



List updated 10/20/2023

PLEASE READ THE FOLLOWING INFO ABOUT HONOR SEMINARS

Seminars are restricted to students currently enrolled in the College Honors Program through College of Letters and Science, or students in the College of Creative Studies.

Honor Seminars (INT 84's) are **two-unit** courses that provide an opportunity for research exploration in various disciplines and consider advanced studies beyond college. Honor seminars are for **First and Second-year students**. To earn honors credit, seminars must be completed with a **letter grade** of B or higher. **Eligible students may take 8 units maximum of INT 84 seminars.**

- **NO ADD CODES** will be given out for Honors Seminars. Please **DO NOT** email the instructor asking for one. Except for INT 84AH, this is by instructor approval with Professor Bibilashvili.
- **INT 84 Honors Seminars are lower-division and designed with First and Second-year students in mind. If you are a First or Second-year students in the Letters & Science Honors Program but have "Senior" standing due to units, you may request an exception to bypass this "Senior" unit restriction by emailing me at honorsmail@lsc.ucsb.edu *If you email me for a bypass - Please include your PERM & which "3" INT 84's you would like to bypass the unit restriction. Once a student receives the bypass, you must still enroll through GOLD during your active pass time, space remaining. A bypass does not override the unit cap in a given pass time of 10 units during Pass1.**
- **If you are in your Third or Fourth-year, you are NOT eligible to bypass the Senior unit standing restriction. No exceptions. Please read our website about the other opportunities to gain honor experiences. Like honor contracts, auto courses, etc.**

***Please note if your class is not a 10-week course the add/drop deadline may be earlier.**

Winter 2024 Honors Seminars

INT 84AH - "INT 84AH: Special Relativity for Pedestrians"

- **Seminar Type:** Honors
- **Department:** Physics
- **Instructor:** Tengiz Bibilashvili
- **Instructor Email:** tbib@physics.ucsb.edu
- **Day - Time - Room:** Wednesday 5:00-6:50 in PHELP 1445 *Open to Physics, Math, Statistics, Chemistry, and COE students. If you are not in one of these majors and still have interest in the class, please use this link: <https://forms.gle/tXyMpMyN47ghcdxWA>
- **Enroll Code:** 26609

Course Description: The goal of the seminar is to teach Special Relativity (SR) using Einstein Notation (EN). The class is designed for enthusiastic students with no or little background in SR. Prerequisite Physics 21, or at least concurrent enrollment in Physics 21. First we will see how EN is used in non-relativistic physics. Then we will learn SR using EN. At the end we will explore how relativistic kinematics is used in High Energy Experiments (HEX) in colliders (like LHC). Good grasp of EN will prepare students to better understand General Covariance of Physics laws like Maxwell's equations in Electromagnetism.

Bio: Dr. Tengiz Bibilashvili, known as Dr. B, completed his Ph.D. at Tbilisi State University. His doctoral thesis centered around Non-equilibrium Quantum Field Diagrammatics. Following this, he shifted his focus towards educating students in physics and currently holds the position of Academic Director of the U.S. Physics Team for the International Physics Olympiad.

INT 84AQ - "Literature, Arts, and Politics: An Approximation via 3 modules"

- **Seminar Type:** Honors
- **Department:** Spanish and Portuguese
- **Instructor:** Silvia Bermúdez
- **Instructor Email:** bermudez@spanport.ucsb.edu
- **Day - Time - Room:** Thursday 2:00-3:50 IN HSSB 1210
- **Enroll Code:** 55921

Course Description: This seminar examines political figures/authors, painters, and musicians from the Iberian Peninsula (with focus in Spanish and Galician), and from Latin America, beginning in the 19th Century and up to the present time by considering them in their historical and political contexts to answer the following question: What does it mean to be political when writing literature/producing art? This Honors Seminar invites students to explore diverse and enduring social issues and political concerns such as, among others, poverty, migration, Afro Latin American identities, and violence against women.

