

Winter 2020

Discovery@UCSB

First Year – Exploration, Discovery & Linked Seminars:

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

INT 89AD

- **Title:** Exciting Developments in Biology Research
- **Department:** MCDB & EEMB
- **Seminar Type:** First Year Discovery
- **Units:** 2
- **Instructor:** Stephen Poole & Craig Carlson
- **Instructor Email:** poole@lifesci.ucsb.edu & craig_carlson@ucsb.edu
- **Day - Time - Room:** Friday 2:00-3:50 in GIRV 2120
- **Enroll Code:** 64824

Course Description: This seminar will explore topics related to current ongoing research within the departments of Ecology, Evolution and Marine Biology and Molecular, Cellular and Developmental Biology. Students will interact with faculty about the latest developments in fields ranging from molecular mechanisms of animal development to evolutionary studies of genomes to ecological effects of climate change.

Bio's: Professor Poole earned his BA at Trinity College, and his PhD in molecular biology at UCSD. His research areas are the molecular genetics of animal development and also contact-dependent growth inhibition in bacteria. Dr. Poole is a former Chair of Molecu

Professor Carlson earned his BA degree at Colby College and his PhD in marine science at the University of Maryland where he investigated the role that marine microbes play in governing the carbon cycle of open ocean ecosystems. As a Postdoctoral scholar

INT 89AL

- **Title:** Puppetry
- **Department:** Theater and Dance & Theater and Dance
- **Seminar Type:** First Year Linked
- **Units:** 2
- **Instructor:** Jessica Nakamura & Christina McCarthy
- **Instructor Email:** jnakamura@ucsb.edu & cmccarthy@theaterdance.ucsb.edu

- **Day - Time - Room:** Tuesday 11:00-12:50 in TD-W 1703
- **Enroll Code:** 64832

Course Description: This seminar uses puppetry to explore the significance of the object in performance. Students will learn about puppetry styles from around the world, including Japanese Bunraku, Indonesian Wayang Kulit, and English Punch and Judy. Then, students will explore these forms by building simple puppets and creating short performances.

Bio's: Jessica Nakamura is an Assistant Professor in Theater and Dance. Her research focuses on East Asian Theater and Performance, but her interest in puppetry developed when she worked as a stage manager and director for a puppet theater.

Christina McCarthy is a multimedia artist in dance, theater, puppet construction and design and film. Her creative work often collides these various interests as she seeks to uncover new and interesting ways to tell stories with voices, bodies and objects

INT 89AM

- **Title:** Innovations in Health Equity Research: Participatory Action with Communities
- **Department:** ISBER & Counseling, Clinical and School Psychology (GGSE)
- **Seminar Type:** First Year Discovery
- **Units:** 2
- **Instructor:** Melissa Smith & Melissa Morgan Consoli and Maryam Kia-Keating
- **Instructor Email:** melissasmith@ucsb.edu & mmorgan@education.ucsb.edu & maryamkk@ucsb.edu
- **Day - Time - Room:** Monday 10:00-11:50 in ED 1205
- **Enroll Code:** 64790

Course Description: What are the advantages of research with the community, rather than on the community? How can using participatory action approaches in scientific research lead to collaborative practices, moving towards more innovative and effective change?

This Seminar provides students an opportunity to learn about a social justice-based research methodology and, partnering with community-serving organizations, to seek solutions to community health and mental health problems. Students will learn about community-based participatory research (CBPR), applying it within the context of underrepresented populations living in California. Undergraduate students will work with graduate students and community partners in team-based projects focused on priority health concerns.

Bio's: Melissa Smith is Director of Health Equity Initiatives at UCSB, and a physician who has worked in poor communities in the US and Latin America. She has been involved in CBPR with local partners, and developed community health worker training programs and public health manuals for community health and empowerment.

Melissa Morgan Consoli is a Counseling Psychologist and Associate Professor in the Counseling, Clinical and School Psychology program at UCSB. Her research interests include issues of resilience, thriving, social justice and immigration, with an emphasis on Latino/a populations. She utilizes quantitative, mixed, qualitative, and CBPR approaches in her work.

