

# Spring 2023 Course Descriptions

Please review the course descriptions below. You should select your <u>top five</u> classes. The course selection survey will open <u>Wednesday</u>, <u>January 25 at 11:50 AM</u> and closes <u>Monday</u>, <u>January 30 at 8:00</u> <u>AM</u>. Course assignments will be sent via UC Davis email on Wednesday, February 1.

- 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 2022-2023 academic year (one per quarter). Taking a second course during Spring 2023 does not waive another quarter's UHP course requirement unless approved by UHP.
- All of the Honors courses are capped at 25 students each, except for DES 128B, ECH 1, MAT 17C, MAT 21D, NAS 34, and SOC 2 which are capped at 13, 24, 30, 30, 15, and 20 respectively.
- CHI 10 is part of a large general-population lecture; however, the discussion section is taught by Professor Marquez instead of a TA and includes only UHP students.
- 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
American Lives Through	202303	AMS	1C	0U1	4.000
Autobiography					

INSTRUCTOR(S)	TYPE	DAYS	TIME	BUILD	ROOM
Arapoglou, Eleftheria	Lecture	TR	1:40 PM - 3:00 PM	WELLMN	109

#### **Description:**

Lecture – 3 hour(s); Discussion – 1 hour(s). Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR). American culture as understood through the individual life stories told by Americans, with attention to the roles of gender, race, ethnicity, social class, and sexual orientation in the individual's life course. GE credit: AH or SS, ACGH, DD, WE.

TITLE	TERM	SUBJ	CRSE	SEC	CREDITS
Re-Imagining California:	202303	AMS	101A	0U1	4.000

Creative Social Movements in

Times of Crisis

INSTRUCTOR(S)	TYPE	DAYS	TIME	BUILD	ROOM
Kohl, Erica	Lecture	W	1:10 PM - 4:00 PM	WELLMN	207

# **Description:**

Seminar – 3 hour(s). Intensive reading, writing, and special projects. Interdisciplinary group study of special topics in American Culture Studies, designed for non-majors as well as majors. GE credit: None.

This seminar compares and contrasts social movements from the 1960s and today that move beyond protest to imagine, design, and enact new ways of living, working, and caring for one another towards a more just and equitable future. The late scholar-activist Grace Lee Boggs calls this work the re-training of our hearts and minds – or 'growing our souls' - for cultural revolution. From the free breakfast program of the Black Panthers to the utopian domes of the California back to the landers, to the cultural arts of the Chicano and American Indian Movement, the 1960s-era experienced a creative mix of 'prefiguring' - imagining, embodying, and enacting - a better future. As Ruth Wilson Gilmore describes of the current abolition movement, creating a liberatory future requires that we rehearse the new world we want in the here and now. Through a close reading of cultural theory, including the work of Robin Kelley, Ruth Wilson Gilmore, bell hooks, Mariame Kaba, Dean Spade, Eve Tuck and Wayne Yang, alongside social movement histories, students will study the creative politics of the 1960s and our current political moment.

Desired student outcomes for this class include: a critical understanding of the histories of American social movement traditions, in the context of 1960s and now; experience conducting oral history interviews, and other life history research methods; practice translating academic research into public scholarship through the collaborative design of class dialogue and media; experience engaging in critical thinking and intellectual/historical analysis in a small seminar setting.

<b>TITLE</b> Creative Visualizations Science	in	<b>TERM</b> 202303		<b>SUBJ</b> ART	CRSE 113		SEC 0U1	CREDITS 4.000
INSTRUCTOR(S) Martin, Darrin Terning, John	<b>TYPE</b> Lecture	2	<b>DAYS</b> MW	<b>TIME</b> 1:10 PM - 4:00	) PM	<b>BUILD</b> ART		ROOM 55

### **Description:**

Studio – 6 hour(s). Experimental interdisciplinary strategies. Use of various media in creation of collaborative or independent works. Production of participatory audio-visual works, installations, or two-dimensional explorations. GE credit: AH, VL.

This course will explore scientific discovery in visual terms as well as how science can be creatively communicated to non-experts. We will also be examining how contemporary art has engaged the sciences through both content and technological means. Students will produce their own imaginative videos expressing responses to a specific scientific topic as a final product while linking scientific ideas and data with innovative visual analogies and personal narratives. Lectures will cover how the world is

revealed through visual means and how scientific results can be effectively communicated visually, and all aspects of producing a video: camera work, audio, animation, editing, and special effects. Students will have access to video editing software and equipment. Science topics to be explored include climate change, DNA, gene editing, the quantum world, and our place in the cosmos.

