# SPRING 2024 Discovery Seminars

### First Year Discovery & Discovery+ Seminars

Please note that if a listed seminar does not last the full 10 weeks, the drop deadline may be sooner.

#### Updated 2/7/2024

### **INT 86EI** – "SciTrek: How science works"

- Seminar Type: First Year Discovery
- Department: Psychological & Brain Sciences
- Instructor: Vanessa Woods
- Instructor Email: vewoods@ucsb.edu

• Day - Time - Room: Thursday 3:00-3:50 in ILP 3310 \*This seminar will meet the first two Thursday's of the quarter in ILP 3310 at UCSB, and the last two weeks of the quarter. Please note that 6 hours of this seminar will be off campus at the K-12 schools and at various times

• Enroll Code: 63610

**Course Description:** Improve your ability to think critically, probably the most important skill you will be hired for in the future, whatever your degree is in. This course is a blend of instruction from Biochemistry Professor Norbert Reich, who works on drug development for cancer and antibiotics, through reading and discussing papers on critical thinking, and your involvement in UCSB's largest outreach, "SciTrek". The outreach brings university students into local classrooms (this class will focus largely on Junior High and High School classes) to help run inquiry into diverse topics such as math, biology, chemistry, and physics. The outreach does not require that you be a STEM major. Prior university students have improved in their critical thinking even in this one quarter of in class and outreach engagement.

SciTrek Website for more information: https://scitrek.chem.ucsb.edu/

#### Bio: ?

## **INT 86GG – "***The Exploration of Identity & Art: Personal, Cultural, Familial,*

### <u>& Sexual"</u>

- Seminar Type: First Year Discovery
- Department: Art
- Instructor: Kip Fulbeck
- Instructor Email: seaweed@arts.ucsb.edu
- Day Time Room: Tuesday 10:00-11:50 in Arts 1237 \*This seminar will meet the first 5 weeks of the quarter
- Enroll Code: 61028

**Course Description:** The exploration of identity continues to be a focus of contemporary artists. Examining how we create and recreate our internal and external selves allows us to better understand our interactions in

personal, social and political arenas. In this interactive workshop, students will view work by various filmmakers, artists, and performers, and engage in lively discussions pertinent to their phase in life.

**Bio:** Kip Fulbeck is a Distinguished Professor of Art, with affiliate appointments in Asian American Studies and Film & Media Studies. He has exhibited worldwide and has been featured on CNN, MTV, The New York Times, The TODAY Show, Voice of America, and various NPR programs. He is the author of numerous books and the recipient of UCSB's Faculty Diversity Award and Distinguished Teaching Award.

## INT 86HI - "Your Brain on Art - A UCSB Reads Experience"

- Seminar Type: First Year Discovery
- **Department:** College of Creative Studies
- Instructor: Michelle Petty-Grue
- Instructor Email: mgrue@ucsb.edu
- Day Time Room: Wednesday 12:00-12:50 in CCS 136
- Enroll Code: 61036

**Course Description:** You may have heard of UCSB Reads, but what exactly is it? In this class, we'll read the UCSB Reads book - Your Brain on Art - but we'll also explore the various art spaces on campus, do some art of our own (arts, crafts, writing as art, etc.), and go on field trips to arts and crafts spaces in the greater Santa Barbara community. We'll engage in some of UCSB Reads programming, too. You'll also do some reflective writing about the experiences in the class, getting to really know your brain on art.

**Bio:** Michelle Petty Grue's interdisciplinary research in Education and Writing draws on Black feminism to investigate diversity issues in academia, creative writing, and in digital writing. She is currently working on an Afrofuturist novel and has recently published several poems, in addition to more traditional academic writing. Michelle is an Assistant Teaching Professor in the Writing Program since 2016 and the College of Creative Studies, where she is happy to doing work that combines both her degree in Creative Writing, earned at Pepperdine University, and her PhD from the Gevirtz Graduate School of Education here at UCSB.

## **INT 86TN** – "Planetary Defense - defending our home planet from

### extinction"

- Seminar Type: First Year Discovery
- Department: Physics
- Instructor: Philip Lubin
- Instructor Email: lubin@ucsb.edu
- Day Time Room: Thursday 5:00-5:50 in Broida 3302
- Enroll Code: 63198

**Course Description:** The Earth is our only home for now. In the past and in the future catastrophic events such as large asteroid or comet impacts will wipe out much of life. Our last tenants, the dinosaurs, were completely wiped out about 66 million years ago along with the majority of other life forms. Such catastrophic have happened multiple times in the past and will occur again in the future. While we have no current planetary defense system we are working on new ways to prevent this in the future. See our website for our NASA planetary defense program: <a href="https://www.deepspace.ucsb.edu/projects/pi-terminal-planetary-defense">https://www.deepspace.ucsb.edu/projects/pi-terminal-planetary-defense</a>