Maryam Kia-Keating is an Associate Professor in the Department of Counseling, Clinical, and School Psychology and a Licensed Clinical Psychologist. Dr. Kia-Keating uses participatory methods, partnering with communities to address adversity, risk, positive youth development, and resilience, and ultimately, translate research into more effective programs for youth and families. <maryamkk@ucsb.edu>

INT 94JK

- **Title:** Latin America through Film
- **Department:** Spanish and Portuguese
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Ellen McCracken
- **Instructor Email:** emccr@spanport.ucsb.edu
- **Day - Time - Room:** Wednesday 2:00-4:20 in GIRV 2116. **This Seminar will meet the 1st four Wednesdays of the QTR ONLY*
- **Enroll Code:** 60863

Course Description: This seminar is an introduction to new Latin American film focusing on such countries as Mexico, Argentina, Chile, and Bolivia. We will study key films as a means of understanding historical and contemporary socio-cultural issues that preoccupy Latin America, including the origins of revolutionary struggles in the 1960s, the dictatorships of the 1970s-80s, contemporary political struggles, and the border crisis. How do feature and documentary films re-articulate these and other issues for contemporary audiences? Additionally, how do these films relate to contemporary U.S. and European films that portray Latin America? What defines a Latin American film in the age of globalization? We will combine close readings of select films and excerpts with a general introduction to Latin American studies through film.

Ellen McCracken teaches U.S. Latino Literature and contemporary Latin American literature and culture in the Department of Spanish and Portuguese.

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INT 94JV

- **Title:** The Beauty of Mathematics
- **Department:** Maths
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Daryl Cooper
- **Instructor Email:** cooper@math.cusb.edu
- **Day - Time - Room:** Tuesday 2:00-2:50 in HSSB 2251

- **Enroll Code:** 64246

Course Description: In 1610 Galileo said that "The language of nature is mathematics." By this he meant the world, and indeed the universe we live in, can only be understood with the aid of mathematics. Just as one can appreciate music without being able to read a note of it, and a painting without being able to hold a brush, so one can appreciate the beauty of mathematics without the formulae. We will travel from the mathematically inspired art of M.C. Escher and the infinite complexity of Mandelbrot's fractals to the transcendence of music as epitomized by Bach. We will discover why mirrors reverse left to right but not up and down. We will contemplate the sublime: what is infinity? And imagine the seemingly unimaginable: what shape is our universe? Want to win the lottery? We will explore every day uses of logic such as chance and probability. The only prerequisite for this class is a willingness to suspend disbelief. The course will be heavy on ideas and light on numbers. There is no need for a calculator.

Bio: Professor Cooper's main research is in topology which can be used to describe the shape of all possible universes. He is also an expert on the geometry of the infinitely large and infinitesimally small.

INT 94LT New Seminar Added on 11/25**

- **Title:** The Elegant Universe
- **Department:** Mathematics and Physics
- **Instructor:** David Morrison
- **Instructor Email:** drm@math.ucsb.edu
- **Day - Time - Room:** Monday 3:00-3:50 in HSSB 1207
- **Enroll Code:** 75507

Course Description: The early twentieth century saw two major advances in theoretical physics: Einstein's theory of general relativity, which gives a framework for understanding the universe on the scale of stars, galaxies, and beyond, and quantum mechanics, which gives a framework for understanding the universe on the scale of molecules, atoms, and subatomic particles. Both theories are extremely well tested under ordinary physical conditions, but when they are extrapolated to extreme physical conditions (such as near a black hole), they are incompatible. We will explore these two important aspects of theoretical physics, as well as a possible resolution to the incompatibility known as superstring theory. Our discussions will emphasize metaphor rather than equations; there are no mathematics or physics prerequisites, only a willingness to engage difficult intellectual material.

Bio: David Morrison, Mathematics and Physics, is an expert on the mathematical aspects of string theory. His recent courses include: General Relativity, Complex Analysis, String Theory, Lie groups and Lie algebras

INT 94MW

- **Title:** The case against science
- **Department:** Chemistry and Biochemistry
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Mattanah de Vries

- **Instructor Email:** devries@chem.ucsb.edu
- **Day - Time - Room:** Friday 1:00-2:50 in PSB-N 1631. *This Seminar will meet the 1st four Friday's of the Quarter ONLY
- **Enroll Code:** 65706

Course Description: Should there be stickers on biology books, warning that evolution is only a theory? Is climate change a hoax? Is alternate medicine systematically suppressed by the mainstream medical establishment? Is intelligent design covered up by biologists? What do the courts have to say? Explore the history and philosophy of science. Be skeptical and decide whether science can be trusted.

