YOUNG	ì	ROOM 192	

Description: Lecture -3 hour(s); Discussion -1 hour(s). Group study of a special topic in natural sciences and mathematics. Varies with topic offered. *May be repeated for credit*. GE credit: SE, SL.

Many major discoveries in the fields of animal behavior, behavioral ecology, evolution, and neuroscience have been based on studies of bird vocalizations. With the recent advent of publicly available repositories of high-quality audio recordings of wild bird vocalizations, it is now possible to evaluate some long-standing assumptions and test hypotheses about bird vocal behavior using existing samples. Key questions in this research area concern the mechanisms of vocal development (whether

vocalizations are learned or innate), the evolution of developmental mechanisms (when the ability to modify vocal behavior through learning first appeared, and how many times it has evolved), and whether there are widespread "limits to vocal performance" that constrain vocalizations to be honest indicators of individual quality. In this course we will evaluate these and other questions using publicly available audio recordings from Xeno-Canto and free Raven sound analysis software.

The course will begin with a few lectures introducing the broad array of biological questions that have been (or could yet be) examined in the context of bird vocalizations. The purpose of this will be to give students ideas for problems they can explore further; students will not be handed pre-packaged projects and study plans. The next part of the course will involve forming teams of 2-4 students who share interests in particular topics. Those teams will then each identify a primary research question and a set of alternative hypotheses that they plan to investigate using audio recordings. They will then outline sets of testable predictions to evaluate their hypotheses. Finally, the students will formulate and carry out a plan to test their predictions by collecting and analyzing data from recordings they download from Xeno-Canto. A fundamental goal of the course will be to give students the opportunity to explore, and participate deeply in, the process of formulating scientific questions, hypotheses, and predictions, and with collecting and analyzing acoustic data. In addition to receiving feedback from their peers and instructor, each team will be assigned a primary graduate student mentor to guide them in developing their questions and research projects.

TITLE Environment & Cancer	TERM 20240	1	SUBJ IST	CRSE 8A		SEC 0U3	CREDITS 4.00
INSTRUCTOR(S) Chen, Xinbin Zhang, Jin	TYPE Lecture	DAYS MR	TIME 3:10 PM – 5:00	PM	BUILD TUPPE	R	ROOM 2411

Description: Lecture -3 hour(s), Discussion -1 hour(s). Group study of a special topic in natural sciences and mathematics. Varies with topic offered. *May be repeated for credit*. GE credit: SE, SL.

Cancer is a genetic disease caused by changes to genes that lead to uncontrolled cell growth and spread of cells to other parts of body. Some of these genetic and epigenetic changes occur naturally when DNA is replicated during the process of cell division. But others are the result of environmental exposures that damage DNA or alter the gene expression patten, such as tobacco smoke. This "Environment and Cancer" course is designed to provide an overview about the link between environment and cancer and to discuss new frontiers of cancer research and biomedical sciences. Topics will include an introduction of cancer, man-made and natural carcinogens, and the underlying mechanisms of cancer development. Through class lectures and discussions, student will develop a critical skill in reading, comprehension, and communication. Students will also be able to develop a skill to discuss and/or explain the implication of scientific discoveries to lay audiences. At the end of the course, students will offer an opportunity to shadow a graduate student mentor as they work in the laboratory and then carry out cutting-edge cancer research for a student who plans to pursue a career in medicine, veterinary medicine, and/or biomedical research.

TITLE Calculus for Biology & Medicine	TERM 20240:	1	MAT 17B	SEC 0U1	CREDITS 4.000
INSTRUCTOR(S) Goldsmith, Edward	TYPE	DAYS	TIME	BUILD	ROOM
	Lecture	MWF	10:00 AM – 10:50 AM	WELLMN	3
	Discussion	R	5:10 PM – 6:00 PM	HART	1120

Description: Lecture – 3 hour(s); Discussion – 1 hour(s). *Prerequisite(s): (C- or better) MAT 016A OR MAT 017A; MAT 021A OR MAT 021AH.* Introduction to integral calculus and elementary differential equations via applications to biology and medicine. Fundamental theorem of calculus, techniques of integration including integral tables and numerical methods, improper integrals, elementary first order differential equations, applications in biology and medicine. *Not open for credit to students who have completed MAT 016C, MAT 021B, OR MAT 021C; only 2 units of credit for students who have completed MAT 016B.* GE credit: SE, QL, and SL.