TITLE Introduction to Chicana Studies	a/o	<b>TERM</b> 202303	}	<b>SUBJ</b> CHI	CRSE 10		SEC AU1	<b>CREDITS</b> 4.000
INSTRUCTOR(S) Marquez, Lorena	TYPE Lecture Discuss		<b>DAYS</b> TR T	TIME 10:30 AM – 11: 12:10 PM – 1:0		BUILD TLC HUTCH		ROOM 1020 102

## **Description:**

Lecture – 3 hour(s); Discussion – 1 hour(s). Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR). Analysis of the situation of the Chicana/o (Mexican-American) people, emphasizing their history, literature, political movements, education, and related areas. GE credit: AH or SS, ACGH, DD, OL, WE.

Note: This course is a large 1.5-hour general population lecture, but Professor Lorena Marquez will be teaching the small 25-person 1-hour discussion section.

<b>TITLE</b> BioDesign Challenge –	Part 2	<b>TERM</b> 202303	<b>SUBJ</b> DES	<b>CRSE</b> 128B	<b>SEC</b> 001	CREDITS 4.000
INSTRUCTOR(S)	TYPE	DAYS	TIME	В	UILD	ROOM
Cogdell, Christina	Lecture	e F	1:10 PM -	- 4:00 PM O	LSON	163

## **Description:**

Discussion/Laboratory – 3 hour(s). Prerequisite: Winter 2023 Honors DES 128A with C or better. Teambased, experimentally grounded prototype design in a mini-entrepreneurial start-up context. GE credit: SE.

Continuation of Winter 2023 University Honors Program BioDesign Challenge Course. In this unique pair of courses over two quarters, students will work closely with Design and Biology or Bioengineering faculty in a hands-on, cross-disciplinary course experience to produce and showcase innovative new products that are functional, elegant, and sustainable.

In the first quarter, teams of students 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 venture capitalists.

In 2018, UC Davis BioDesign students produced completely novel biodegradable diapers, biosensors for toxic chemicals, sustainable fashion from biodegradable "leather", and a variety of other clever 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. The 2018 winning UC Davis team —the Sorbit diaper team (https://www.youtube.com/watch?v=CCKUzZB2cDI) -traveled to New York City in June representing UC Davis at the international BioDesign Challenge (http://biodesignchallenge.org/). They came in second overall and first place in the science category, a remarkable performance for a first time participating University!

<b>TITLE</b> Design of Coffee	<b>TERM</b> 20230	3	<b>SUBJ</b> ECH	<b>CRSE</b> 001		SEC AU1	CREDITS 3.000	
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD		ROOM	
Kuhl, Tonya	Lecture	М	3:10 PM - 4:00	PM	MDSC	С	180	
Ristenpart, William	Lab/Dis	T	10:00 AM - 11:	50 AM	EVERSI	N	126	

### **Description:**

Lectures – 1 hour(s); Laboratory – 2 hour(s); Project (Term 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 Chemical Engineering and Biochemical Engineering majors or students who have completed Chemical and Materials Science 5. GE credit: SE, SL, VL.

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

TITLE Becoming an Americ Immigration and Am Culture	an: 2	<b>TERM</b> 202303		<b>RSE</b> 73	SEC 0U1	<b>CREDITS</b> 4.000	
INSTRUCTOR(S)	TYPE	DAYS	TIME	BUILD		ROOM	
Tsu, Cecilia	Lecture	TR	9:00 AM - 10:20 A	AM BAINEI	₹	1134	

## **Description:**

Lecture – 3 hour(s); Term Paper. Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR). Introduction to the wide range of immigrant experiences and cycles of nativism that have shaped American culture in the 20<sup>th</sup> century. From novels, memoirs, and films, students will explore how external and internal immigration has created a multicultural society. GE credit: AH or SS, ACGH, DD, WE.

We will use a comparative framework to explore the history of immigrants and refugees from Europe, Asia, and Latin America. Themes will include debates in immigration history, community, identity, racial formation, gender and family, immigration and refugee policy, and competing notions of citizenship.

