

From Harvard to Berkeley, major research universities have discovered that establishing a program of freshman seminars is an excellent way to help new freshmen make the transition to university life. While large lecture classes with teaching assistant-led sections continue to be the norm for the freshman year, freshman seminars give new students the chance to get to know a faculty member personally at the beginning of the students' academic career and to study a topic in depth with a small group of peers. Benefits of freshman seminars to both faculty and students include:

- Helping some students decide on a major;
- Helping faculty recruit students into their major;
- Giving faculty a chance to explore an academic interest outside their field, with a small group of freshman students;
- Beginning an association that leads to a faculty letter of reference at the end of the undergraduate career.



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

The following seminars will be offered during the Fall 2005 semester. Additional seminars will be available in the spring semester. Seminars are listed alphabetically, by title. This brochure contains a page of information on each Freshman Seminar and the faculty member who will teach it.

Course	Faculty	School
The Chemistry, Biology and Social	Matthew P. Meyer	Natural Sciences
Impact of Viruses		
Civil Rights in Merced	Kenji Hakuta	Social Sciences,
		Humanities and Arts
Climate Change, Sierra Nevada	Roger Bales	Engineering
Snowpack and California's Water		
Supply		
A Day in the Life of Leopold Bloom	Mike Colvin	Natural Sciences
From the Dust Bowl to the Garden of	Shawn Kantor and Jan	Social Sciences,
Eden: Migration to California	Goggans	Humanities and Arts
During the Great Depression		
Introduction to the Geology of	Peggy O'Day	Natural Sciences
Yosemite and the Sierra Nevada		
Great Women in Science	Jennifer O. Manilay	Natural Sciences
The Growth of Scientific Knowledge:	Benoît Dayrat	Natural Sciences
Molecular Biology as a Case Study		
Income Inequality and Social Class	Katie Winder	Social Sciences,
in America		Humanities and Arts
The Myth and Reality of Scientific	Aleksandr Noy	Natural Sciences
Discovery		
National Parks in the 21st Century	Sam Traina	Natural Sciences
Natural History and Evolution	Manuel Martin-	Social Sciences,
	Rodriguez	Humanities and Arts
Open Source/Open Systems: a	Jeff Wright	Engineering
Software Revolution	-	
Psychotherapy Meta-Analysis	Will Shadish	Social Sciences,
		Humanities and Arts
Stem Cell Biology and Regenerative	Maria Pallavicini	Natural Sciences
Medicine		
You Are What You Drink: How Safe	Tom Harmon	Engineering
is Your Water?		-



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

The Chemistry, Biology and Social Impact of Viruses

[CHEM 90X—001; 1 unit]

This course serves to introduce students to chemical biology while also making them aware of the impact that viruses have on the general population. From the scientific view, this course will teach a little about how molecular recognition happens in the body, i. e. how a virus recognizes its target and how the body recognizes pathogens. Additionally, some aspects of immune system function will be covered in the course. The social impact component is designed to make students aware of the challenges they face in making personal choices.

FACULTY / BIOGRAPHY:

Matthew P. Meyer

Professor Meyer's research is directed toward developing techniques to aid in drug discovery. He received two B.S. degrees from the University of Kansas, a M.S. from the University of Wisconsin, and a Ph.D. from Texas A & M University.

SCHOOL:

Natural Sciences

READING LIST:

Not Available

TIME:

Monday, 2:00-2:50 p.m., Kolligian Library 464



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

Civil Rights in Merced

[PUBP 90X—001; 1 unit]

Reading of Charles Ogletree's <u>All Deliberate Speed</u>, an autobiography by a Harvard Law professor from Merced growing up in the era of school desegregation and the Civil Rights Movement. The course will be include participation by prominent African-American community leaders from Merced; students will participate in an oral history project.

FACULTY / BIOGRAPHY:

Kenji Hakuta

Kenji Hakuta is the Founding Dean of the School of Social Sciences, Humanities and Arts. An experimental psycholinguist by training, he is best known for his work in the areas of psycholinguistics, bilingualism, and the acquisition of English in immigrant students. Hakuta is a member of the National Academy of Education. Hakuta received his BA Magna Cum Laude in Psychology and Social Relations, and his Ph.D. in Experimental Psychology, both from Harvard University. Before joining UC Merced, he taught at Yale University, the University of California at Santa Cruz, and most recently, he was the Vida Jacks Professor of Education at Stanford University.