TITLE Calculus	TERM 20240	1	SUBJ MAT	CRSE 21C		SEC 0U1	CREDITS 4.000
INSTRUCTOR(S) Jacob, Cooper	TYPE Lecture Discussion	DAYS MWF T	TIME 10:00 AM – 10 6:10 PM – 7:00		BUILD BAINER OLSON	=	ROOM 1060 147

Description: Lecture – 3 hour(s); Discussion – 1 hour(s). *Prerequisite(s): (C- or better) MAT 016C, MAT 017C, MAT 021B, MAT 021BH, or MAT 017B.* Continuation of MAT 021B. Sequences, series, tests for convergence, Taylor expansions. Vector algebra, vector calculus, scalar and vector fields. Partial derivatives, total differentials. Applications to maximum and minimum problems in two or more variables. Applications to physical systems. GE credit: SE, QL.

TITLE The Human Brain & Dis	sease	TERM 202401	SUBJ NPB	CRSE 12	SEC 001	CREDITS 3.000	
INSTRUCTOR(S) Fioravante, Diasynou	TYPE Lecture	DAYS MW	TIME 5:10 PM -	- 6:30 PM	BUILD BAINER	ROOM 1130	

Description:

Lecture—3 hour(s). Study's normal function and diseases of the human brain and nervous system. Diseases discussed include Parkinson's, Alzheimer's, leprosy, amnesia, and schizophrenia; intended for non-science majors. *Not open for credit for students who have completed NPB 100, NPB 101, NPB 112, or PSC 121.* GE credit: SE, SL.

TITLE TERM SUBJ CRSE SEC CREDITS

Social Problems 202401 SOC 3 0U1 4.000

INSTRUCTOR(S)TYPEDAYSTIMEBUILDROOMMudge, StephanieLectureTR10:00 AM - 11:50 AMSTORER1342

Description: Lecture -3 hour(s); Discussion -1 hour(s). General sociological consideration of contemporary social problems in relation to sociocultural change and programs for improvement. GE credit: SS, ACGH, DD.

The course I propose for Winter 2024 centers on two social problems in the United States: housing insecurity and environmental pollution. Touchstone readings will consist of two engaging, well-researched, award-winning books--Matthew Desmond's Eviction (2016) and Arlie Hochschild's Strangers in Their Own Land (2016). Ethnographic books will be supplemented by current research by these and other authors, plus lecture materials that (a) provide an introduction to orienting concepts in the study of social problems; (b) trace the history of housing and pollution, and the politics thereof, in the US; (c) situate housing insecurity and pollution in the larger context of American economic, racial/ethnic, gender, and intergenerational inequality; and (d) review the history and current state of relevant law, legislation, and regulatory agencies, with a focus on the federal government and California.

A second element of the course is a carefully curated selection of weekly documentary films, using the UC Davis subscription to Kanopy (a film repository that works much like Netflix). Documentary films are closely linked to reading materials and lectures and are excellent supplements for a social problems course because they help students develop a better sense of the real-world context and complex dynamics of social problems. This cultivates students' ability to think about contemporary public concerns in a holistic way--that is, not as isolated events or "variables," or as black-and-white matters of right versus wrong, but as complex, historical institutions shaping the lives of people and communities in time and place. This kind of ability to think holistically, historically, and institutionally is especially important for students who are interested in pursuing careers in politics, advocacy, government, law, public health/medicine, and/or public service.

A third element of the course will be one or two invited speakers who work in the California legislature, at another UC campus (perhaps the UC Berkeley school of public policy), for advocacy or non-profit organizations, and/or a Sacramento-based think tank who have expertise on the course's two featured issues (housing and pollution). Speakers will be invited to share with the class their insights on the complexities of research, effective advocacy, community engagement, and policymaking.

The main assignments for the course will be:

- (a) careful reading of assigned materials each week
- (b) viewing of / detailed notetaking on weekly documentaries, via Kanopy
- (c) student discussion leadership at least once during the quarter (or twice, depending on enrollment)
- (d) weekly memos in which students synthesize what they've learned from readings, lectures, and films
- (e) a final project consisting of two "policy memoranda." Each memorandum will formulate and defend, using course materials, one policy recommendation for each social problem (housing insecurity and pollution). Students will be given the option of supplementing their policy memoranda with additional research if students wish to do so.

TITLE TERM SUBJ CRSE SEC CREDITS

Social Conflict 202401 SOC 157 0U1 4.000

INSTRUCTOR(S) TYPE DAYS TIME BUILD ROOM

TR

Description:

Teff-Seker, Yael

Lecture

Lecture -3 hour(s); Discussion -1 hour(s). Analysis of the causes, dynamics, and regulation of social conflict within and between various kinds of social groupings with particular reference to nonviolent methods of waging and regulating conflict. GE credit: SS.