Bio: Professor Mattanah de Vries teaches Environmental Chemistry, Analytical Chemistry, and special topics graduate courses. His research interests include studying the molecular origin of life with novel laser-based techniques, as well as applications in analysis of art and archaeology.

INT 94NU

- **Title:** Chicano/Latino Film Documentaries in Historical Perspective
- **Department:** Chicana and Chicano Studies
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Mario Garcia
- **Instructor Email:** garcia@history.ucsb.edu
- **Day - Time - Room:** Tuesday 1:00--2:50 in HSSB 4202 *This Seminar will meet the first five weeks of quarter ONLY
- **Enroll Code:** 27946

Course Description: This seminar focuses on Chicano/Latino film documentaries in historical perspective. Five documentaries will be shown and discussed over five weeks. The films deal with contemporary Latino issues, educational struggles, civil rights, and the recent Central American refugees.

Bio: Prof. Mario T. Garcia is Distinguished Professor of Chicana and Chicano Studies and History. He is the author of over 20 books on Chicano history. His research focuses on immigration, civil rights, the Chicano Movement, Chicano religion, and oral history.

INT 94TI

- **Title:** Department of Music LIVE
- **Department:** Music
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Jill Felber
- **Instructor Email:** felber@ucsb.edu
- **Day - Time - Room:** Tuesday 4:00-4:50 in MUSIC 2224
- **Enroll Code:** 28001

Course Description: Department of Music Live is a freshman seminar that allows students to attend student or faculty chamber and ensemble concerts hosted by the Department of Music. **One class is required and attendance at four Department of Music concerts in the term is expected.**

UCSB Chamber Players

Wednesday, February 26, 2020 | 7:30 pm | Karl Geiringer Hall
Free admission (no reservations)

UCSB Wind Ensemble

Thursday, March 5, 2020 | 7:30 pm | Lotte Lehmann Concert Hall
\$10 general admission | \$5 non-UCSB students | Free for UCSB students and children under 12

UCSB Chamber Orchestra and Chamber Choir

Monday, March 9, 2020 | 7:30 pm | Lotte Lehmann Concert Hall
\$10 general admission | \$5 non-UCSB students | Free for UCSB students and children under 12

UCSB Jazz Ensemble

Wednesday, March 11, 2020 | 7:30 pm | Lotte Lehmann Concert Hall
\$10 general admission | \$5 non-UCSB students | Free for UCSB students and children under 12

Bio: Jill Felber, Professor of Flute, has performed solo recitals, chamber music, and concertos on five continents and has held residencies in Hong Kong, Taiwan, Australia, Mexico, France, Switzerland, Great Britain, Italy, Canada, Brazil and the United States. Ms. Felber has inspired many composers to write solo and chamber works for her and for her flute duo ZAWA!, and is currently engaged in several commissioning projects. She has premiered over five hundred works for the flute and has released world premiere recordings for Centaur Records, CRI, Neuma Records, and ZAWA!MUSIC.

INT 94TK

- **Title:** Experimenting with the Fundamental Building Blocks of the Universe
- **Department:** Physics
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** David Stuart
- **Instructor Email:** stuart@physics.ucsb.edu
- **Day - Time - Room:** Friday 1:00-1:50 in HSSB 1223
- **Enroll Code:** 64808

Course Description: This seminar will discuss the physics experiments that revealed the fundamental building blocks of the universe over the course of the last century. We'll look at the questions that drove the experiments, the techniques that they used, and the impact that they had. We'll also discuss ways that undergraduate science majors can make their own contributions to modern experiments through undergraduate research projects.

Bio: David Stuart is a professor of physics who does particle physics experiments with the Large Hadron Collider. These experiments involve colliding protons at high energies to create new particles, and their anti-matter partners, to study the fundamental constituents and interactions of the universe.

INT 94UA

- **Title:** 20 Questions, Lawyer's Edition
- **Department:** Writing Program
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Gina Genova
- **Instructor Email:** genova@ucsb.edu
- **Day - Time - Room:** Wednesday 4:00-4:50 in HSSB 3202
- **Enroll Code:** 64816

Course Description: Ever wondered what it was like to be a lawyer? What do personal injury lawyers do that is different from criminal defense practitioners? Now is your chance to find out as we pose student-generated questions to several local lawyers, each from a different legal practice area. The quarter begins with a profession overview, including information about the LSAT and Law School from UCSB pre-law advisors. Lawyers visit each week and speak for about an hour, answering our questions and generating interactive discussions. After a class debrief, each student posts a response to the night's discussion on our GauchoSpace forum.

