COLLEGE OF LETTERS AND SCIENCE
HONORS PROGRAM
UNIVERSITY OF CALIFORNIA SANTA BARBARA

Spring 2024 Honors Seminars

List updated 1/30/2024

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 intended 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 84AT, this is by instructor approval with Professor Bibilashivili.*

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

INT 84AG – *"Latin American Women in Popular Music: Boleros, Salsa, La Nueva Canción, and Pop"*

- **Seminar Type**: *Honors*
- **Department:** Spanish and Portuguese
- **Instructor:** Silvia Bermúdez
- **Instructor Email:** bermudez@spanport.ucsb.edu
- **Day - Time - Room:** Wendesday 2:00-3:50 in HSSB 1214
- **Enroll Code:** 61002

Course Description: This Seminar introduces students to some of the most famous Latin American women composers and singers within the musical traditions of boleros, salsa, Chilean and Argentinian Folk music, and contemporary pop. Students are to understand how these genres construct an idea of Latin American identity through instrumentation and the musicians' performance. Among the artists to be considered are the Mexican bolero composer María Grever, who worked as a film composer for Paramount Pictures and 20th Century Fox beginning in 1920; Violeta Parra, Chilean composer, singer-songwriter, and pioneer of the Nueva Canción Chilena (The Chilean New Song); Celia Cruz (Cuba-United States), known as "The Queen of Salsa," and whose catchphrase "¡Azúcar!" ("Sugar!") has become an emblem of salsa music. We will also consider Argentinian

Mercedes Sosa, regarded as “the conscience of Latin America;” and Colombian Shakira, whose revenge track “Music Sessions, Vol. 53” with Argentine DJ and record producer Bizarrap enriched the time-honored tradition from the wider genre of break-up music.

Bio: 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 84AT – *“Blackbody Radiation: how quantum was born”*

- **Seminar Type**: *Honors*
- **Department:** Physics
- **Instructor:** Tengiz Bibilashvili
- **Instructor Email:** tbib@physics.ucsb.edu
- **Day - Time - Room:** Wednesday 5:00-6:50 in ILP 3207 ***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/uYGr6qdigGhM5BQa8
- **Enroll Code:** 60947

Course Description: The objective of the seminar is to provide an in-depth understanding of thermal radiation physics. We will delve into the intricacies of classical thermodynamics, exploring instances where certain outcomes could not be accurate without the transformative conceptual contributions of Max Planck. His paradigm-shifting ideas laid the groundwork for physicists to construct the framework of quantum mechanics. As the seminar progresses, attendees will uncover the connection between thermal physics and the emergence of the notion of photons as discrete units of the electromagnetic field. Through this exploration, participants will gain insights into the profound interplay between thermal radiation and the quantum nature of light.

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 84BC – *“Yoga: Theory, Culture & Practice”*

- **Seminar Type**: *Honors*
- **Department:** Black Studies
- **Instructor:** Roberto Strongman
- **Instructor Email:** rstrongman@ucsb.edu
- **Day - Time - Room:** Tuesday & Friday 2:00-3:50 in GIRV 2128 ***This seminar will run from April 2nd – May 3rd**
- **Enroll Code:** 27409

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).

Here are the details of your Honors seminar for Spring 2024 - INT 84BG - "Introduction to Subtractive Manufacturing". Please take a look at the listing below and let me know if you would like any changes to be made to any of the information.

INT 84BG – "*Introduction to Subtractive Manufacturing*"

- **Seminar Type**: *Honors*
- **Department:** Physics
- **Instructor:** Andrew Jayich is the Instructor & Lincoln Satterthwaite in the Lab
- **Instructor Email:** amj44@ucsb.edu , link@ucsb.edu
- **Day - Time - Room:** Fridays from 9:00-10:50 in Broida 3324
- **Enroll Code:** 60954

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 (e.g., blocks, bars, rods) of plastic or metal are shaped. This is a project-based course geared towards sophomores and motivated freshmen who want to acquire first-hand knowledge of and hands-on experience with subtractive manufacturing. The mission of the course is to instill a deep appreciation of machining, its capabilities, limitations and risks. A majority of the course contact hours will take place in the Physics Department Student Machine Shop. Safety is of primary importance. Students must pass a safety screening and adhere to rules regarding dress and comportment.