SCHOOL:

Social Sciences, Humanities and Arts

READING LIST:

Charles Ogletree, All Deliberate Speed

TIME:

Friday, 1:00-1:50 p.m., Kolligian Library 474



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

Climate Change, Sierra Nevada Snowpack and California's Water Supply [ENVE 90X-004; 1 unit]

Students will explore the connections between the Sierra Nevada snowpack and California's water use for agriculture, cities, hydropower and in-stream habitats. Tensions between water supply and demand, particularly in the context of both natural climate variability and human-induced climate change will be included. Most classes will involve inquiry-based activities done in small groups with instructor guidance. Weekly meeting for 10 weeks and one field trip.

FACULTY / BIOGRAPHY:

Roger Bales

Dr. Bales, Professor of Environmental Engineering, teaches water and climate, with particular emphasis on the Sierra Nevada and other mountains of the Western U.S. He has a B.S. from Purdue University, an M.S. from the University of California, Berkeley and a Ph.D. from the California Institute of Technology. His research interests include the study of mountain hydrology and biogeochemistry, snow, polar climate and glaciology, and water quality. He and his research group are currently carrying out studies in the Sierra Nevada, in Valles Caldera, in Greenland, and in Antarctica. For the past several years, he has also focused on the broader impacts of climate change in the Western U.S.

SCHOOL:

Engineering

READING LIST:

Course Reading List: (paper copies available in UC Merced library)

- Excerpts from: The Sierra Nevada Ecosystem Project, Final report to Congress, 1996 (http://ceres.ca.gov/snep/pubs/)
- Excerpts from: Confronting Climate Change in California, 1999 (http://www.ucsusa.org/climatechange/ccreport.html)
- Excerpts from: The Potential Consequences of Climate Variability and Change for California. The California Regional Assessment, 2002 (http://www.usgcrp.gov/usgcrp/nacc/california.htm)
- Excerpts from: The California Water Plan 2005 (http://www.waterplan.water.ca.gov/cwpu2005)

TIME:

Monday, 4:00-5:20 p.m., Kolligian Library 359; includes one Saturday field trip to Yosemite. Class will end before Thanksgiving.

ADDITIONAL INFORMATION:

Grades will be based on in-class activities, class preparation and participation, and short homework assignments. The field trip is planned for November 19 (tentative).



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

A Day in the Life of Leopold Bloom: James Joyce's Ulysses

[CORE 90X—001; 1 unit]

The novel *Ulysses* by James Joyce describes the lives of a few seemingly ordinary people in Dublin, Ireland on a single day in 1904. Despite this apparently limited scope, it is frequently listed as one of the best and most challenging novels of all time. This seminar will be an informal tour through the novel lead by an enthusiastic reader (rather than a scholar) of this great novel. We will read selections of the novel, discuss its characters, story and structure, and seek to understand its humor, pathos and modern relevance.

FACULTY / BIOGRAPHY:

Michael Colvin

Michael Colvin is a professor of biology in the School of Natural Sciences. His research involves the use of advanced computers to model biomolecular processes. While an undergraduate student at MIT, he became an enthusiastic reader of modernist novels, especially the books of James Joyce, Joseph Conrad and Ford Maddox Ford. During the subsequent 25 years he has continued to be an avid reader and collector of the books of James Joyce.

SCHOOL:

Natural Sciences

READING LIST:

Ulysses by James Joyce, 1992 Modern Library Edition. Some additional handouts and online readings.

TIME:

Wednesday, 4:00-4:50 p.m., Kolligian Library 464

ADDITIONAL INFORMATION:

The primary assignment for this seminar will be a reading assignment of 15-45 pages per week from *Ulysses* and some supplementary materials. Student grades will be based on participation in discussions.