Bio: Gina L. Genova, Esq. teaches Writing for Public Speaking (105PS), Business Writing (107B), Legal Writing (107L), and Advanced Legal Writing (110L). As a retired business litigator, her research interests range from the function and process of collaborative work in business spaces to the intersection, interference, and imposition of laws on the workplace environment.

INT 94UO

- **Title:** The Future of Global Progress
- **Department:** Writing
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Robert Samuels
- **Instructor Email:** bobsamuels_us@yahoo.com
- **Day - Time - Room:** Wednesday 11:00-11:50 in HSSB 4202
- **Enroll Code:** 28035

Course Description: This seminar will discuss the history and future of global progress in relation to economics, politics, philosophy, and history. We will study how politicians and the media hide global progress and present an overly negative view of the world. This seminar requires student participation and light reading.

Bio: I have been teaching for 20 years,, and I have PhDs in Psychology and English. I am the author of 11 published books.

INT 94UP

- **Title:** We are Gauchos: Collective Memory and Community Identity
- **Department:** Writing Program
- **Seminar Type:** First Year Exploration

- **Units:** 1
- **Instructor:** Kathy Patterson
- **Instructor Email:** kpatterson@ucsb.edu
- **Day - Time - Room:** Wednesday 3:00-3:50 in HSSB 1232
- **Enroll Code:** 28043

Course Description: This seminar explores campus and Isla Vista sites, artifacts, and practices illustrating how what we remember and forget about our shared past shapes who we are in the present and who we may be in the future. Field observation and archival research informed by readings from memory studies and local history will be used to examine who we are as Gauchos. Half of the classes will be in a classroom seminar setting; the other half will take place in the field.

Bio: I am a Continuing Lecturer in the UCSB Writing Program. I teach first year writing, upper division writing in the Social Sciences and Humanities, and Community Writing.

INT 94VA

- **Title:** Responsive and Accessible Web Design
- **Department:** Writing Program
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Madeleine Sorapure
- **Instructor Email:** sorapure@writing.ucsb.edu
- **Day - Time - Room:** Monday 4:00-4:50 in PHELP S 1518
- **Enroll Code:** 64261

Course Description: In this course, you'll work through the process of creating a website that you can use for your academic, professional, and personal work during your time at UCSB. No prior experience is expected; the course is intended for beginners to web design.

Bio: Madeleine Sorapure is director of the Writing Program and of the Multimedia Communication track of the Professional Writing Minor. Her teaching and research focus on digital composition, web design, and data visualization.

INT 94VD

- **Title:** Puppet Design and Fabrication
- **Department:** Theater and Dance
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Christina McCarthy
- **Instructor Email:** cmccarthy@theaterdance.ucsb.edu
- **Day - Time - Room:** Monday 11:00-11:50 in HSSB 1105
- **Enroll Code:** 60871

Course Description: Build your own rod style puppet while immersing yourself in learning about various building techniques translatable to many puppet styles including shadow puppets, marionettes, and large scale parade puppets. Each student will design and fabricate their own puppet and have the opportunity to delve into simple mechanisms for realistic body movement.

Bio: Christina McCarthy is a multimedia artist working in dance, theater, puppetry and film, embracing all of these forms as she seeks to tell stories in innovative ways. As a former student of Engineering, she decodes the mechanisms to give puppets realistic movement qualities with rudimentary building materials. She is a maker of animated performance space with a love for the unexpected.

INT 94VE

- **Title:** Advanced sensors and sensing technology
- **Department:** Electrical and Computer Engineering
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Hua Lee
- **Instructor Email:** hualee@ece.ucsb.edu
- **Day - Time - Room:** Wednesday 5:00-5:50 in Frank Hall 4164
- **Enroll Code:** 64279

Course Description: The seminar sequence covers a full collection of sensors and sensing technology, including radar, sonar, medical endoscopy, software-defined communication, and radiation detection.

Bio: Hua Lee received his BS degree from National Taiwan University in 1974, and MS and Ph.D. degree from UC Santa Barbara in 1978 and 1980 respectively. He returned to UC Santa Barbara in 1990 where he is currently Distinguished Professor of Electrical and Computer Engineering Department. Prior to his return to UCSB, he was on the faculty of the University of Illinois at Urbana-Champaign. His research interests cover the areas of imaging system optimization, high-performance image formation algorithms, synthetic aperture radar and sonar systems, acoustic microscopy, microwave nondestructive evaluation, tera-hertz imaging, tomographic ground-penetrating radar imaging, and reconfigurable sensing systems.