TITLE	TERM	SUBJ	CRSE	SEC	CREDITS
Sex and Society in Modern	202303	HIS	191J	0U1	4.000
Chinese History					

INSTRUCTOR(S)	TYPE	DAYS	TIME	BUILD	ROOM
Chiang, Howard	Lecture	W	9:00 AM - 11:50 AM	OLSON	217

## **Description:**

Lecture – 3 hour(s); Term Paper. Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR). Role of sex, gender, and family relations in the development of Chinese politics, society, and personal life in the modern period, 1900-present. GE credit: AH, WC, WE.

This seminar explores the history of sexual relations and practices in twentieth-century China. Our entry points will be multiple and themes overlapping, but one constant goal will be assessing the role of historical evidence with a critical eye. By surveying some of the most important secondary literatures to date, we will scrutinize many of the taken-for-granted understandings about sex and desire, especially those issues related to the status of women, gender relations, social movements, cultural identity, sexual minorities, and political resistance. Topics include changes in the family structure and marriage expectation; the role of the state; scientific and medical concepts about the body; images of masculinity and femininity in the mass media; pornography; geopolitical transformation; the gendered division of labor; gay, lesbian, bisexual, transgender, and queer subcultures; the commoditization of sex; and digital activism. As we study the pertinent Chinese controversies about gender, sexuality, and the body (some of which remain hotly debated in Western countries), we will also try to situate them, when useful, in a global historical context.

<b>TITLE</b> Ethics and the America Healthcare Systems	an	<b>TERM</b> 202303	3	<b>SUBJ</b> IST	CRSE 8C		SEC 0U1	<b>CREDITS</b> 4.000
INSTRUCTOR(S) Fedyk, Mark	<b>TYPE</b> Lecture	e	<b>DAYS</b> MW	<b>TIME</b> 6:10 PM – 8:0	0 PM	<b>BUILD</b> WELLN		<b>ROOM</b> 25

## **Description:**

Lecture – 3 hour(s); Term Paper. Group study of a special topic in the Social Sciences. Varies with topic offered. May be repeated. GE credit: SS.

This course consists of a survey of ethical controversies that are, each in their own way, by-products of the contemporary organization of healthcare delivery and research, with a particular focus on the role that American educational, research, and healthcare delivery institutions play in these controversies. Controversies that we will likely investigate include those related to medicine and disability, brain-machine-interface technology, genetics and individualized healthcare, and the structure of biomedical research. Fundamentally, this course is an advanced survey course that will increase students' ability to think critically about ethical controversies, with a secondary aim of helping students develop important analytical writing skills. Students interested in careers in medicine, public health, or nursing are encouraged to take this course -- although this course is designed to be engaging for any student with a broad interest in ethics and healthcare.

IIILE	I ERIVI		SUBJ CR	SE	SEC	CREDITS
Calculus for Biology & Medicine	20230	3	MAT 17	С	0U1	4.000
INSTRUCTOR(S)	TYPE	DAYS	TIME	BUILD		ROOM
Varn, Dowman	Lecture	MWF	12:10 PM - 1:00 PM	M WELLM	N	229
	Discussion	R	6:10 PM - 7:00 PM	1 VEIMYR		116

# **Description:**

Lecture – 3 hour(s); Discussion – 1 hour(s). Prerequisite(s): MAT 17B C- or better. Matrix algebra, functions of several variables, partial derivatives, systems of differential equations, and applications to biology and medicine. Not open for credit to students who have completed MAT 021C; only 2 units of credit to students who have completed MAT 016C. GE credit: SE, SL.

TITLE Vector Analysis	<b>TERM</b> 20230		<b>SUBJ</b> MAT	CRSE 21D		<b>SEC</b> 0U1	<b>CREDITS</b> 4.000
INSTRUCTOR(S) Varn, Dowman	<b>TYPE</b> Lecture	<b>DAYS</b> MWF	<b>TIME</b> 10:00 AM – 10:5	50 AM	<b>BUILD</b> OLSON		<b>ROOM</b> 163
•	Discussion	R	7:10 PM - 8:00	PM	VEIMYR		16

#### **Description:**

Lecture – 3 hour(s); Discussion – 1 hour(s). Prerequisite(s): (MAT 021C C- or better or MAT 021CH C- or better) or MAT 017C B or better. Continuation of MAT 021C. Definite integrals over plane and solid regions in various coordinate systems. Line and surface integrals. Green's theorem, Stoke's theorem, divergence theorem. GE credit: QL, SE.

