UCI Freshman Seminar Program

SPRING 2015 FRESHMAN SEMINARS
This quarter we are offering 17 different Freshman Seminars. The table below lists all of them as they are listed in the schedule of classes under University Studies 3. Clicking on the abbreviated title of the seminar that interests you in the table will take you to a full description, including the full course title, instructor's department and biography. For some seminars, this table is the only place you will find the room location, so please make a note of it if you enroll.

Please note that students may take a maximum of THREE University Studies freshman seminars during their ENTIRE time at UCI so long as subjects vary.

All sections are open to students of all majors

<table>
<thead>
<tr>
<th>SOC Title</th>
<th>Code</th>
<th>Instructor</th>
<th>Time</th>
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<tr>
<td>LINGUISTX FUNPROFIT</td>
<td>87601</td>
<td>KAY, D.</td>
<td>Th 10:00-10:50</td>
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<tr>
<td>WANT TO BE A STAR?</td>
<td>87602</td>
<td>HILL, D.</td>
<td>Th 4:00-4:50p</td>
<td>MESA CCC</td>
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<tr>
<td>DIY NEUROSCI</td>
<td>87603</td>
<td>DO, A.</td>
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<td>GLOBALIZATION</td>
<td>87604</td>
<td>SMITH, D.</td>
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<td>SCHWAB, M.</td>
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<td>MEDITATION/DREAM</td>
<td>87606</td>
<td>KUBIAK, A.</td>
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<tr>
<td>SHAKEN SHAKESPEARE</td>
<td>87607</td>
<td>PAGE, J.</td>
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<tr>
<td>Course</td>
<td>Code</td>
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<td>MILLENNIUM PROBLEMS</td>
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<td>RUSSO, B.</td>
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<td>EDUCATE NOT MEDICAT</td>
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<td>ECONOMICS &amp; SPORTS</td>
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<td>MILANI, F.</td>
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<td>EVIDENCE-BASED MED.</td>
<td>87612</td>
<td>LIN, S.</td>
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<tr>
<td>EDGE OF THE SEA</td>
<td>87613</td>
<td>AGUILAR-ROCA, N.</td>
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<td>ORGANIC MOLECULES</td>
<td>87614</td>
<td>DONG, V.</td>
<td>Th</td>
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<tr>
<td>SEX AND COLONIALISM</td>
<td>87615</td>
<td>WILLOUGHBY-HER, T.</td>
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<tr>
<td>SOCIETY &amp; MEDICINE</td>
<td>87616</td>
<td>BANIMAHD, F.</td>
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<td>BIOMIMETIC DESIGN</td>
<td>87617</td>
<td>LOUDON, C.</td>
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<tr>
<td>WHY STUDY ABROAD</td>
<td>87619</td>
<td>LEVINE, G.</td>
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SCHOOL OF THE ARTS

*Meditation/Dream*

Anthony Kubiak, Drama

This quarter we will be investigating the mind through the medium of meditation, discussion and dream. Although we will look at the issues from an academic viewpoint, and I will discuss with you my own research and work within these areas, the focus of this particular seminar will be on learning simple meditation techniques in order to develop mental equilibrium and clarity, and to use these growing powers of clarity and calm to investigate our various mental states throughout the day and night—including dreams, flights of imagination, memories, and other activities of mind. Overall, I hope the class causes you to look at your mind with a bit more insight in order to see those things that make you unhappy, anxious or fearful, and what you might do to alleviate these negative emotions.

I am a Professor in the Drama Department researching the relationship between consciousness and performance. My focus is on meditative practice and shamanism.

*Shaken Shakespeare: Taking it to the Streets!*

Jane Page, Drama

This Seminar will provide participants the chance to “Shake up” their ideas about Shakespeare. We are taking the Bard across the campus. Participants can be involved in a variety of ways and demystify Shakespeare. No experience is necessary.

Jane Page, Head of Directing, Drama Department, Claire Trevor School of the Arts. Jane has a 30+ year career as a theatre director. She has worked across the United States and abroad. A unique approach to Shakespeare is one of Jane’s strengths as she has worked at numerous Shakespeare Festivals. She believes that Shakespeare belongs to everyone!

*So, You Want to be a star?*

Donald Hill, Drama

Identify what success means to you. Create strategies and action plans to achieve your goals and examine what stops you. Explore a research process for how to find a mentor. Learn the art of how to become unstoppable in going for what you really want in life. Develop greater self-esteem by getting in touch with your personal power and achieve a higher level of self-love and acceptance.

Don Hill has worked in the professional theater as an actor, stage manager, production manager, director, producer and union negotiator in a thirty-two year career spanning both coasts. As the Vice Chair of the Drama Department, Professor Hill teaches stage management and acting. For the past three years he was voted “Outstanding Professor of the Year” for the Claire Trevor School of the Arts by the graduating senior class.

SCHOOL OF BIOLOGICAL SCIENCES

*Biomimetic design: technological inspiration from nature*

Catherine Loudon, Ecology & Evolutionary Biology
Velcro, flying and walking robots, and self-cleaning surfaces are just a few examples of devices that draw on the amazing properties of biological organisms to inform novel technological advances.

Dr. Catherine Loudon does interdisciplinary research at the interface of biological and physical sciences, using physical principles to understand the function of biological organisms. Her Ph.D. is in Zoology with a minor in Mechanical Engineering.

*Introduction to Evidence-Based Medicine*

**Shin Lin, Developmental & Cell Biology**

How does one determine whether certain medicines and therapies are safe and effective? This course discusses basic principles in Evidence-Based Medicine, including: usefulness and limitations of laboratory research and clinical trials; Food and Drug Administration (FDA) regulations on drugs, medical devices, and dietary supplements.

Dr. Shin Lin, formerly Chairman of Biophysics at Johns Hopkins University, is a Professor in the Department of Developmental & Cell Biology, the Department of Biomedical Engineering, and the Susan Samueli Center for Integrative Medicine at UCI; and a Visiting Professor at the Shanghai University of Traditional Chinese Medicine. His research interest and expertise are centered on the use of modern technologies to investigate the effectiveness and mechanisms of Oriental therapies, including mind-body practices, acupuncture and herbal remedies. He served on the U.S. National Advisory Council for Complementary Medicine and Integrative Health, and is on the editorial board of the journal *Chinese Medicine* and the *Journal of Alternative and Complementary Medicine*.

*Life at the edge of the sea*

**Nancy Aguilar-Roca, Ecology & Evolutionary Biology**

Why don't some marine animals die when they are exposed to air? What traits allow some fish to walk out of the water and thrive? What can we learn from studying organisms that live at the edge of the ocean? Why are their habitats in jeopardy? During the quarter we'll learn what life is like for organisms at the edge of the ocean, what techniques researchers use to study them and what we can do to save their habitats. We'll also go on a field trip to a local intertidal habitat (date and location will depend on weather and group preference).

I'm on faculty in the department of Ecology and Evolutionary Biology. I have a degree in Marine Biology, but I'm unfortunately prone to sea sickness. Fortunately some fascinating creatures live at the edge of the ocean and I don't need a boat to get to them. I've had the pleasure of studying air-breathing fishes in environments ranging from Upper Newport Bay to Malaysian mangroves. I teach Bio 94 "Organisms to Ecosystems" and direct the upper division physiology teaching labs. My current research focus is on best practices for teaching science.
Perpetual Peace?
Martin Schwab, Philosophy

Shortly after the French Revolution, and in response to the wars it triggered, Immanual Kant conceived of a plan that would secure peace among nations. Much has changed in our attitudes towards war and peace since that time. But Kant's ideas continue to be discussed and used.

Trained in Germany, I have specialized in 19th and 20th century European philosophy.

Sex, Erotics, and the Colonial
Tiffany Willoughby-Herard, African American Studies

How does a sustained examination of erotics help us understand the history of colonialism? Along with the theme of this year the Season of Love, Lust and Greed this course will draw on scholarship on international relations, economic justice, and sexuality to answer this question.

Tiffany Willoughby-Herard (Assistant Professor, African American Studies, University of California, Irvine) conducts research in Black political thought on Black internationalism, the Black radical tradition, and Black feminism and Third World feminisms. Her first book, Waste of a White Skin (forthcoming University of California Press), emphasizes transnational linkages that made the politics of scientific racism and civilizing missions directed toward “poor Whites” the central currency for US and South African intellectuals and race relations policy makers. She examines the role of the Carnegie Corporation’s international philanthropy in South Africa as an expression of the making of global whiteness and the consolidation of Afrikaner Nationalism.

Study Abroad in a Globalized World
Glenn Levine, German

Why study abroad? Where should I go? How long should I study abroad? How can I plan study abroad to fit with my major? Can I afford to study abroad, and how much will it cost? Do I have to master a foreign language before I go? What should I expect when abroad? How does UCI help me to go abroad? How will study abroad affect me, my education, my career, my family and friends, the world?

These are some of the practical questions we'll explore in depth in this seminar. On the more scholarly side, we'll also consider how the study abroad experience involves acculturating to a new country and people, and the ways you can act as an "ethnographer" of a new country and culture while abroad and do your bit as a "global citizen" (we'll also discuss what these terms mean).

Readings, to be provided digitally as pdf files, are made up of short excerpts from a variety of books dealing with study abroad and exploring other cultures.

Glenn Levine is a Professor of German in the Department of European Languages and Studies. Professor Levine teaches courses in German and German-Jewish history and culture, as well as applied
linguistics and language pedagogy. He is an applied linguist who researches and publishes on second-language acquisition, bilingualism and language pedagogy. He is also closely involved with the Jewish Studies program at UCI.

SCHOOL OF INFORMATION AND COMPUTER SCIENCES

Linguistics for Fun and Profit
David Kay, Informatics and Computer Sciences

One of the reasons we go to college is to learn more about how the world works. We all use at least one language, but most people's understanding of why the language they speak behaves as it does is limited to folkloric misconception. Language is rich and complex—even linguists don't completely understand it—but learning some of what linguists know is fascinating: It helps us see things we otherwise wouldn't notice, and it's useful background for many human activities, from academic work to child-rearing. We'll address questions like these: Why can't most English speakers pronounce (or even recognize) the tones in Chinese; why do some non-native speakers of English have trouble pronouncing phrases like "there is a rather pithy theme"? People in Rome 2000 years ago spoke Latin; why do Romans speak Italian today? If "ain't" isn't a word, what is it? Why is English spelling so inconsistent? Why do young children pick up new languages more easily than adults? Why can Danes and Norwegians understand each other's speech more easily than they can understand speakers of Finnish? How is it that we can understand sentences describing entirely novel ideas (like "a zebra-striped anteater riding a flying skateboard")? Why can't we have a real conversation with Siri?

You will read and view a wide range of source materials, largely online. You will participate actively in the discussion at each class meeting, drawing questions and comments from your own experience and writing occasional reaction pieces on your observations.

David G. Kay came to UCI from UCLA in 1990. He started his academic career as an undergraduate major in linguistics; from there he transitioned to law and computer science. At UCI he teaches courses in introductory computer science (for majors and for non-majors), human-computer interaction, programming languages, technical communication, pedagogy for TAs and for undergrads, and computer law.

SCHOOL OF MEDICINE

Introduction to Neuroscience Electronics (aka Do-it-yourself (DIY) Neuroscience)
An Do, Neurology

The neurosciences research is seen as very expensive and challenging to become involved in. However, the DIY electronics and “Maker” movement can change all of this. Many hobbyists are starting to use neuronal signals to build exciting hobby projects. This seminar will help students gain understanding on how neural signals are acquired and processed, including electromyogram (EMG) and electroencephalogram (EEG). In this hands-on class, students will learn to design their own signal acquisition amplifier arrays as well as program microcontrollers to perform this signal acquisition. These fundamental skills can later be used for academic research projects, senior design projects, or for exciting hobby projects.
As an assistant professor in the Department of Neurology, I spend 80% of my time doing research in brain-computer interfaces, and developing the technology to become a clinical tool to treat paralysis. I am the PI/Co-PI on several federal (NSF, VA), state (Roman Reed Spinal Cord Injury Research Foundation), and foundation grants (American Academy of Neurology) to undertake this research. As a result of this research, my lab has made breakthroughs in the field. One notable breakthrough is the development of a BCI, which for the first time in human history, has enabled a person with paraplegia due to spinal cord injury to regain brain-controlled walking. My lab is now currently heavily engaged in the design of specialized electronics for fully implantable brain-computer interface systems. I spend the remaining 20% time performing clinical duties at the UCI Medical Center, where I practice general neurology and neuro-rehabilitation.

**Society and Medicine, An Uneasy Marriage!: How Completely Unrelated Forces, Included Media and Profit Share Our View of Medicine and Our Expectations of It**

Faried Banimahd, Emergency Medicine

Technology and rapid spread of "quasi-information", popular culture, big pharma, and government regulations all impact society and their relationship with healthcare. Mostly for the worse. We will explore this idea and how valid it is.

I am a Fellow in Education and clinical instructor in the department of emergency medicine. I am also doing research on alcohol risk mitigation in patients presenting to the ED. F. Banimahd MD FAAEM

**SCHOOL OF PHYSICAL SCIENCES**

**Sex, drugs, and pest control: The organic chemistry edge**

Vy Dong, Chemistry

The study of organic molecules (compounds made up of the element carbon) is an essential one for a wide-range of scientific and health-related careers. But why? It's because organic molecules make-up almost everything around us, including our food, clothing, and medicines. Professor Dong will introduce key concepts in organic chemistry and its impact outside our classroom. This freshman course will help students get an edge on the notorious Chem 51 series (taken sophomore year). Through an interactive classroom environment, students will practice critical and creative thinking skills. Importantly, the course will provide mentorship and guidance for undergraduates seeking to learn more about research and career opportunities in chemistry.

Vy Dong was born in Big, Spring Texas and graduated from UC Irvine as a chemistry major. After graduate studies at Caltech and Berkeley, Professor Dong began her academic career at the University of Toronto. In 2012, she returned to her alma mater where she's currently teaching organic chemistry and running a research lab focused on molecular design.

**The Millennium Problems**

Bernard Russo, Math

In 2000, the Clay Mathematics Institute offered a million-dollar prize to anyone able to solve any of what it considered the seven most important mathematical problems at the time. These ""Millennium
Problems" were chosen not for theoretical beauty alone, but because many of them deal with concepts in fields like physics, computer science, and engineering, and exist because practitioners in those fields are already using theoretical or practical design solutions that have not been mathematically proven. Each of the seven problems would certainly be difficult to understand on your own. The seminar will provide a historical and mathematical background for each of these problems, and in the process, reveal how the solutions to these problems would bring an exponential leap for human knowledge as a whole.

A passing knowledge of mathematics is important but a major in the subject is not, and this seminar should satisfy anyone wishing to know more about modern theoretical mathematics.


PROGRAM IN PUBLIC HEALTH Educating Instead of Medicating in Public Health
Zuzana Bic, Public Health
The goal of the seminar is to learn how to think healthy and increase the level of health literacy.

Dr. Zuzana Bic has doctorate degrees in both Public Health and Medicine. She is the co-author of the book No More Headaches, No More Migraines. Dr. Bic studies the impact and application of "lifestyle medicine" (nutrition, physical activity, stress management) on slowing the process of aging and developing of other chronic diseases (headaches, diabetes II, cardiovascular diseases, osteoporosis, fibromyalgia /chronic fatigue syndrome, arthritis, cancer, depression, drug abuse, and others.). She is also working to develop health literacy programs for the K-12 curriculum and for the general public. She is a director of student experience in public health practice and is an advisor for the Students" Public Health Association at UCI. http://faculty.sites.uci.edu/zbic/

SCHOOL OF SOCIAL SCIENCESGlobalization: Problem or Panacea?
David A. Smith, Sociology
The word "globalization" is familiar to anyone tuned into global media, and is rapidly emerging as the favorite mantras of political leaders, business executives and news reporters all around the world. It is clearly one of those faddish buzzword that is frequently used but rarely defined (and heavily laden with ideological implications). In this seminar we will explore what "globalization" means. We will try to examine the long-term historical origins of a modern world-system, as well as grapple with more recent worldwide political and economic changes that occurred in the last two or three decades. Finally, we will analyze and discuss whether a world beset with myriad problems (grinding poverty and inequality, international tension and terrorism, severe ecological threats, etc), is better or worse off given the current level of "globalization." Has an increasingly integrated world led become a better one, where problems are more easily solved? Or, as the globalization critics argue, has this phenomena just made things worse for many or most people on the planet? Finally, how can we as citizens and ordinary people constructively participate in our new globalized society?

David A. Smith is a Professor of Sociology (and Planning, Policy and Design) at UCI. His research
focuses on world-system analysis, global trade and commodity chains, world cities and comparative urbanization, and social change in East Asia. He is currently the President-Elect of the SOCIETY FOR THE STUDY OF SOCIAL PROBLEMS (SSSP) and Editor of INTERNATIONAL JOURNAL OF COMPARATIVE SOCIOLOGY and a former collegiate track and cross-country runner who still runs several miles every day.

Win-Win: Economics through Sports
Fabio Milani, Economics
This seminar will introduce students to a selection of research topics in economics using sports as a laboratory and as sources of amazingly-detailed data. Economists are interested in and routinely study how individuals make decisions under uncertainty, the functioning of labor markets, and how psychological (e.g., cognitive biases) or social (e.g., peer effects) elements affect decisions and outcomes. Sports provide a variety of situations and data that can be exploited to test existing economic theories, identify reasons for their eventual failures, and possibly uncover novel relations. The course is not a course on the subfield of sport economics per se (microeconomic aspects of the sports business and related markets), or on analytic approaches applied to sports (sabermetrics, etc.). Ideal students for the course should have an interest in economics, business, or other social sciences, besides being passionate about sports.

Fabio Milani is an Associate Professor in the Department of Economics. His research interests focus on macroeconomics, international finance, and econometrics. When not researching, he can be found shooting three-pointers at the local basketball court.

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A Division of Undergraduate Education Program

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