3:10 PM - 5:00 PM

SOCSCI

1291

This course will focus on how social norms, orders, and perceptions create, exacerbate, contain, or resolve conflict between groups. The course introduces inter-group and social conflict theories and applies them to cases in the Middle East, the US, and beyond. It focuses on topics from the fields of sociology, social psychology, and political sciences, and sub-fields such as game theory, alternative dispute resolution (ADR), and sustainability studies. The students will discuss issues of group identity, group relations, inter-group tensions, and conflict, and apply these theories and models to real-life cases. The course will bring case studies from around the world, including the US and the Americas, East Asia, Sub-Saharan Africa, Northern Africa, East Asia, and the Middle East.

The course will first focus on social conflict theories and critical theories of race, gender, and class, including theories from the field of sociology, cultural studies, and social psychology, and will continue with a focus on practical solutions relating to inter-group contact, conflict resolution, reduction, and prevention, as well as inter-group cooperation. Students will engage in open and critical respectful and evidence-based - discussion, as well as their own analysis of inter-group tensions, culminating in an independent (yet guided) study of a specific case of their choosing for their final project. In addition to lectures, classes will include videos, discussions, group exercises, active-learning opportunities, and in-class writing workshops.

TITLE Elementary Statistics	TERM 202403	L	SUBJ STA	CRSE 13	SEC 0U1	CREDITS 4.000	
INSTRUCTOR(S) Drake, Christiana	TYPE Lecture	DAYS MW	TIME 12:10 PM – 2	:00 PM	BUILD VEIMYR	ROOM 116	

Description:

Lecture – 3 hour(s), Discussion – 1 hour(s). *Prerequisite(s): Two years of high school algebra or Mathematics D.* Descriptive statistics; basic probability concepts; binomial, normal, Student's t, and chisquare distributions. Hypothesis testing and confidence intervals for one and two means and proportions. Regression. *Not open for credit for students who have completed STA 013V, or higher.* GE credit: SE, QL.

TITLE	TERM	SUBJ	CRSE	<mark>SEC</mark>	CREDITS
Adventures in Data Science:	202401	STS	115		4.0
Date Sense & Exploration –					
Critical Storytelling with Analys	sis				

INSTRUCTOR(S)	TYPE	DAYS	TIME	BUILD	ROOM
Stahmer, Carl	Lecture	T	3:10 PM - 4:00 PM	SHIELDS	360
Reynolds, Pamela		R	1:10 - 4:00 PM		

Description:

Discussion/Laboratory – 1 hour. Data science and the communication of data insights through critical analysis and storytelling. Introduction to network architecture, file system and command line basics, version control, data structures and types, webscraping, data types, and basic programming skills the R computing environment for data exploration, cleaning, analysis, and visualization. Attention to the historical and social contexts of data analysis emphasizing narrative. GE credit: OL.

This is the first course in a challenging two-quarter series. The first course of the series, offered in Winter 2024, is classroom-based instruction where students acquire the core skills and knowledge necessary to conduct data-driven research using the R programming language. No previous experience with computer science, data science, or statistics is required. It is an expectation that students who successfully complete the first quarter of the series with a final grade of B or better will move on to the second course of the series offered in Spring 2024. The second course is a practicum-based learning opportunity in which students will be embedded into one of several interdisciplinary research teams to solve active research problems with faculty and researchers from across UC Davis. During the second quarter students will work closely with the faculty Principal Investigators ("clients"), Graduate Student mentors, and staff research data scientists. Combined, the two-quarter honors/elective series introduces students to the basics of computer programming and data analysis using the R programming language and provides hands-on exposure to the core skills needed to work in interdisciplinary, teamscience settings. This program is designed to give students pursuing majors that are not within the data sciences the knowledge and skills to succeed in today's interdisciplinary, data-driven workforce.

TITLE Genres in Professional Write Proposal Writing	TERM ting: 202403	L	SUBJ UWP	CRSE 110	SEC 001	CREDITS 4.000	
INSTRUCTOR(S) TY Macarthur, Marit Le	PE cture	DAYS MW	TIME 4:40 PM – 6:00	PM	BUILD SCC	ROOM 2103	

Description:

Lecture – 3 hour(s), Discussion – 1 hour(s). *Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR)*. Instruction in the elements and practices of professional writing in specialized genres. GE Credit: AH, WE.