Professor Lee served as Chairman of Department of Electrical and Computer Engineering from 1998 to 2002. From 2007 to 2012, he serves as Technical Director of the National Security Institute. In the professional societies, Dr. Lee served as the Chairman of the 18th, 24th, and 30th International Symposium on Acoustical Imaging in 1989, 1998, and 2009 respectively. He also served as Co-Chair of the 13th International Workshop on Maximum Entropy and Bayesian Methods in 1993 and the 9th International Ground-Penetrating Radar Conference in 2002. From 1988 to 1994, he served as Editor of the International Journal of Imaging Systems and Technology. He also served as an Associate Editor of IEEE Transactions on Circuits and Systems for Video Technology from 1992 to 1995, and Associate Editor of IEEE Transactions on Image Processing from 1994 to 1998.

Professor Lee received the Presidential Young Investigator Award in 1985 for his work in imaging system optimization. He was elected Professor of the Year in 1992 by the Mortar Board National Honor Society. Dr. Lee was also given the Nineteenth Pattern Recognition Society Award in 1993. In 1998, he received the UC Santa Barbara Academic Senate Distinguished Teaching Award. He also received UCSB College of Engineering Outstanding Faculty Award in 2000, 2006, 2015, 2016, 2017 and 2018. In 2011, he received the Technical

Achievement Award of the International Symposium on Acoustical Imaging. Professor Lee is a Fellow of the Acoustical Society of America and IEEE.

Dr. Lee's publications include eight books: Imaging Technology (IEEE Press, 1986), Modern Acoustical Imaging (IEEE Press, 1986), Engineering Analysis: A Vector Space Approach (John Wiley, 1988), Acoustical Imaging, Vol. 18 (Plenum Press, 1991), Acoustical Imaging, Vol. 24 (Kluwer Academic/Plenum Publishers, 2001), Acoustical Imaging, Vol. 30 (Kluwer Academic/Plenum Publishers, 2011), Biomedical Devices and Technology (Wiley, 2012), and Acoustical Sensing and Imaging (CRC Press, 2015).

INT 94VR

- **Title:** Once Upon a Time in the West
- **Department:** Spanish and Portuguese
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Jorge Luis Castillo
- **Instructor Email:** castillo@spanport.ucsb.edu
- **Day - Time - Room:** Monday 2:00-2:50 in PHELP 1508
- **Enroll Code:** 64022

Course Description: A chronological overview of the so-called "adult" or "mature" Westerns from the 1950s til the 1960s. Adult Westerns no longer idealize or sanitize the genre (amiable singing stars like singing cowboy Roy Rogers wane). They become increasingly violent and delve into sexual themes and scenes, indulging sometimes in auto referential or parodic scenarios. This tendency culminates in the Spaghetti Westerns of the late sixties and early 70s. The seminar will focus on the Westerns of John Ford, Fred Zinneman, Budd Boetticher, Edward Dmytryk, Sergio Corbucci, Sam Peckinpah and Sergio Leone.

Bio: Jorge Luis Castillo (Ph.D. Harvard University, 1995) is a Professor of Spanish American Literature at the University of California, Santa Barbara. He has published a novel (*La estaciÃ³n florida*, 1997), two monographs (*El lenguaje y la poesÃa de Julio Herrera y Reissig* 1999 and *Gris en Azul* 2011), and two PEN Club Award winning collection of short stories (*La vida vulgar* 2004 and *La virgen de los boleros*). He has also published a variety of articles on Spanish American Romanticism, Modernismo, Posmodernismo, and the Avant-Garde.

INT 94VS

- **Title:** God Doesn't Exist and You Have No Free Will
- **Department:** Philosophy
- **Seminar Type:** First Year Exploration
- **Units:** 1
- **Instructor:** Dan Korman
- **Instructor Email:** dkorman@ucsb.edu
- **Day - Time - Room:** Friday 2:00-2:50 in HSSB 1207
- **Enroll Code:** 64782

Course Description: Each week, we'll examine an argument for a radical or controversial conclusion, including: that God does not exist, that you have no free will, that you don't know anything, that it's irrational to fear death, that abortion is immoral, that eating meat is immoral, and that taxation is immoral.

Bio: I have been teaching philosophy at UCSB since 2017.