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

From the **Dust Bowl to the Garden of Eden:** Migration to California During the Great **Depression**

[CORE 90X—003; 1 unit]

California has long welcomed and relied on imported labor. In agriculture, particularly, labor was historically characterized by seasonal tides and immigrant waves. Starting in the mid 1800s, Chinese, Japanese, Sikh, Filipino and Mexicans followed one upon the next through subsequent decades. Politically and sociologically, their impact was felt in certain migration policies and laws that were the equivalent of the South's "Jim Crow" laws; culturally, they remained isolated. But in the 1930s, after years of a fairly steady state of immigrant and migrant labor entering California, Dust Bowl migrants from a four-state area in the country's heartland began pouring into the state. This seminar will explore the economic, political, and social ramifications of the massive exodus from the Dust Bowl to what migrants considered their Garden of Eden – California.

FACULTY / BIOGRAPHY:

Jan Goggans and Shawn Kantor

Jan Goggans is a professor of literature and is finishing a book on California Depression-era photographer Dorothea Lange. Professor Goggans has taught courses on Arts and Humanities in the Great Depression.

Shawn Kantor is a professor of economics and is working on a book-length research project examining the economic and social consequences of various New Deal policies during the Great Depression.

SCHOOL:

Social Sciences, Humanities and Arts

READING LIST:

John Steinbeck, <u>The Grapes of Wrath</u> John Steinbeck, <u>In Dubious Battle</u>

TIME:

Monday, 4:00-4:50 p.m., Kolligian Library 464



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

Introduction to the **Geology of Yosemite and the Sierra Nevada** [ESS 90X—001; 1 unit]

This seminar will focus on aspects of the geology and glacial history of Yosemite and the Sierra Nevada, with discussion of how past changes in climate have influenced today's landscape and ecosystems, and how future climate change will impact natural process and human society. Most of the seminar will be completed during a weekend field trip through the foothills and into Yosemite National Park. Exercises during the trip will introduce students to basic geologic and glacial features and concepts, and principles of scientific observation and hypothesis testing. A discussion theme for the seminar will focus on evidence of past climate change through observation of Yosemite's glacial features, the potential impacts of future climate change on water balance, ecosystem function, and land use in the Sierra Nevada and California, and how this in turn may influence economics, policy, and decision-making.

FACULTY / BIOGRAPHY:

Peggy O'Day

Peggy O'Day is a Professor in the School of Natural Sciences where she teaches Earth systems science and environmental chemistry. She received her undergraduate degree from UC Davis, her M.S. from Cornell University, and her Ph.D. from Stanford University in geological and applied Earth sciences. Her research interests include study of the chemistry, mobility, and bioavailability of contaminants in the environment, mineral-aqueous interface geochemistry, and abiotic and biotic geochemical cycling and microbial colonization in hydrothermal systems.

SCHOOL:

Natural Sciences

READING LIST:

M. Hill, *Geology of the Sierra Neveda* Selections from: J. LeConte (1890), A Journal of Ramblings Through the High Sierra

TIME:

Pre-trip meeting: Wed. Oct. 5, 4-7 p.m., Kolligian Library 470 Field trip: Sat.-Sun., Oct. 8-9 Post-trip: Wed. Oct. 12, 4-7 p.m.

ADDITIONAL INFORMATION:

This freshman seminar will have a special format in order to introduce students first-hand to geologic and glacier features of Yosemite and the Sierras. In preparation for the weekend trip, the class will meet for 3 hours during the week before to introduce concepts and points of discussion. The weekend trip will depart on Saturday morning, camp out on Saturday night, and return on Sunday evening. The week following the trip, the class will meet for 3 hours to review the trip and key concepts, conclude discussion questions posed during the field trip, and hand in written exercises.



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

Great Women in Science

[CORE 90X-002; 1 unit]

Women have made significant contributions to our scientific knowledge, yet these contributions often are de-emphasized or overlooked. The goal of this seminar is to foster an appreciation of great women scientists through studying their lives and their work. We will focus on women scientists who have been awarded the Nobel Prize or contributed to Nobel Prize-winning work. This will be achieved through faculty/student presentations and informal discussions.

FACULTY / BIOGRAPHY:

Jennifer O. Manilay, PhD

Dr. Manilay is a developmental immunologist and an Assistant Professor in the School of Natural Sciences at UC Merced. Her doctoral research focused on the mechanisms of self/non-self recognition in natural killer cells. Her recent topic of study focuses on the mechanisms that control cell fate decisions during T cell development in the thymus.