Bio: Silvia Bermúdez is Professor of Iberian and Latin American Studies in the Department of Spanish and Portuguese. Her current scholarship centers on Iberian feminisms, antiracist activism in 21st Century Spain, Peruvian poetry and music, and the social function of poetry. Her courses engage students in these areas of enquiry.

INT 84BC - "Yoga: Theory, Culture & Practice" - **UPDATED**

- **Seminar Type:** Honors

- **Department:** Black Studies
- **Instructor:** Roberto Strongman
- **Instructor Email:** rstrongman@ucsb.edu
- **Day - Time - Room:** ~~Monday 2:00-3:50 in GIRV 1119~~ **Thursday 2:00-3:50 in HSSB 1233**
- **Enroll Code:** 58909

Course Description: Yoga is a Sanskrit term that can be best translated as "Integration." The course aims to develop an integral understanding of the history of yogic knowledges with roots in South Asia, creolization with XIX Century European body culture during the era of British imperialism, and a capitalist and often culturally-appropriative global spread in the late XX Century and beyond. This historical and philosophical material will be "yoked" (a cognate of "yoga") with a physical asana practice: the class will be organized in weekly two-hour sessions, with the first hour devoted to lecture, presentation, discussion and journal writing and the second hour to a physical postural and breathing practice thematically wedded to the readings. As such, the deeper, even metaphysical, goal of the course will be to bring "union" to the budding scholar, fomenting a balanced, equanimous and holistic body-mind.

Bio: Ph.D. Literature (UCSD 2003). I am a scholar of embodiment, specializing in trance states. My latest book "Queering Black Atlantic Religions" (Duke UP, 2019) speaks to my interest in fomenting an awareness of the unity within the body-mind construct, the goal of "yoga." In addition to my academic credentials, I am also certified as a massage therapist by the state of California and as a yoga instructor at the 500-hour level (the highest recognizable credential in the field).

INT 84BG - "Introduction to Subtractive Manufacturing"

- **Seminar Type:** Honors
- **Department:** Physics
- **Instructor:** Deborah Fygenon
- **Instructor Email:** fygenon@ucsb.edu
- **Day - Time - Room:** Friday 9:00-10:50 in Broida 3324 ***This seminar will meet in the student machine shop for 3h a week in PSB-South 1707. Students will meet in the classroom on Friday's for 1 hour**
- **Enroll Code:** 62968

Course Description: Subtractive manufacturing is an umbrella term for machining and other material removal processes (e.g., cutting, boring, drilling, and grinding) by which solid pieces of plastic or metal are shaped to specification. This is a project-based course geared towards sophomores and motivated freshmen who want hands-on experience with subtractive manufacturing. The majority of course hours will be spent in the Physics Department Student Shop. The mission of the course is to instill a deep appreciation of machining, its capabilities, limitations and risks. Safety is paramount. Students must pass a safety screening, sign a liability waiver, adhere to rules regarding dress and comportment, and commit to schedules allowing adequate supervision.

Bio: Deborah Fygenon received a BS in physics from MIT, and a PhD in physics from Princeton. Her research seeks to understand and control biomolecular self-assembly and to use this knowledge to explore physical principles of molecular machinery and physical routes to the emergence of animate matter. Her teaching focuses on making the lower-division laboratory experience of physics majors impart skills essential to experimental research.

INT 84CC - "Art From Machines: Computer Numerical Control in the Hands of Creators"

- **Seminar Type:** Honors
- **Department:** Theater and Dance
- **Instructor:** Greg Mitchell
- **Instructor Email:** gmitchell@ucsb.edu
- **Day - Time - Room:** Tuesday 3:00 PM-4:50 in TD-W 1530
- **Enroll Code:** 26625

Course Description: Contemporary design and art such as sculpture and installation often integrate diverse kinds of 21st century technologies into their creation and execution. Some of those technologies that were once out of the reach of individual or unfunded artists are now becoming ubiquitous. We'll introduce the class to technological processes, machines, and applications that integrate computer control with creative work by using them to iterate real world objects. We'll extrapolate how these processes can be used to design studio sized fabrications and structures that are scale-able to impressive physical creations.