#### Website: www.deepspace.ucsb.edu

Philip Lubin is a professor of Physics at UC Santa Barbara whose primary research has been focused on studies of the early universe in the millimeter wavelengths bands as well as applications of directed energy for planetary defense and relativistic propulsion. His group has designed, developed and fielded more than two dozen ground based and balloon borne missions and helped develop two major cosmology satellites. Among other accomplishments his group first detected the horizon scale fluctuations in the Cosmic Microwave Background from both their South Pole and balloon borne systems twenty years ago and their latest results, along with an international teams of ESA and NASA researchers, are from the Planck cosmology mission which have mapped in exquisite detail the structures of the early universe. He is a co-I on the Planck mission. His group has worked on applications of directed energy systems for both small scale single launcher solutions as well as large standoff systems for planetary defense and on applications to allow small interstellar probes to achieve relativistic speeds for the first interstellar missions. He is co-recipient of the 2006 Gruber Prize in Cosmology along with the COBE science team for their groundbreaking work in cosmology as well as the 2018 Gruber Prize in Cosmology along with the Planck science team for their determination of fundamental cosmological parameter. He has published more than 500 papers

## **INT 86VC** – "Portraiture and Self in the Age of AI"

- **Seminar Type**: *First Year Discovery*
- Department: College of Creative Studies, Music Composition
- Instructor: Andrew Watts
- Instructor Email: aawatts@ucsb.edu
- Day Time Room: Friday 10:00-10:50 in SSMS 1007
- Enroll Code: 62919

**Course Description:** "Portraiture and Self in the Age of AI" offers an academic exploration into the intersection of technology and identity. This course examines how photography, digital editing, and artificial intelligence shape self-representation and perception. Students will develop skills in capturing and editing images, while critically analyzing AI's role in redefining reality and self. The seminar culminates in creating a personal portfolio, reflecting each student's technical proficiency and philosophical insights on authenticity in the digital era. This course is an invitation to engage with the evolving narrative of self in our technologically advanced world.

**Bio:** Dr. Andrew A. Watts is a composer of chamber, symphonic, multimedia, and electro-acoustic works regularly performed throughout North America, Europe, and Asia. His compositions have been premiered at world-renowned venues and famed cultural events such as Burning Man; Ravinia, the summer home of the Chicago Symphony Orchestra; Boston's celebrated Jordan Hall; The Kitchen in New York City; the Internationales Musikinstitut Darmstadt; and the Holywell Music Room, the oldest custom-built concert hall in Europe. He has written works for many of the top new music groups today including Ensemble Dal Niente, Ekmeles Vocal Ensemble, Proton Bern, Distractfold Ensemble, RAGE Thormbones, Splinter Reeds, Quince Vocal Ensemble, Line Upon Line Percussion, as well as members of the International Contemporary Ensemble, Elision Ensemble, and Talea Ensemble. Recently, in December 2023, Watts premiered a large-scale work, AI and the Heat Death of the Universe, which utilizes video and multichannel audio to ponder how an artificial intelligence would react to or interpret a timeline of our distant future.

He completed his doctorate at Stanford University, studying with Brian Ferneyhough, Chris Chafe, and Jaroslaw Kapuscinski. Watts received his master's with distinction from Oxford University and his bachelor's with academic honors from the New England Conservatory. Watts's music mines the expressive and dramatic ramifications of technology and the post-human. His research examines the compositional applications of language desemanticization, focusing on the ability to convey expression through the voice even when specific meaning is lost, augmented, or otherwise unintelligible. His writing also actively explores musical extremes through gradients of freedom and restriction, ambiguity and detail, purity and distortion, along with sound and noise. Often, he includes invented instruments to broaden the palette of what a performer can do. The treatment of microtonality in his pitch language focuses on the evolution of material under tightly constrained circumstances. Watts has sought to create highly precise surface gestures to serve as the impetus in his music. He exercises a great degree of control over nuanced parameters, creating systems to model dramatic real-world behaviors and relations.

Watts is currently on the Music Composition faculty at the University of California Santa Barbara's College of Creative Studies. From 2017-2022, he co-taught the summer workshop "Algorithmic Composition with Max/MSP and OpenMusic" at the Center for Computer Research in Music and Acoustics (CCRMA). He has been a featured composer at the MATA Festival (USA), impuls International Composers Academy (Austria), Rainy Days Festival (Luxembourg), Young Composers Meeting (Netherlands), Delian Academy (Greece), Cheltenham Music Festival (England), Summer Courses for New Music at Darmstadt (Germany), Composit Festival (Italy), Ostrava Days Institute (Czech Republic), highSCORE Festival (Italy), Wellesley Composers Conference (USA), Etchings Festival (France), Fresh Inc. Festival (USA), New Music on the Point (USA), and Atlantic Music Festival (USA). Furthermore, he has given guest lectures on his compositional practice at IRCAM, Harvard University, UC Berkeley, UC San Diego, McGill University, CalArts, Ithaca College, and other leading music programs. Lastly, from 2018-2019, he co-hosted the interview series Composer OverTime featuring discussions and works by innovative composers across the world today.