This course introduces students to strategies for composing effective proposals. Students learn to identify a need, target an appropriate funding source, and persuasively argue the merits of the proposed solution, whether to secure funding or procure a contract. The course focuses on writing a proposal that meets all the funder's requirements and presents a well-justified narrative, budget, and timeline. Students will learn to identify the rhetorical basis of proposals and to differentiate between solicited and unsolicited proposals for various contexts, such as nonprofit and for profit, academic and private. They will learn how to define the problem or area of opportunity for which support is being sought, research solutions, and solicit buy-in from stakeholders. They will learn to identify sources of

funding for grant proposals, to understand Requests for Proposals, and to analyze the charge of the funding sources, assess the proposal requirements, and understand the role of the Grant Program Officer. They learn how the review process works, what the common elements of proposals are, and develop essential proposal writing skills, including formatting, editing, and working with multiple authors.

NOTE: This course may be counted toward the Professional Writing Minor.

TITLE	1	TERM		SUBJ	CRSE		SEC	CREDITS	
Indian Spices, Color, a Cuisine	ind	202401		IST	8B	(0U2	4.000	
INSTRUCTOR(S)	TYPE	[DAYS	TIME		BUILD		ROOM	
Shagufta Fatema	Lecture		TR	12:10 PM - 2:0	0 PM	Olson Ha	all	53 A	

Description:

Lecture – 3 hour(s); Discussion – 1 hour(s). Group study of a special topic in humanities. Varies with topic offered. May be repeated for credit. GE credit: AH.

The culture of India is one of the most unique and diverse. It is cultivated from historic traditions, handicrafts, art, food, languages and more. This seminar class will explore three of the most important aspects of the Indian culture—food, spices, and vibrant colors associated with traditional customs such as Rangoli and henna. The classes will be voicing the value of each of these aspects and exploring how these were ancient assets of India. It will highlight the hidden importance of the spices and herbs which are used in our day-to-day life. Indian herbs and spices are the major ingredients of the cuisines, loaded with lists of powerful health benefits and alternative medicine to common ailments. Learning the magic of spices and herbs will enhance the understanding of students and it may be an addition to those who are thinking of a career in medicine. At the time of Covid-19 the pandemic, the knowledge spices have become essential for making immunity booster drinks as well. When learning about the vibrant colors and their importance in the culture of India, students will learn about traditions such as 'Rangoli,' an ancient piece of art where powdered color, colored rice, flowers, and other ingredients are used to decorate the entrance of the houses. Students will also learn about Indian cuisine. Not only will students learn about the use of these three aspects within the Indian culture, but they will gain practical knowledge during the class. It will be learning an ancient art as well as getting to know the rich culture of India. The last section of the seminar will be interesting as popular Indian cuisine will be learnt and shared by the instructor. The instructor will be using audio-visual aids to make the class communicative.

TITLE Pollinator Health & Eco With Special Focus on F	.	TERM 202401 gbirds	SUBJ SAS	CRSE 5		SEC	CREDITS 4.0
INSTRUCTOR(S) Diane Ullman Lisa Tell	TYPE Lecture Lab	DAYS W	5 TIME 1:10 PM – 2 2:10 PM – 5		BUILD TBD		ROOM TBD

Description:

*Students in this course will register for both SAS 5 (3 units) and SAS 90X (1 unit) for a total of 4 units of credit.

SAS 5: Lecture/Discussion – Highlights a current issue and/or controversy found in contemporary society and looks at how this problem impacts and is affected by the physical, social, and biological sciences. Topics vary. May be repeated up to 2 time(s). GE credit: SE, SS.

SAS 90X: Lab – Examination of a special topic in Science & Society through shared readings, discussions, written assignments, or special activities such as fieldwork, laboratory work, etc. May be repeated for credit. GE credit: None.

Pollinators encompass a diverse group of animals that provide important ecosystem services. This seminar will explore the hummingbird species of California, what ecosystem services hummingbirds provide, the important factors that help hummingbirds be successful and produce offspring, and how hummingbirds are being studied in science. In addition, discussions about the visual symbolic message of the hummingbird in different Latin American countries researching cultures, artifacts and visual historic representation will occur. Students will learn how to research ideas and apply their own concept and designs to a symbol that is representative of the hummingbird. They will learn the basic design principles that can be applied to creation of visual narrative. The design can be hand drawn, digitally, technically draw or abstract, still maintaining the core message. Students will be guided through the design process with critiques at each step of the process, and continued class discussions on the meaning of their design and research leading up to their concept. Their final project will be rendered in ceramics, and they will learn to silk screen their designs onto ceramic tiles and collaborate in combining their work into a mural. The goal of this course is to provide students with an overview of scientific studies evaluating challenges that hummingbirds are facing in an ever-changing world in addition to understanding and expressing the symbolism of these majestic birds using basic principles of visual narrative.