Bio: Greg Mitchell is an Associate Professor of Theatre Design. His work in Scenic Design, Lighting Design, Art Direction for Television, Projection, and Video Design has been seen around the world.

Professor Mitchell's recent projects have included Scenic, Lighting, and Costume designs for Arjuna's Dilemma, the first western style opera in Nepal. The Jazz-fusion cross cultural work was created as site specific production in one of the world's oldest Hindu temples, a UNESCO site at Patan Durbar Square in Kathmandu.

He collaborated with Opera Panama and the Panama Symphony Orchestra to design a site specific production of Macbeth in Panama City in the 400 year old ruin of the Convento de las Monjas Concepciones. In addition to scenery designed to accommodate the fragile archaeological site, he projection mapped the interior of the structure to create a media design that aligned with the architecture.

In Dublin, Ireland Professor Mitchell created an installation performing space in the Boys School at Smock Alley, the oldest extant theatre in Ireland, for the Creative Artists Collaborative involving a three story tall sculptural work and a projection mapping of the medieval architecture.

Recently he worked with Ping Chong and Company as a lighting and video projection designer on the new documentary-theatre production of Aan Yátx'u Sáani: Noble People of the Land.

Theatre work includes Off-Broadway productions in New York City including Classical Theatre of Harlem's Tartuffe Supreme, Classic Stage Company's Tempest Tossed, Baruch Performing Arts The Actors Rap, 321 Arts A Night in the Mind of Jim Jones. Other notable New York productions encompass years of collaboration with the site specific Brave New World Rep which yielded a large scale immersive production of Shakespeare's The Tempest on the Coney Island Boardwalk, The Merry Wives of Windsor (Terrace), Lynn Nottage's Fabulation, and Fahrenheit 451 presented at the Prospect Park Amphitheatre as part of Celebrate Brooklyn's 2010 Season. He has designed numerous other productions in the city for organizations including Three Graces Theatre, New York Theatre Experiment, The New York International Fringe Festival, and the New York Musical Festival.

Professor Mitchell's regional theatre work spans hundreds of productions around the country including a multiple productions in Anchorage and Juneau Alaska for Perseverance Theatre Company, in Maine at the Pensobscot Theatre Company, and Theatre at Monmouth, and seasons as the resident designer at Washington DC's Source Theatre Company and Washington Stage Guild. Elsewhere his theatre designs have been seen at Mac-Haydn (NY), Curtain Call (NY), Alpine Theatre Project (MT), The Kennedy Center (DC), The Studio Theatre, (DC), African Continuum Theatre Company (DC), Tsunami Theatre (DC), Washington Shakespeare Company (DC), Imagination Stage (MD), Rep Stage (MD), Sierra Rep (CA), Summer Rep (CA), Hackmatack Playhouse (ME), American Stage Festival (NH), Playhouse on the Square (TN), Texas Shakespeare Festival (TX), Bristol Riverside Theatre (PA), Capital Playhouse (WA), and The Historic Lao Theatre (HI).

Design for opera includes international productions in Nepal, Panama, and the costumes for Tannhauser in Tirana Albania for their national theatre Teatri Kombetar i Operas dhe i Baletit. He has worked on the development of new operas including a commission for the Princess Sophia about the sinking of a passenger ship off the Alaskan coast in 1918, and Llantos about the intersection of Gypsies and Jews during the inquisition. He has designed multiple productions for the Capital City Opera (DC), Juilliard Opera (NY), New Opera NYC (NY), and Opera Modesto (CA), and Chicago Opera Theatre (upcoming).

As an art director and assistant art director, Professor Mitchell has worked on projects for ESPN, CNBC, MTV, and VH1.

In educational theatre, Professor Mitchell has served as guest artist, lecturer, or faculty member at the University of Maine at Orono, Whitman College, Fort Lewis College, Catholic University, CUNY Laguardia, and Kathmandu University School of the Arts.

His work outside of the theatre includes planning and designing events, architectural spaces, and interactive installations for clients such as Heineken, Pink, The Food Network, Vornado Realty NYC, among many others. The range of this work spans turning a half acre of New York's meat packing district into a Pumpkin Patch for Old Navy to multi-story interactive incendiary art for Nevada's Burning Man.

Professor Mitchell is a proud member of USA Local 829, the union of stage designers. His work has been nominated for several awards including the Helen Hayes Award, Broadwayworld Awards, and Indy Awards.

INT 84CO - "Channel Islands Literature: The Lone Woman of San Nicolas"

- **Seminar Type:** Honors
- **Department:** Germanic and Slavic Studies
- **Instructor:** Sara Pankenier Weld
- **Instructor Email:** saraweld@ucsb.edu

- **Day - Time - Room:** Friday 9:00-11:50 in PHELP 6206C ***This seminar has a fieldtrip to Santa Cruz Island February 17-19, 2023 – weather permitting. Please read below for further info**
- **Enroll Code:** 26633

Course Description: In this recurring Honors Seminar on “Channel Islands Literature,” students will discuss literature related to the Channel Islands, located off the coast of Santa Barbara, and, if conditions permit, visit the Channel Islands as part of a field trip for the course. In Winter 2024, the course will focus on “The Lone Woman of San Nicolas,” whose story is fictionalized in Scott O’Dell’s *Island of the Blue Dolphins*. The story of the Lone Woman of San Nicolas will be reexamined from a variety of perspectives, including literary, historical, archeological, anthropological, and Indigenous scholarly perspectives, and through dialogue with the recent literary response *Dear Miss Karana* by Eric Elliott. Students will work together on arrangements, prepare presentations on scholarly work, complete a creative project, and write a reflective or scholarly paper on a topic of their choice. As long as conditions permit, a majority of the course contact hours will take place during an intensive weekend field trip to the Channel Islands, so students should plan to be available to visit Santa Cruz Island and spend time at the UC field station there on February 17-19, 2024. If conditions do not permit, alternative programming/field trips to local or mainland sites will be conducted in this period instead.

Bio: Sara Pankenier Weld is a Professor of Slavic and Comparative Literature who researches childhood and children's literature across national and disciplinary boundaries. She is an islander by blood and loves the Channel Islands off-shore of Santa Barbara. She likes to travel, backpack, hike, and camp. She lives in Santa Barbara with her family, including 3 school-aged kids. This is the third time she is offering this course.

INT 84CT - “Neuroscience of Chronic Pain”

- **Seminar Type:** *Honors*
- **Department:** Physics
- **Instructor:** Paul Hansma
- **Instructor Email:** phansma@ucsb.edu
- **Day - Time - Room:** Monday 10:00-11:50 in ILP 4207
- **Enroll Code:** 55939

Course Description: Chronic pain involves neuroplastic changes in the brain that are only beginning to be understood. There are now practical techniques for reversing these changes based on clinical experience. Our multidisciplinary group here at UCSB has done 2 studies to identify the physiological correlates of chronic pain and 4 studies using biofeedback, together with chronic pain education, to help people reverse the neuroplastic changes and decrease or, in some cases, eliminate their chronic pain.

But there is no fundamental understanding yet, at the level of neurons and neuron interactions, of how the neuroplastic changes originate and how they are reversed.

I also collaborate with Prof. Ken Kosik on the electrophysiology of neural circuits. Most recently we are using multielectrode arrays with thousands of electrodes to study human brain organoids. We see repetitive neural firing patterns in these organoids, with no body and no connections to sensory data, that may have some similarities to the repetitive neural firing patterns that are involved in chronic pain.