## INT 86VV – "Translanguaging practice: focus on online K-pop fan

### communities"

- Seminar Type: First Year Discovery
- Department: East Asian Languages and Cultural Studies department
- Instructor: Wona Lee
- Instructor Email: wonalee@ucsb.edu
- Day Time Room: Tuesday 2:00-2:50 in HSSB 1210
- Enroll Code: 61044

**Course Description:** Translanguaging is a common practice of employing various linguistic resources to interact and comprehend the world, occurring wherever different languages come into contact. This seminar will explore how individuals form communities through translanguaging, with a specific focus on online fan communities centered around K-pop. Students will gain insights into the interplay between language and culture, as well as learn how to conduct online ethnographic research.

**Bio:** Wona Lee (Ph.D. in Education, University of California, Santa Barbara, 2018) is currently teaching Korean classes in the Korean language program at UC Santa Barbara. Her research areas are bilingual education and Korean language education as a foreign language.

### **INT 86WC – "**Nature and the Sciences: What Can "Wild Nature" Teach Us About Ourselves and Our Human Needs?"

- Seminar Type: First Year Discovery
- Department: Writing Program
- Instructor: Peter Huk
- Instructor Email: phuk@ucsb.edu
- Day Time Room: Wednesday 11:00-11:50 in SH 1432
- Enroll Code: 63271

**Course Description:** This seminar will bring students into the world of natural area conservation through a case study of UCSB's Sedgwick Reserve, a field station and protected area that is part of the University of California's Natural Reserve System (NRS). Learn about the role of field stations in conservation, opportunities the NRS has for students, and gain insight into natural resource management as a practice of decision-making that combines science, values, and socio-cultural understandings of nature. The class will include environmental readings and writing intended to help you examine your own understanding of nature and conservation. It also includes an overnight trip to Sedgwick Reserve. Sedgwick staff, Dr. Heather Constable and Dr. Nikki Evans, will help facilitate the class, providing insight into managing a field station in a wildland setting.

## **INT 86WE** – "Even your shampoo is fascinating: the science of cosmetics

### and consumer products"

- Seminar Type: First Year Discovery
- Department: Chemical Engineering
- Instructor: Todd Squires
- Instructor Email: tsquires@ucsb.edu
- Day Time Room: Monday 10:00-11:50 in Building 570 room 1200 \*This seminar is a lab and will meet the first 5 weeks of the quarter
- Enroll Code: 63693

### **INT 86WE** – "Even your shampoo is fascinating: the science of cosmetics

### and consumer products

- Seminar Type: First Year Discovery
- Department: Chemical Engineering
- Instructor: Todd Squires
- Instructor Email: tsquires@ucsb.edu
- Day Time Room: Monday 1:00-2:50 in Building 570 room 1200 \*This seminar is a lab and will meet the first 5 weeks of the quarter
- Enroll Code: 63701

**Course Description:** Each of you has used shampoo and toothpaste almost every day of your life (I hope), yet have you ever stopped to think about how incredible these products are? Why does shampoo flow as slow as honey, but spread into your hair so much more easily (and less painfully)? How can hand sanitizer pump out of the bottle, but sit in a little pile on your hand until you spread it? Come learn how these products work by making your own in lab! Current plans are to do shampoo, hand sanitizer, moisturizing lotion, and lip balm.

**Bio:** Todd Squires has been a Professor of UCSB Chemical Engineering since 2005, and is faculty advisor for UCSB's student chapter of the Society of Cosmetic Chemists. He earned undergraduate degrees in Physics and Russian Language and Literature at UCLA in 1995, and his PhD in Physics from Harvard in 2002. His research involves "complex fluids", with applications in consumer products, the function and dysfunction of lung surfactants, and water treatment membranes. He has two kids in college and one in elementary school, which has helped him understand both how exciting -- and how stressful -- the transition to college can be.