Bio: Scientist

INT 84BL – "*Ethical Tech: Navigating the 'Should' in Innovation*"

- **Seminar Type**: *Honors*
- **Department:** Computer Science
- **Instructor:** Maryam Majedi
- **Instructor Email:** majedi@ucsb.edu
- **Day - Time - Room:** Monday 4:00-5:50 in HSSB 4201
- **Enroll Code:** 62935

Course Description: In an era where technological advancements are occurring at an unprecedented rate, the course "Ethical Tech: Navigating the 'Should' in Innovation" offers a crucial perspective on the intersection of ethics and technology. This seminar invites students to embark on a thought-provoking journey, exploring not just the limitless possibilities of what they can create with technology, but more importantly, reflecting on whether they should create them.

Throughout this course, students will engage with fundamental ethical theories and principles, applying them to real-world scenarios and emerging technological trends.
The seminars will foster critical thinking and ethical reasoning, encouraging students to contemplate the broader implications of technology on society, the environment, and future generations.
Some possible topics include:
The Role of Ethics in Technology Development
Balancing Innovation with Moral Responsibility
Privacy, Security, and Ethical Dilemmas in the Digital Age
From AI and Data Privacy - Where Should We Draw the Line?
Through a combination of interactive discussions, case studies, and presentations, students will gain insights into how ethical considerations can and should influence technological innovation. They will learn to identify potential ethical issues and develop strategies to address them, ensuring that the technology they create contributes positively to society.

Bio: Dr. Maryam Majedi joined the Department of Computer Science at the University of California, Santa Barbara, as an Assistant Teaching Professor in 2023. She completed a teaching stream postdoc at the University of Toronto, where she worked with the Embedded Ethics Education Initiative (E3I) team and introduced the first ethics modules for CS courses in Canada. Dr. Majedi earned her Ph.D. in data privacy at the University of Calgary. Her Ph.D. work presents a novel privacy policy modeling technique. Prior to her Ph.D., she earned a Master of Science degree in High-Performance Scientific Computing from the University of New Brunswick. Dr. Majedi also completed a fellowship in Medical Innovation at Western University.
Dr. Majedi's research primarily revolves around Embedded Ethics and Data Privacy. She explores the intersection of computer science and ethical considerations, aiming to develop modules that facilitate the integration of ethics and data privacy principles into computer science education.

INT 84BR – *"Studies in Language, Writing and Learning: An Undergraduate Research Design Laboratory"*

- **Seminar Type**: *Honors*
- **Department:** Linguistics -- English for Multilingual Students
- **Instructor:** Karyn Kessler
- **Instructor Email:** kkessler@linguistics.ucsb.edu
- **Day - Time - Room:** Monday & Wednesday 1:00-2:50 SH 3605 ***This seminar will meet weeks the first 2-6 weeks of the quarter**
- **Enroll Code:** 62901

Course Description: How do language, learning, and writing researchers design studies to explore concepts such as development, integration, process, and improvement? In this seminar, students will be introduced to the landscape of inquiry across multiple disciplinary fields, including applied linguistics, writing studies and education. Drawing on foundational understandings of epistemology and the ways in which disciplinary researchers come to conclusions and implications, students will work in small, interdisciplinary teams to identify and design their own research study in response to a genuine curiosity that is relevant to language, writing or education studies. Learning outcomes for this course include 1. an increased understanding of "the disciplinary lens" through which research is designed, 2. a demonstrated ability to identify and design an interdisciplinary research study, and 3. a deepened sense of collaborative learning and problem solving.