SCHOOL:

Natural Sciences

READING LIST:

McGrayne, Sharon Bertsch. <u>Nobel Prize Women in Science: Their Lives, Struggles and</u> <u>Momentous Discoveries, 2nd edition</u>. Joseph Henry Press (Washington, D.C.), 1998. Selected articles on Linda B. Buck, PhD, Recipient of 2004 Nobel Prize in Physiology or Medicine.

TIME:

Friday, 9:00-9:50 a.m., Kolligian Library 464



The **Growth of Scientific Knowledge: Molecular Biology as a Case Study** [BIS 90X—001; 1 unit]

One of the most fascinating problems of epistemology is the growth of scientific knowledge. Understanding how new theories or discoveries become part of our scientific knowledge requires one to consider a broad range of factors: sociological, philosophical, historical, theoretical, and technical. We will use the history of molecular biology as a case study to discuss some classical questions related to the development of scientific knowledge, such as: the impact of the segregation of scientists in —largely isolated— communities; whether major discoveries are sudden and made by individuals, or the result of long-term and collective efforts; whether or not discoveries could have been made in other places or countries; why surprising, accurate results or hypotheses can remain overlooked for quite some time. Students from all Schools are welcome to join the seminar that I envision as a series of discussions on how science "works" as a process. No knowledge in molecular biology is required.

FACULTY / BIOGRAPHY:

Benoît Dayrat

After a MS in Biochemistry and Molecular Biology (*Ecole Normale Supérieure*, 1994), I got my PhD in Systematics and Evolutionary Biology (University of Paris, 2000). My current research in Biology deals with the biodiversity and evolution of life, specifically mollusks. I propose this seminar because, in parallel of my empirical research, I am interested in epistemology, history and philosophy of science.

SCHOOL:

Natural Sciences

READING LIST:

"A History of Molecular Biology" by Michel Morange, Harvard University Press, 2000, translated by Matthew Cobb. Additional articles will be provided.

TIME:

Wednesday, 3:00-3:50 p.m., Kolligian Library 464



Income Inequality and Social Class in America

[CORE 90X-007; 1 unit]

The gap between the rich and poor in America has been growing since the early 1970'8s, at the same time that the perception of America as a nearly classless society has risen in popularity. This seminar will investigate the causes and economic implications of income inequality. Since income is an important determinant of social class, along with other factors such as education, race and ethnicity, we will also explore how the rising inequality has affected class status and mobility between classes. To do so, we will examine economic data and arguments as well as draw from the recent *New York Times* series on class in America.

FACULTY / BIOGRAPHY:

Katie Winder

Katie Winder is a professor of economics and does research on poverty and welfare, most recently with The Three Cities Welfare and Families Study. She also conducts research on the economic difficulties faced by working parents.

SCHOOL:

Social Sciences, Humanities and Arts

READING LIST:

(*subject to change) The New York Times, <u>Class Matters</u> (2005 series, selected articles) Ryscavage, Paul, <u>Income Inequality in America</u> (excerpts) *Zweig, Michael, <u>The Working Class Majority</u> *Shipler, David K. <u>The Working Poor</u>

TIME:

Wednesday, 10:00-10:50 p.m., Kolligian Library 464

ADDITIONAL INFORMATION:



The Myth and Reality of Scientific Discovery

[CORE 090X-006; 1 unit]

Major advances in science, such as quantum mechanics or structure of DNA, make an enormous impact on our society and often achieve mythical status; however, we often do not realize what events led to these monumental discoveries, or what role people's personalities and even chance played in bringing these events to life. We will attempt to look behind the myth of the scientific discovery being an orderly progression of ideas put forward by scientists locked in an ivory tower. We will explore the stories behind some of the pivotal discoveries in science and try to understand how people make them. We will also discuss the role of new tools in the discovery process as well as the role of governments and world events in fostering the progress in science.

FACULTY / BIOGRAPHY:

Aleksandr Noy

Aleksandr Noy is an adjunct professor in the School of Natural Sciences and a Staff Scientist at the Lawrence Livermore National Laboratory. His research involves using advanced tools to manipulate individual molecules as well as building tiny functional devices using new nanoscale materials. Growing up through high school, Aleksandr had an interest in science as well as a romanticized view of the scientific discovery process. Going through college and graduate school had a profound effect on some of these notions; however it did not cool down his interest in scientific discovery.