## INT 87AC - "Love and Desire"

- Seminar Type: First Year Discovery+
- Department: Spanish and Portugeuse
- Instructor: Antonio Cortijo & Silvia Bermúdez
- Instructor Email: cortijo@ucsb.edu, bermudez@spanport.ucsb.edu
- Day Time Room: Tuesday 2:00-3:50 in NH 1109
- Enroll Code: 61051

**Course Description:** This seminar offers an overview of the way our conceptualization of Love and Desire has shaped Western thought from its inception to the present. Love lies at the intersection of sexual passion, religious mysticism, and social utopia. Conceptualized as a human need for creating a relationship with the other we will begin by examining how the Greeks believed "love" encompassed the notions of eros, philia, agape and Charistia/Love/Charity. From the most natural and simple sexual desire (eros), love moved to embrace the need to establish a connection with others through friendship (philia) or with the societal group at large (agape). A human mystical longing to transcend the sphere of the merely human was also recognized through the concept of Charistia/Love/Charity. To explore how Love and Desire have been conceptualized and explored throughout the centuries in the Iberian Peninsula and Latin America, we will pay attention to literature, painting, and music.

**Bio:** Dr. Antonio Cortijo analyzes in his research the ideological structures and tensions that have forged the Modern Period across the Atlantic and across the languages and cultures of the Iberian Peninsula. He deals with issues such as nation building, power and ideology, religion and economy in the late medieval through 18th centuries, as well as with the larger topic of the relevance of Humanism in the creation of the modern nations.

Silvia Bermúdez is Professor of Iberian Studies in the Department of Spanish and Portuguese. Her current scholarship centers on Iberian feminisms, the social function of poetry, and antiracist activism in 21st Century Spain. She teaches courses on modern and contemporary Spanish literary and cultural history, popular music studies, feminist studies, and poetic discourses.

## **INT 87AN – "**Building Psychosocial & Planetary Resilience"

- Seminar Type: First Year Discovery+
- Department: Environmental Studies & English
- Instructor: Summer Gray & Ken Hiltner
- Instructor Email: summer\_gray@ucsb.edu, hiltner@english.ucsb.edu
- Day Time Room: Friday 9:00 10:50 GIRV 1115
- Enroll Code: 62927

**Course Description:** We live in a rapidly changing world with the climate crisis and interrelated global crises ("the polycrisis"). Students will gain invaluable resilience skills, including mindfulness meditation, to navigate and build a meaningful future. The class aims to fill a critical gap in climate education and well-being, building on the science of personal and social resilience and climate change action, building a sense of belonging, and motivating empowerment and self-efficacy via actionable projects.

**Bio:** Summer Gray is a qualitative sociologist and Assistant Professor of Environmental Studies at UCSB. Her research explores crucial dilemmas surrounding climate change adaptation and conceptualizes frameworks that promote climate justice and critical resilience. She has published academic research in the areas of climate justice studies, critical resilience studies, and disaster studies. In addition to her scholarly work, she engages in public sociology and cinematic sociology, including the Carsey-Wolf Center's Coastal Media Project.

Ken Hiltner has written a number of books and articles, mostly on literature, culture, and the climate crisis. In addition to the University of California, Santa Barbara, Ken has taught at Harvard, where he received his Ph.D., and at Princeton. Ken was the founding Director of both UCSB's Literature and the Environment Center and the Environmental Humanities Initiative. Currently, he is the faculty Co-chair of the Chancellor's Sustainability Committee, Chair of UCSB's Sustainable Transportation Committee, and Director of the T. A. Barron Environmental Leadership Program. He/His/Him; always "Ken," never "Professor Hiltner."

## INT 87AX - "Arts & Cultures Discovery Seminar"

- Seminar Type: First Year Discovery+
- **Department:** Art
- Instructor: Kim Yasuda & Yumiko Glover
- Instructor Email: yasuda@ucsb.edu, yumikoglover@ucsb.edu
- Day Time Room: Thursday 5:00-6:50 in ARTS 0641
- Enroll Code: 63727

Departments within the Division of Humanities and Fine Arts, Social Sciences and College of Creative Studies have joined in partnership with UCSB Arts & Lectures and other campus presenters to host these free live events to those first-year students who participate in Spring 2024 First Year Discovery Seminar.

Arts & Culture for All Series presents the opportunity to introduce new students on campus to cost-free art and live performance by some of the leading creative thinkers and practitioners of our time as well as participate in discussions with one another and campus faculty from across a broad range of disciplines. A schedule of weekly events will be announced with weekly updates posted to the Canvas course site

Students will attend scheduled weekly events and discussion sessions in addition to some programs scheduled on other weeknights or weekends and will be offered free or at a discount to Spring 2024 Discovery seminar students. Events take place on campus and theatre venues in downtown Santa Barbara.

**Bio:** Kim Yasuda is an Artist and Professor of Public Practice in the Department of Art at UC Santa Barbara. Yasuda's creative work and public research investigate the role of art practice, and educational institutions in community development and public life. Her recent projects combine her teaching and research to shape pedagogical experiments at the intersection of disciplinary knowledge production and creative practice. Yasuda has worked with campus faculty, students and staff across Arts and Humanities, Social Sciences, and STEM to build coalition and cross-sector collaborations that mitigate social and environmental challenges through models of academic stewardship, public participation and mutual aid.