Bio: Karyn E. Kessler, Ph.D., is an Associate Professor of Teaching and the Director of the English for Multilingual Students Program. As a teacher and scholar, she is particularly interested in the higher education concept of

academic integrity, source-based writing across the disciplines and across languages, language program leadership, and genre studies. She works closely with TESOL minor students and teaches Second Language Acquisition as well as English Grammar for Teachers. Professor Kessler is a writer and editor as well as a linguistic consultant for the American Board of Family Medicine where she reviews medical board exam questions for potential racial, ethnic, gender, or linguistic bias. Dr. Kessler has given a TEDx talk on the subject of linguistic diversity. Beyond work, Karyn is a long-distance runner, organ donation advocate, returned Peace Corps Volunteer, and mom.

INT 84BT – *"Web-based Robotic Control of Modern Physics Labs"*

- **Seminar Type**: *Honors*
- **Department:** Physics
- **Instructor:** Deborah Fygenson
- **Instructor Email:** fygenson@ucsb.edu
- **Day - Time - Room:** Friday 10:00-11:50 in Broida 3324
- **Enroll Code:** 62828

Course Description: Evidence that necessitated the development of Quantum Mechanics is not readily observable in daily life. Nor is it easily experienced via lecture demonstrations. Ideally, the curious student re-enacts the key experiments prior to their first QM course. However, schools with few physics majors often lack the resources to make the sophisticated apparatus required available to their students. At UCSB, we "remotified" our Modern Physics apparatus to allow authentic manipulation over a web interface during the pandemic. Now, we're working to make these apparatus available to students/schools around the world. In this seminar, students will get to interact with the remotified apparatus both on-line and in person and thereby gain first-hand experience with the underpinnings of QM, as well as learn the basics of CAD, 3D printing, robotic control, web interfacing, and pedagogy that went into adapting these experiments for remote instruction. Pairs of students will then be assigned to upgrade some aspect of the remote lab user experience.

Bio: Deborah Fygenson 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 84ZA – *"Owens Valley, Mono Lake, and the LA Aqueduct"*

- **Seminar Type**: *Honors*
- **Department:** Earth Science
- **Instructor:** Jordan F Clark
- **Instructor Email:** jfclark@geol.ucsb.edu
- **Day - Time - Room:** Friday 1:00-1:50 in GIRV 2135 ***This seminar has a 3-day field trip**
- **Enroll Code:** 62810

Course Description: This class focuses on a three-day field trip that will leave Friday morning and return Sunday. During the trip we will stop at important sites related to the LA Aqueduct, Mono Lake, and watch a PBS documentary. Finally, the class will meet twice prior and once after the field trip.

Bio: Dr. Clark is an environmental scientist who works in geochemistry and hydrology. Much of his current research relates to water supply problems in California. In particular, he investigates groundwater flow near Managed Aquifer Recharge sites. He has taught a version of this class numerous times.

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:** Mondays from 4:00-4:50 in GIRV 2110. ***This seminar requires an overnight camping field trip**
- **Enroll Code:** 27474

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 84ZG – *"Mexican Politics: The 2024 Presidential Election"*

- **Seminar Type**: *Honors*
- **Department:** Political Science
- **Instructor:** Kathleen Bruhn
- **Instructor Email:** halcon@ucsb.edu
- **Day - Time - Room:** Thursday 10:00 - 11:50 in HSSB 1227
- **Enroll Code:** 60962

Course Description: This seminar will examine contemporary Mexican politics through the lens of the 2024 presidential elections in Mexico. In addition to English sources on major issues and candidates, students will be invited to access Spanish language newspapers and original survey data collected by the instructor to understand what this election reveals about Mexican politics and the prospects for democratic consolidation in Mexico.

Bio: Professor Bruhn is a scholar of comparative politics, and the author of several books on Mexican and Latin American politics. She specializes in the study of political parties, social movements, protest, and elections.