TITLE Musics of the Americas	<b>TER</b> 202		<b>SUBJ</b> MUS	CRSE 129A	SE OL		
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD	ROOM	
Diaz, Juan Diego	Lecture	MW	2:10 PM - 4:00	PM	MUSIC	203	

### **Description:**

Lecture – 3 hour(s); Discussion – 1 hour(s). Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR). Survey of music cultures from North, Central, and South America, including the Caribbean, with emphasis on the role of music in society and on the elements of music (instruments, theory, genres and form, etc.). Introduction to ethnomusicological theory, methods, and approaches. GE credit: AH, DD, VL, WC, WE.

This honors course introduces students to selected musical traditions of the Americas and to some conceptual ethnomusicological approaches to understand the music in its broader cultural contexts. This quarter the course will focus on musical and dance traditions from the Americas that have transcended national boundaries such as cumbia, salsa, reggaetón, hip-hop, jazz, capoeira, Afro-diasporic sacred

music, and more. Through the study of aesthetics, performances practices, and musical structure of these genres, we will examine the role of music in the construction of national and regional identities and study its processes of circulation. We will also attend to music's role in processes such as colonization, enslavement, freedom and independence campaigns, as well as musical responses to globalization, neoliberalism, and environmental activism. The overall course objectives are to: (1) develop vocabulary and frameworks for analyzing music in its cultural context; (2) achieve a deeper understanding of how and why music connects people across national boundaries; (3) develop practical knowledge about some of the most popular musical traditions in the Americas nowadays.

TITLE Native American Art St	-	<b>ERM</b> 02303		CRSE 34	SEC 0U1	<b>CREDITS</b> 4.000
INSTRUCTOR(S) Tsinhnahjinnie, Hulleah	TYPE Lecture Studio Studio	DAYS M M W	<b>TIME</b> 9:00 AM - 9:50 A 10:00 AM - 11:50 9:00 AM - 11:50	0 AM HART		ROOM 1401 1401 1401

# **Description:**

Lecture – 2 hour(s); Studio – 6 hour(s). Studio projects to be influenced by contemporary and traditional Native American arts. Examples of designs and media presented in lectures will be of indigenous origin. Introduction and familiarized with various materials and techniques. GE credit: AH, ACGH, DD, OL, VL, WC.

TITLE	TERM	1	SUBJ	CRSE	SEC	<b>CREDITS</b>
Classical Physics	20230	03	PHY	9A	0U1	5.000
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD	ROOM
Chiang, Shirley	Lecture	MWF	11:00 AM	– 11:50 AM	RESSLR	55
	Laboratory	F	8:00 AM -	10:20 AM	RESSLER	162
	Discussion	W	6:10 PM -	7:00 PM	PHYSIC	130

## **Description:**

Lecture – 3 hour(s); Laboratory – 2.5 hour(s); Discussion – 1 hour(s). Prerequisite(s): MAT 021B or MAT 021M; or Consent of Instructor. Introduction to general principles and analytical methods used in physics for physical science and engineering majors. Classical mechanics. Only 2 units of credit for students who have completed PHY 001A or PHY 007B; not open for credit to students who have completed PHY 009HA. GE credit: SE.

Kinematics, forces and statics problems, Newton's Laws of Motion, work and energy, linear momentum, collisions, angular momentum, torque, gravitation, Kepler's Laws, small oscillations.

TITLE	TERM		SUBJ	CRSE		SEC	<b>CREDITS</b>
Self & Society	20230	3	SOC	002		0U1	4.000
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD		ROOM
Faris, Robert	Lecture	MW	12:10 PM - 2:0	00 PM	OLSON	l	244

### **Description:**

Lecture – 3 hour(s); Discussion – 1 hour(s). Exploration of how self and identity are formed and transformed by socialization and social interaction in relation to roles, groups, institutions, power, and social change. Consideration of how people make decisions, fall in love, and come to blows. GE credit: ACGH, DD, SS.

This course introduces the key concepts and theories of social psychology, beginning with an overview of basic mental processes, followed by an exploration of the self and identity, an examination of important types of primary relationships, and concluding with a survey of group and cultural influences. In other words, we will figure out how we can be manipulated, how we fall in love, why we cheat, and why we can't all just get along.

TITLE Writing Research Paper	rs	<b>TERM</b> 202303	<b>SUBJ</b> UWP	CRSE 49	SEC 0U1	CREDITS 4.000	
INSTRUCTOR(S) Macarthur, Marit	TYPE Lecture	DAYS MW	<b>TIME</b> 1:40 PM	– 3:00 PM	<b>BUILD</b> TLC	<b>ROOM</b> 2211	

## **Description:**

Lecture/Discussion – 4 hour(s). Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR). Principles of research writing. Analysis and development of research topics and effective arguments, including critical reading, analysis, integration, and documentation of source material. Not open for credit to students who have taken UWP 019. GE credit: AH, WE.

Understanding and synthesizing research articles is a crucial skill in any field. In UWP 49, students will choose their own research question—ideally something they are fascinated by and want to research intensively. The course will help students refine a research question, become familiar with library databases, practice search techniques, read and understand complex research articles, paraphrase, summarize and synthesize, and write a well-organized, persuasive literature review with appropriate documentation.

<b>TITLE</b> History of Scientific Wr	riting	<b>TERM</b> 202303	<b>SUB</b> UWI		<b>RSE</b> 21	SEC 0U1	<b>CREDITS</b> 4.000
INSTRUCTOR(S)	TYPE	DA	YS TIM	E	BUILD		ROOM
Herring, Scott	Lecture	e TR	6:10	PM - 7:30 PM	M SHLDS		90B

#### **Description:**

Lecture – 3 hour(s); Extensive Writing. Prerequisite(s): Completion of Entry Level Writing Requirement (ELWR). History of scientific writing from the 17<sup>th</sup> century to the present; origins and evolution of

scientific genres; role of scientific writing in producing scientific knowledge; discursive differences between disciplines; emergence of English as a global language of science. GE credit: AH, SE, SL, WE.

How does scientific writing work? What does it communicate, and why do scientists and other science writers choose the precise strategies they do? We will answer these questions, and plenty of others. Students will focus on two tasks: you will learn to understand scientific writing, and will get better at producing your own. You will write a series of term papers aimed at achieving both goals.

Writing about big nature reserves, especially Yellowstone and Yosemite, will serve us as case studies, although we will not restrict ourselves more than we need to; writing about the natural environment is our major focus. We will also look closely at medical writing. While students are expected to know basic essay structure, as well as sentence mechanics, before coming into the class, we will also spend time on style and usage.

Texts: All reading will be in PDF documents supplied by the instructor, except these two books:

- 1. McPhee, John. Assembling California. Farrar, Straus and Giroux, 1993.
- 2. Quammen, David. Spillover: animals infections and the next human pandemic. Norton, 2012.

Writing Assignments: You will complete four written assignments during the quarter; in addition, we will have a number of quizzes and in-class assignments. Quizzes, which may be given at any time, may not be made up, and you will be responsible for any instructions given in your absence. Verbal displays of your critical thinking skills also constitute an essential aspect of your presence in class. An important note: all the papers must be handed in to receive a passing grade for the course. Here are the assignments (the page counts are in 12-point Times New Roman, with one-inch margins):

Paper 1: Analysis 1, 3 pages: 15% Paper 2: Analysis 2, 3 pages: 15%

Paper 3: The History of a Familiar Science, 5 pages: 25%

Paper 4/Final Essay Exam: The History of an Unfamiliar Science, 5 pages: 25%

Quizzes, class participation: 20%

Final Exam: The fourth paper will function as a take-home final, due on the day our final exam would have taken place.

TITLE Introduction to Winem	naking	<b>TERM</b> 202303	<b>SUBJ</b> VEN	CRSE 3	<b>SEC</b> 0U1	<b>CREDITS</b> 3.000	
INSTRUCTOR(S)	TYPE	DAYS	TIME		BUILD	ROOM	
Ebeler, Sue	Lecture	e TR	9:00 AM -	– 10:20 AM	RMIBWF	00000	

## **Description:**

Lecture – 3 hour(s). Overview of the history of wine, viticulture, fermentation, winery operations, the physiology of wine consumption, wines produced in California and other major wine-producing regions and the sensory evaluation of wine. GE credit: SE or SS.