This honors seminar will explore the connections between repetitive neural firing patterns in organoids and in chronic pain sufferers with the hope of getting some insights into fundamental science-based approaches for decreasing the undesirable neural firing patterns involved in chronic pain.

Bio: Paul Hansma, PhD, is a physicist at the University of California, Santa Barbara and a researcher in the Neuroscience Research Institute. His current research focuses on neurobiology and activity of human brain organoids as revealed by multi-electrode arrays. His inventions include Atomic Force Microscopes that function with samples in air or fluid, which have been commercialized by Digital Instruments (now Bruker) and Asylum Research (now part of Oxford Instruments), the Scanning Ion Conductance Microscope, and Bone Diagnostic Instruments including the Osteoprobe® commercialized by Active Life Scientific. He has over 350 publications, with over 50,000 citations and an H factor of 114. His most recent publications are primarily in neuroscience.

INT 84ZB - “Causes and Consequences of Sea-Level Rise: A Geologic Perspective”

- **Seminar Type:** Honors
- **Department:** Earth Science
- **Instructor:** Alex Simms
- **Instructor Email:** asimms@geol.ucsb.edu
- **Day - Time - Room:** Monday 4:00-4:50 in GIRV 1106 ***This seminar will have a fieldtrip on a weekend. Date TBD**
- **Enroll Code:** 62745

Course Description: During this course we will discuss the causes of sea-level rise at several different time scales and its influence on the natural and geologic system.

Bio: Professor Simms received his BS in Geology from Oklahoma State University and his PhD from Rice University. After completing his PhD he started as an assistant professor at Oklahoma State University before moving to UCSB in 2010. He has over 20 years of experience studying past sea-level changes from locations across the globe ranging from Antarctica to South Texas.

INT 84ZL - “Social Innovation and Entrepreneurship: Tools for Changemakers”

- **Seminar Type:** Honors
- **Department:** Writing Program
- **Instructor:** Paul Rogers
- **Instructor Email:** paulrogers@writing.ucsb.edu
- **Day - Time - Room:** Wednesday 11:00-12:50 in HSSB 1228
- **Enroll Code:** 55947

Course Description: Social entrepreneurship has its origins in the work of a group of actors, social entrepreneurs, who introduce solutions to pressing social and environmental problems (e.g., poverty, human trafficking, climate change). The object of social entrepreneurs, broadly stated, is to improve the quality of life for people in practical ways. To make these improvements, social entrepreneurs use the tools of enterprise and business in combination with community engagement and the power of ordinary citizens to create novel solutions to what are typically localized problems. Examples of these innovative solutions include the development of micro-finance, community-sourced emergency preparedness social media platforms, greenscaping programs for heavily polluted urban areas, integrated systems to combat human trafficking, and much more. While individuals fitting the description of social entrepreneur have lived throughout history, it is only in the past 40 years that social entrepreneurship has been galvanized into a recognized field of activity. In this sense, social entrepreneurship represents a deliberate reframing and destabilization of the narrative related

to what we commonly refer to as the nonprofit sector; in principle, social entrepreneurs are individuals who play by a different and somewhat hybrid set of rules than that of either business or traditional non-profits as they apply “the mindset, processes, tools, and techniques of business entrepreneurship to the pursuit of a social and/or environmental mission” (Kickul and Lyons, 2016, p.1). The course aims to cover four primary learning outcomes Develop Knowledge of Changemaking and Changemakers (Including social entrepreneurs) Habits of Mind Communicative Competence - Ways of Being -UNDERSTAND THE FIELD OF SOCIAL ENTREPRENEURSHIP - How it differs from traditional non-profit activity, social enterprise, corporate social responsibility, philanthropy, and service projects.

Identify historical & contemporary examples of social entrepreneurs: the traits and qualities of social entrepreneurs and their organizations; the strategies and ideas they use to address local, national and global challenges; the nature of the organizations social entrepreneurs lead; the ways social entrepreneurs measure impact.

Develop deep understanding of the competencies associated with social innovation and social entrepreneurship, especially empathy, teamwork and leadership, which have been identified as the foundational attributes for making change.

HABITS OF MIND

Use systems thinking: Possess the ability to analyze problems in context of systems, identify root causes of systemic failure, search for critical leverage points in leading systemic change.

COMMUNICATIVE COMPETENCE

Gain experience in creating and communicating new, complex, and audience appropriate messages in a wide variety of genres and media aimed at furthering entrepreneurial solutions to global challenges.

WAYS OF BEING

Understand oneself: Gain awareness of personal passions, motivations, aspirations, abilities, limitations, and a commitment to work on cultivating strengths and well-being over the course of one’s professional and personal life.

Deepened sense of purpose: Develop greater awareness of the change one wants to see in the world and the self-permission to take risks to pursue it.

Bio: Paul Rogers is an associate professor of Writing Studies at the University of California, Santa Barbara, where he also earned his PhD in education (2008). He is a cofounder and former chair of the International Society for the Advancement of Writing Research. Paul’s primary focus is on educational research and advancing transformation in policy and practice related to writing and literacy through data-informed decision making at all levels. Paul has served as a strategic advisor to Ashoka: Innovators for the Public - the world's 5th ranked NGO and a leading sponsor of social entrepreneurs around the world - in a variety of capacities including their work in advancing the vision of Everyone a Changemaker in K-12 and higher education. Paul is a recipient of AAC&U’s K. Patricia Cross Award for leadership in higher education, and NCTE’s Janet Emig Award for research in English education. He is the editor of seven coedited volumes, including the 2022 book *International Models of Changemaker Education* and numerous other publications. His favorite activities are spending time with his family (the Seven Hearts Tribe), surfing, running, hiking, playing basketball, and reading.

INT 84ZN - “The Psychology of Conspiracy Theories”

- **Seminar Type:** Honors
- **Department:** PBS
- **Instructor:** Tamsin German

- **Instructor Email:** tamsingerman@ucsb.edu
- **Day - Time - Room:** Tuesday 1:00-2:50 in PSY-E 3834
- **Enroll Code:** 63248

Course Description: This seminar addresses the propensity for humans across all cultures, and across history, to believe in conspiracy theories. Conspiracy theories propose that certain significant world events are caused by the secret and deliberate actions of powerful malevolent groups. The class will look at the elements that make something a conspiracy theory, including how they are to be distinguished from actual conspiracies, and draw on recent research in a variety of areas of psychological science (evolutionary, perceptual, cognitive, social, and neuro) as well as on anthropological, historical, and sociological evidence to account for why belief in them is so widespread. We cover specific topics including the way our minds can sometimes see patterns even when none are there; how we identify actors with different kinds of intentions, especially hostile intentions; how our identification with the groups to which we belong can promote sensitivity to threats from outgroups, especially outgroups we perceive to have more power than us. We also address how our minds have cognitive systems for guarding against misinformation, but also how these can be circumvented by conspiracy theories. We look at how our thinking biases can maintain beliefs once they are formed, and the ways in which people are resistant to evidence that challenges their beliefs. Consulting all this evidence allows us to diagnose why some people are more likely to believe in conspiracy theories than others. The last part of the class addresses what the consequences of widespread belief in conspiracy theories are, as well as how we might approach combating the negative effects of conspiratorial thinking. Students will engage in readings, in class exercises, small group discussions and short class presentations, and the seminar will end with a session devoted to longer group presentations of new conspiracy theories that the groups in the class will be invited to invent based on the material covered across the quarter.

Bio: [Tamsin Cleo German is a Professor in the Department of Psychological and Brain Sciences. Her research concerns the cognitive foundations of the human capacity for understanding other people, and its relationship to other domains of human thinking, including how we represent and reason about supernatural phenomena and how and why humans can be subject to beliefs in conspiracy theories and pseudoscience.](#)