INT 84ZI – *"Eating Architecture: Food Spaces and Architectural Design"*

- **Seminar Type**: *Honors*
- **Department:** History of Art and Architecture

- **Instructor:** Swati Chattopadhyay
- **Instructor Email:** swati@arthistory.ucsb.edu
- **Day - Time - Room:** Wednesday 1:00-2:50 in ARTS 1245
- **Enroll Code:** 63180

Course Description: "*Eating Architecture: Food Spaces and Architectural Design*" will explore the role of architecture in supporting what, where, and how we eat. The course will introduce students to the modern architectural history of food and beverage production and consumption with examples drawn from around the globe. The title of the course is borrowed from a book *Eating Architecture* (MIT Press, 2006) and is an invitation to think creatively and critically about food and architecture. Students will have the opportunity to develop their understanding of changes in food taste, spaces, and labor by working with objects and architectural drawings, and through site visits. Classes will meet for 2 hours each week for ten weeks.
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Bio: Swati Chattopadhyay is Professor in the Department of History of Art and Architecture, California, Santa Barbara. An architect and architectural historian, she researches and teaches modern architecture and urbanism, and empires and environmental histories.

INT 84ZL – "*Social Innovation: Tools for Changemakers*"

- **Seminar Type**: *Honors*
- **Department:** Writing Program
- **Instructor:** Paul Rogers
- **Instructor Email:** paulrogers@writing.ucsb.edu
- **Day - Time - Room:** Thursday 2:00-3:50 in HSSB 1211
- **Enroll Code:** 60970

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). Through discussion, projects, reflection, and guest lecturers, students will gain an appreciation for the work of social entrepreneurship and explore their own changemaker journey.
The course aims to cover four primary learning outcomes:
1. Develop Knowledge of Changemaking and Changemakers (Including social entrepreneurs)
2. Habits of Mind

3. Communicative Competence
4. 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- the world's 5th ranked NGO and a leading sponsor of social entrepreneurs around the world. He has worked in a variety of capacities ito advance the vision of 'Everyone a Changemaker' in K-12 schooling 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 eight 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, hiking, playing basketball, and reading.

INT 84ZP – *"An Exploration of Linguistic Justice Policies and Practices in Context"*

- **Seminar Type**: *Honors*
- **Department:** Linguistics -- English for Multilingual Students
- **Instructor:** Karyn Kessler
- **Instructor Email:** kkessler@linguistics.ucsb.edu
- **Day - Time - Room:** Tuesday and Thursday 10:00-11:50 in SH 3605 - ***This seminar will meet the first 2-6 weeks of the quarter**
- **Enroll Code:** 60996

Course Description: What is linguistic justice and how does it relate to social justice and/or IDEA (Inclusion, Diversity, Equity, Access) efforts in varied contexts and communities? In this seminar, students will explore how the concept of linguistic justice is defined and operationalized through research and fieldwork of their own in a chosen context. Drawing on foundational literature in the fields of Linguistics, Applied Linguistics and Writing Studies, students will be asked to demonstrate their understanding of linguistic justice as a concept as well as to

analyze exemplar projects and policies in real-world and varied linguistic environments. Throughout the course, students will work approximately half of the time with a partner or small group out of the classroom to 1. Identify and explore a real-world linguistic context, 2. analyze the historical and current contributing factors of the linguistic environment through data collection (including textual analyses and interviews where possible) and, 3. present their new offering — policies and/or practices written and designed to improve linguistic justice to members within their chosen linguistic environment — in a poster session format. Learning outcomes for this course include an increased understanding of linguistic justice as a concept with real-world applications, improved ability to accurately and comprehensively analyze linguistic injustices and discriminations from an historical and sociolinguistic perspective, ability to demonstrate deeper learning through sustained collaborative and problem-solving project work, and an increased personal sense of global mindedness.

Bio: Karyn E. Kessler, Ph.D., is an Associate Teaching Professor and the Director of the English for Multilingual Students Program in the Linguistics Department at UC Santa Barbara. As a teacher and scholar, she is particularly interested in supporting multilingual students' academic reading and writing strategies, including their ability to recognize and respond appropriately to language patterns and vocabulary within different genres across disciplines. She works closely with TESOL minor students and loves to connect prospective teachers to new opportunities to learn and grow as professionals. Professor Kessler is a writer and editor as well as a linguistic consultant for the American Board of Family Medicine where she reviews medical board exam questions for potential racial, ethnic, gender, or linguistic bias. Dr. Kessler has given a TEDx talk on the subject of linguistic diversity. Beyond work, Karyn is a long-distance runner, organ donation advocate, returned Peace Corps Volunteer, and momma bear.