SCHOOL:

School: Natural Sciences

READING LIST:

James Watson *"The Double Helix"* Some additional handouts and online readings.

TIME:

Tuesday, 3:00-4:50 [every two weeks], Kolligian Library

ADDITIONAL INFORMATION:

The primary assignments for this seminar will be the selected reading from the book, as well as some additional handouts and web-based materials. Grades will be determined by discussion participation as well as a 10-minute final presentation on an important scientific discovery.



National Parks and the 21st Century

[CORE 090X-005; 1 unit]

This course will explore the history and future of national parks in American culture. Topics of discussion will include the use of public lands for conservation versus recreation, parks as laboratories and classrooms, and the interplay between the evolving American culture and the conservation movement. National Park Service rangers, scientists, and educators from Yosemite and Sequoia/Kings Canyon national parks will participate in each class session. Class participants will also spend one Saturday in Yosemite National Park and meeting behind the scenes with NPS officials and learning about the challenges they face in managing this national treasure.

FACULTY / BIOGRAPHY:

Sam Traina

Sam Traina is a native of the Central Valley, and holds B.S. and Ph.D. degrees in Soil Science from UC Berkeley. Dr. Traina was a faculty member in the School of Natural Resources at Ohio State University before returning to California to become the first Director of the UC Merced's Sierra Nevada Research Institute. Sam's own research is focused on chemical pollutants in air, soil and water.

SCHOOL:

Natural Science

READING LIST:

Selected course readings will be provided for the class.

TIME:

Tuesday, 7:00 – 7:50 p.m., Kolligian Library 473

ADDITIONAL INFORMATION:

This course will be jointly taught by Professor Traina, and by Steve Shackelton, the Chief Ranger of Yosemite National Park.



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

Natural History and Evolution [CORE 90X—004; 1 unit]

FACULTY / BIOGRAPHY: Manuel Martin-Rodriguez

Professor Martin-Rodriguez specializes in Chicano/a and Latino/a literature, film studies, literary theory and children's literature. He holds a Licenciatura en Filologia Hispanica from the University of Seville in Spain, a M.A. from the University of Houston, and a Ph.D. from UC Santa Barbara.

SCHOOL:

School: Social Sciences, Humanities and Arts

READING LIST:

Not Available

TIME:

Wednesday, 3:00-3:50 p.m., Kolligian Library 474



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

Open Source/Open Systems: a Software Revolution

[ENG 90X—001; 1 unit]:

A new model for software design, development, and use has emerged over the past two decades that is having a profound impact on the personal and professional productivity of technical professionals. Open source ("the process of systematically harnessing open development and decentralized peer review to lower costs and improve software quality") and open systems ("hardware and software implementations that conform to the body of standards that permits free and easy access to multiple vendor solutions") provide an ideal framework from which to explore exciting new opportunities for collaboration and cooperative professional exchange This seminar will review the history and accomplishments of the open source/systems movement, and examine the challenges that will be faced as it moves forward. Students will have the opportunity to hear first-hand from the pioneers of the open systems movement.

FACULTY / BIOGRAPHY:

Jeff Wright

Jeff Wright is a civil and environmental engineer and Dean of the School of Engineering. His research interests include use of advanced modeling and information technologies to improve water resources and environmental management; and design and implementation of computerbased spatial support systems for civil infrastructure, transportation, water resources, and land resources engineering and management. He received a B.A., B.S.E., and M.S.E. from the University of Washington and a Ph.D. from The Johns Hopkins University.

SCHOOL:

Engineering

READING LIST:

Not Available

TIME:

Monday, 5:00-6:50 p.m., Kolligian Library 470

ADDITIONAL INFORMATION:



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

Psychotherapy Meta-Analysis

[PSY 90X-001; 1 unit]

Does psychotherapy work? Does it make a difference what kind of psychotherapy is used? Can paraprofessionals do as well as professionally trained psychotherapists? This freshman seminar addresses these and related questions by examining psychotherapy meta-analyses—quantitative reviews of the literature using a method called meta-analysis. Don't worry! No prior quantitative training is assumed beyond basic arithmetic.

FACULTY / BIOGRAPHY:

William Shadish

William R. Shadish is Professor and Founding Faculty, University of California, Merced. He received his bachelor's degree in sociology from Santa Clara University in 1972, and his M.S. (1975) and Ph.D. (1978) degrees from Purdue University in clinical psychology. He completed a postdoctoral fellowship in methodology and program evaluation at Northwestern University from 1978-1981. His current research interests include experimental and quasi-experimental design, the empirical study of methodological issues, the methodology and practice of meta-analysis, and evaluation theory. He is author (with T.D. Cook & D.T. Campbell, 2002) of Experimental and Quasi-Experimental Designs for Generalized Causal Inference, (with T.D. Cook & L.C. Leviton, 1991) of Foundations of Program Evaluation, (with L. Robinson & C. Lu, 1997) of ES: A Computer Program and Manual for Effect Size Calculation, co-editor of five other volumes, and the author of over 100 articles and chapters. He was 1997 President of the American Evaluation Association, winner of the 1994 Paul F. Lazarsfeld Award for Evaluation Theory from the American Evaluation Association, the 2000 Robert Ingle Award for service to the American Evaluation Association, the 1994 and 1996 Outstanding Research Publication Awards from the American Association for Marriage and Family Therapy, and the 2002 Donald T. Campbell Award for Innovations in Methodology from the Policy Studies Organization. He is a Fellow of both the American Psychological Association and the American Psychological Society, Associate Editor of Multivariate Behavioral Research, and a past editor of New Directions for Evaluation.

SCHOOL:

Social Sciences, Humanities, and Arts

READING LIST:

We will read a different psychotherapy meta-analysis each week.

TIME:

Tuesday, 1:00-1:50 p.m., Kolligian Library 474

ADDITIONAL INFORMATION:

Each student will write a brief paper summarizing a meta-analysis that has not been covered in class.



COLLEGE ONE FRESHMAN SEMINAR PROGRAM FALL, 2005 LIST: INFORMATION FOR STUDENTS

COURSE TITLE / DESCRIPTION:

Stem Cell Biology and Regenerative Medicine

[BIS 90X—002; 1 unit]

This seminar will explore the biology of stem cells and their potential for regenerative medicine. Topics will include the origin and sources of stem cells, types of stem cells, and the biological challenges of using stem cells to replace diseased tissue. The ethical and societal challenges associated with using stem cells as a therapeutic alternatives are also topics for discussion.

FACULTY / BIOGRAPHY:

Maria Pallavicini

Dr. Pallavicini is the Dean of Natural Sciences. Her research emphasizes understanding the genetic and molecular changes that determine stem cell behavior in health and disease, especially cancer. Dr. Pallavicini holds a B.S. from UC Berkeley and a Ph.D. from the University of Utah.

SCHOOL:

Natural Sciences

READING LIST:

Current articles and information available on a number of websites, including <u>http://stemcells.nih.gov/info/basics/</u>.

TIME:

Monday, 6:00-6:50 p.m., Kolligian Library 464

ADDITIONAL INFORMATION:



You Are What You Drink: How Safe is Your Water?

[ENVE 90X-002; 1 unit]

Water is life to all of us and water supply management is central to California's (over-) development. In this seminar, we will take a close look at the water we drink every day: tap water, bottled water, reclaimed wastewater, and (in the near future) desalinized seawater. What are the risks (real, perceived and potential) posed to our drinking water supply? What are some of the impending threats to the safety of our water supply? Readings and discussion will revolve around water supply and treatment, chemicals and pathogens, estimating risk, and the regulations aimed at lowering risks. Example topics include reclaimed wastewater (toilet-to-tap), the Hinckley, CA case of hexavalent chromium in drinking water (as seen in Erin Brockovich), and others.

FACULTY / BIOGRAPHY:

Tom Harmon

Professor Harmon's research interests include contaminant transport in aquatic systems, soil and groundwater remediation, and development and use of environmental sensors. He holds a B.S. from The Johns Hopkins University and a M.S. and Ph.D. from Stanford University.

SCHOOL:

Engineering

READING LIST:

Selected course readings will be provided in class.

TIME:

Wednesday, 7:00-7:50 p.m., Kolligian Library 474

ADDITIONAL INFORMATION: