ALS 199H U-ENGAGE, Explore, Evolve with the UHC

CRN: 20770 Section TBD R 1700-1850 FURM 105 2 UHC Credits

Instructor: Toni Doolen

In this course you will be challenged to ENGAGE, EXPLORE, EVOLVE within a collaborative, and supportive Honors community. You will ENGAGE with the various services, resources and pathways that OSU has to offer, EXPLORE your own worldview, and your career and life goals in depth, and EVOLVE your skills in communication, critical thinking and self-directed learning. This course will also guide you through the beginning stages of the UHC Thesis, laying the ground work for a successful thesis experience. The course is team taught by faculty and peer leaders. Students must be in their first year, first term at OSU. Graded P/N. Satisfies **UHC Thesis and Elective.**

ANS 121H Introduction to Animal Sciences

CRN: 18467	Section 001 LEC	MWF 1000 - 1050	NASH 214	4 UHC Credits
CRN: 18468	Section 010 LAB	M 1300 - 1450	OATF 108	

Instructor: Matt Kennedy & Dawn Sherwood

Principles of breeding, physiology, nutrition and management as they apply to modern livestock and poultry production. Current issues affecting livestock and poultry production will be researched and discussed in class. Students will prepare and present oral and written information on the breeds of livestock and poultry. Hands-on opportunities with the various species will be provided in the laboratory sessions. Satisfies **Bacc Core Biological Sciences**.

ANTH 407H Principles of Population, Then and Now: from Malthus to Sustainability

CRN: 17258 Section 001 F 1000 - 1150 STAG 237 2 UHC Credits

Instructor: Roberta Hall & Richard Clinton

Thomas Malthus was one of the most influential theorists of the 19th century, a towering intellect by the age of twenty eight whose work shaped some of the central ideas of the modern era. His work on population was key to the development of evolutionary theory, and the concerns he raised about the relationship between population growth and resource scarcity remain central issues for all modern societies. This course will go beyond the familiar "Malthusian theory" and explore connections between human population dynamics and contemporary issues in evolution, ecology, and sustainable development.

Students who have taken this course say they enjoy not only the readings, which tie in directly with current issues in our society, but also appreciate the time that both professors make available for answering questions and discussing topics of interest. Readings include chapters from Malthus's famous essay An Essay on the Principle of Population, from E.F. Schumacher's Small is Beautiful, from Darwin's Origin of Species, and from books by contemporary scholars Paul Ehrlich and Herman Daly. Crosslisted with PS 407H. Satisfies **UHC Colloquia**.

BI 211H	Principles of Biology			
CRN: 20455	Section 001	MWF 1300 - 1350	CORD 3121	5 UHC Credits
	SIGN UP FOR ONE OF	THE LAB/401H PAIRS BELOW		
CRN: 14362 AND	Section 010	M 1400 - 1650	WNGR 226	Indira Rajagopal
CRN: 13112	BI 401H – Sec. 001	M 1400 – 1650	WNGR 226	Indira Rajagopal
OR				
CRN: 15754	Section 020	W 1400 - 1650	WNGR 226	Timothy Pusack
AND				
CRN: 15755	BI 401H - Sec. 002	W 1400 – 1650	WNGR 226	Timothy Pusack

Instructor: Indira Rajagopal & Timothy Pusack

Origins of life, energy transformations, plant and animal diversity. The optional BI 401H credit provides an additional credit for research done during the lab section. Course work for students enrolled and not enrolled in BI401H will be identical. Lecture, Lab, and additional research credit total 5 UHC credits. Additional \$30 fee. PREREQS: General Chemistry (may be taken concurrently). This course is for life science majors and pre-professional students. Satisfies Bacc Core Biological Sciences.

BI 314H	Cell and Molecular Biology - Recitation			
CRN: 15766	Section 001	TR 1400 - 1520	PHAR 305	2 UHC Credits
CRN: 15767 AND	Section 010	R 1000 - 1050	CORD 2035	
CRN: 17031	BI 405H - Sec 001	R 1000 - 1050	CORD 2035	

Instructor: Indira Rajagopal

Fundamental concepts of prokaryotic and eukaryotic cell biology. Emphasizes cell structure and function at the molecular level. This Honors recitation will focus on recent research. Students will read and discuss recent articles and write research papers on topics of special interest. Lecture common with non-Honors. Recitation is reserved for UHC students enrolled in lecture section of BI 314H. The optional BI 405H credit provides an additional credit for research done during the lab section. Course work for students enrolled and not enrolled in BI405H will be identical. Lecture, recitation, and reading and conference credit total 2 UHC credits and 5 OSU credits. Grades will be determined as follows: Exams (2 midterms and a final) 60%; Recitations (Reading, discussion, research paper, etc.) 40%. PREREQS: (BI 211/211H) and (BI 212/212H) and (BI 213/213H) and COREQS: CH 331 or CH334. Satisfies **UHC Elective.**

CBEE 101H	CHE, BIOE and ENVE Orientation				
CRN: 16832	Section 001 LEC	M 1800 - 1850	GILB 124	2 UHC Credits	
CRN: 16834 CRN: 16833	Section 012 REC Section 010 LAB	W 1500 - 1650 F 1500 - 1650	KEAR 212 GRAF 210		

Instructor: Skip Rochefort

Introduction to the Chemical, Biological, and Environmental Engineering profession for first year and transfer students. The primary purpose is to introduce students to the fields of chemical, biological, and environmental engineering and career opportunities within those fields, as well as to develop basic skills for a career in engineering. Lecture sec. 001 is common with non-Honors, Recitation and Lab are reserved for UHC students enrolled in the lecture section of CBEE 101H. Additional \$25 fee. Lecture, Rec and Lab, total 3 OSU credits. Satisfies **UHC Elective.**

CH 231H Honors General Chemistry ****Choose lecture and one of the corresponding recitation sections**** MWF 1200 - 1250 CRN: 18458 Section 001 LEC **GILB 324** 4 UHC Credits AND CRN: 18464 Section 010 REC T 1100 - 1150 **NASH 214** OR CRN: 18465 Section 011 REC R 1400 - 1450 **NASH 214** ****Choose one of the laboratory sections**** **CH 261H** CRN: 18460 Section 010 LAB T 1200 - 1450 1 UHC Credit LPSC 160 OR CRN: 18463 Section 011 LAB R 1500 - 1750 **LPSC 160**

Instructor: Kevin Gable & Michael Burand

Is a first course in a General Chemistry sequence is for Honors College students with one year of high school chemistry. This laboratory sequence examines the characteristics of molecular and atomic behavior and the way in which these influence chemical properties and reactions. Additional \$30 fee. PREREQ: One year of high school chemistry and acceptable aptitude test scores. CH 231H and CH 261H must be taken together. Satisfies **Bacc Core Physical Sciences.**

CH 361H	Experimental Chen	Experimental Chemistry I			
CRN: 13533	Section 010 LEC	T 1300 - 1350	GBAD 409	3 UHC Credits	
CRN: 13534	Section 011 LAB	T 1400 - 1650	GBAD 409		
		R 1300 - 1650			
OR					
CRN: 13535	Section 020 LEC	W 1300 - 1350	GBAD 409		
CRN: 13536	Section 021 LAB	W 1400 - 1650	GBAD 409		
		F 1300 - 1650			

Instructor: John Loeser & Emile Firpo

First term of the integrated laboratory program for chemistry majors and biochemistry/biophysics majors, combining first hand techniques in organic, physical, and analytical chemistry. This is an advanced chemistry laboratory emphasizing organic chemistry techniques, use of instrumentation and computers, along with technical report writing. Students develop critical thinking skills and learn essential technical standards of: acidification, filtration, weighing, titration, recrystallization, melting point determination, organic synthesis of water sensitive compounds, product isolation, fractional distillation, gas chromatography, and scientific data analysis using spreadsheets. Each student will keep a legal scientific laboratory notebook and receive training in proper use of chemicals, chemical fume hoods, Personal Protective Equipment (PPE), and how to determine chemical hazards using Material Safety Data Sheets (MSDS). Additional \$44 fee. No-show, drop. PREREQ: ((CH 221 and CH 222 and CH 223) or (CH 224H and CH 225H and CH 226H) or (CH 231/H and (CH 261/H or CH 271)) and CH 232/H and (CH 262/H or CH 272) and CH 233/H and (CH 263/H or CH 273)) and COREQS: MTH 251/H and (PH 201 or PH 211) and CH 334. Only Chemistry, Biochemistry and Biophysics majors/minors/options may enroll. Contact the Chemistry department for registration. Satisfies UHC Elective.

CH 461H Experimental Chemistry II

CRN: 14008	Section 001 LEC	T 1300 - 1350	GBAD 211	3 UHC Credits
CRN: 14045	Section 010 LAB	T 1400 - 1650	GBAD 211	
		R 1300 - 1650	GBAD 211	

Instructor: Christine Pastorek

Integrated laboratory for junior level chemistry majors and related disciplines concentrating on modern techniques in analytical chemistry. Students learn the basics of scientific instrumentation by building their own absorption and fluorescence spectrometers from electronic and optical modules. Firsthand experience is also gained using a variety of commercial instrumentation, such as diode array UV-Vis, scanning fluorimeter, HPLC, AA and ICPAES. Real samples are analyzed throughout the term, and a special project of the student's design is a final highlight. See the course web page for examples of past projects. Additional \$44 fee. **PREREQS:** CH 362 or CH 362H and COREQS: CH 421 and CH 440. Satisfies **UHC Elective.**

CH 464H	Experimental Cho	Experimental Chemistry II			
CRN: 13537	Section 001	M 1300 - 1350	GBAD 211	3 UHC Credits	
CRN: 14009	Section 010	M 1400 - 1650	GBAD 211		
		W 1300 - 1650	GBAD 309		

Instructor: Chong Fang

Senior level integrated laboratory for chemistry majors and related disciplines such as biochemistry, physics, and engineering. Covers experimental techniques of analytical, organic, inorganic, and physical chemistry, with the emphasis on the latter two. Consists of three projects: Project 1 – Synthesis and Equilibrium of HCl, DCl, DBr, and HBr; Project 2 - Synthesis and Characterization of CdSe Quantum Dots; Project 3 - Ordering in Nematic Liquid Crystals. Additional \$44 fee. PREREQ: CH 362 or 362H and CH 442 (or approval of instructor). CH 461 or CH 324 is recommended. Contact the Chemistry department for registration. Satisfies **UHC Elective.**

CS 321H Introduction to the Theory of Computation

CRN: 18538 Section 001 MWF 1500 - 1550 KEC 1005 3 UHC Credits

Instructor: Paul Cull

A major accomplishment of the 20th century was the EXACT definition of computability. In this course, we will explore both the philosophical implications and the technological innovations which arise out of this definition. We will use as our guide: Godel, Escher, Bach by Douglas Hofstadter. Major/Minor RESTRICTIONS: Engineering and Pro-School Enrollment. PREREOS: CS 261 and MTH 232. Satisfies **UHC Elective.**

ENG 213H Literature of the World: Middle East

CRN: 20023 Section 001 TR 1600 - 1750 GILK 113 4 UHC Credits

Instructor: Gilad Elbom

This class will focus on modern Middle Eastern literature from multiple perspectives: cultural, political, religious, historical, geographical, linguistic, structural, stylistic, and other points of view. The books on our reading list include a controversial Sudanese novel that navigates between East and West, the present and the past, the personal and the political; a famous work of Egyptian feminism; a surrealistic, hallucinatory, self-deceptive novel from Iran; and two landmarks of Palestinian fiction: one originally written in Arabic, the author's native tongue, the other in Hebrew, the language of the dominant culture that classifies the author as the enemy. We will also watch some movies form the Middle East, mostly from Egypt and Israel. We will compare visual and written texts, make connections between our novels and Middle Eastern cinema, and expand our analysis of narrative structures and thematic concerns. This class will be based on active participation in ongoing discussions about the material. Consistent attendance, a very close reading of the texts, and a high level of involvement in our conversations will be crucial. Be prepared for occasional quizzes. Both the midterm and final exams will be based on our class discussions. The ability to raise questions and propose new directions to explore and discuss will be encouraged, appreciated, and rewarded. Satisfies Bacc Core Cultural Diversity or Literature and the Arts.

ENGR 211H Statics

CRN: 18643 Section 001 MWF 1300 - 1350 KEAR 202 3 UHC Credits

Instructor: Michael Scott

Analysis of forces induced in structures and machines by various types of loading. PREREQS: MTH 252/252H. Sophomore standing in engineering. Satisfies **UHC Elective.**

ENGR 321H Introduction to Materials Science

CRN: 20025 Section 001 MW 1200 - 1350 KEAR 305 4 UHC Credits

Instructor: Brady Gibbons

Crystal structure, microstructure, and physical properties of metals, ceramics, polymers, composites, and amorphous materials. Also includes elementary mechanical behavior and phase equilibria. PREREQ: (CH 202 or CH 222 or CH 224H). Major/Minor RESTRICTIONS: Electrical and Computer Engineering, Chemical Engineering, Manufacturing Engineering, Mechanical Engineering, Industrial Engineering, Nuclear Engineering. Satisfies **UHC Elective.**

ENGR 407H Experiencing Engineering Research

CRN: 20344 Section 001 F 1000 - 1150 STAG 226B 2 UHC Credits

Instructor: Belinda Batten

The College of Engineering seeks to encourage faculty/student collaboration in research and to engage students in the study of issues related to engineering. ENGR 407H supports College of Engineering Honors College students by providing exposure to research faculty and to research projects in the College of Engineering. Therefore, students should view this course as an opportunity to form relationships with research faculty and to develop research ideas for their Honors College thesis. ENGR 407H will be operated in a seminar format. College of Engineering researchers will present their research and encourage discussion with students. The primary learning outcomes of this course relate to the demonstration of knowledge about engineering research. Specifically, students will be able to identify current issues relevant to engineering research topics, describe a variety of research methodologies in engineering that are appropriate to a particular topic, and be able to design a research study in engineering. Satisfies **UHC Colloquia**.

FIN 340H Finance

CRN: 17206 Section 001 MW 1000 - 1150 WNGR 201 4 UHC Credits

Instructor: Jimmy Yang

Role and functions of a financial manager in the modern business environment in which a manager operates; formulation of financial objectives and policies; financial analysis, forecasting, planning, and control; asset management; capital budgeting; acquisition of funds through borrowing, stock issue, and by internal means; dividend policy; and international aspects of finance. PREREQS: ((BA 213 or BA 215/215H) and (ECON 201/201H)) and junior standing. Junior standing waived for Honors students. If needed, see UHC advisor for override. Satisfies **UHC Elective.**

FR 329H Francophone Cultures in Film

CRN: 20027 Section 001 T 1400 - 1650 STAG 233 3 UHC Credits

Instructor: Nabil Boudraa

An exploration of the different cultures of France and the Francophone world through film. Students will delve into the heart of these societies and discover their socio-historical, political, economic and cultural context. Students' analytical and critical skills will be thoroughly solicited through various research and writing activities. This course is taught in English. This course is repeatable for a maximum of 9 credits. Satisfies **Bacc Core Cultural Diversity.**

H 364H Drugs, Society, and Human Behavior

CRN: 18466 Section 001 TR 1200 - 1320 WALD 329 3 UHC Credits

Instructor: Ray Tricker

This course provides students with opportunities to examine the complexities surrounding the use and abuse of drugs in the United States today. Course content will include discussion of the health and social effects of the use and misuse of alcohol, tobacco, stimulant and depressant drugs, medications, hallucinogens, marijuana and other illegal drugs; and the public health aspects of using/abusing these drugs. Through the selection of an applied assignment, students will be able to explore the phenomenon of addictive behavior, in addition to formulating a personal philosophy related to drug use. The challenges inherent in trying to prevent substance abuse will be addressed, with particular regard to the multi-tiered influences on decisions to abuse drugs e.g. the physical and psychological environment, socioeconomic status, poverty, minority status and lack of opportunity, and national policy to name a few. PREREQS: PSY 201 or 202. Prereqs are waived for Honors students. If needed, see UHC advisor for override. Satisfies **UHC Elective.**

HC 199	Honors Writing			
CRN: 11725	Section 001	MWF 900 - 950	STAG 233	3 UHC Credits
CRN: 11726	Section 002	TR 800 - 920	STAG 233	
CRN: 16904	Section 003	TR 1000 - 1120	STAG 233	

Instructor: Eric Hill

Becoming a critical reader and thinker promotes clear writing and verbal communication. You will hone your skills in a discussion/debate format, along with frequent in-class writing assignments and presentations. You will also further develop your abilities to be a critical reader. We will be examining texts from many disciplines and on a variety of topics; you will also bring in examples for discussion. The research paper, which includes both formal documents and informal writing, will focus on an ethical/controversial issue or current research within your discipline; this will include field and library research. PREREQ: WR 121. Satisfies **Bacc Core Writing II.**

HC 299	Building Homes and Ho	ope: Portugal

CRN: 20028 Section 001 W 1500 - 1550 STAG 233 1 UHC Credit

Instructor: Dave Kovac

This course series will help students explore the impact and challenges of international service work while preparing for a summer service trip to Portugal in partnership with Habitat for Humanity (tentatively scheduled for June 20-July 6, 2014). Throughout the series, students will explore the individual, group, and social motivations, processes, and goals of international non-profit and service work. We will examine how Habitat for Humanity has created a successful and sustainable model for mobilizing volunteers to help build simple, decent shelter for families in need around the world; and we will investigate the need and impact of such projects on the communities served as well as ourselves.

The fall course focuses on the cultural context and perspective of international service work; the winter course, co-taught with Dr. Evan Smouse from the College of Business, will examine the impact of service work in light of Portugal's stays and relationship with the European Union; and the spring course will highlight group development and team building for international project success. The course series is open to any student interested in learning about international service work, not just students participating in the summer trip experience course. Satisfies **UHC Colloquia.**

HC 299 Farside Entomology

CRN: 18874 Section 002 R 1800 - 1950 STAG 233 2 UHC Credits

Instructor: Michael Burgett

Farside Entomology is designed to introduce you to the humanistic side of entomology by utilizing the entomological humor of Gary Larson, et alia as paradigms of human-insect interactions. Interactions between humans and insects are numerous, of variable time scales and of varying implications (for both the human and the insect), ranging from the mildly humorous to the deadly serious. The "cartoon" format normally provides an anthropomorphic view of insects. This can be an incredibly rich venue as an introduction to the more serious aspects of insects and their relevance to human activities. Satisfies **UHC Colloquia.**

HC 299 Oregon Outback Tour

CRN: 16169 Section 003 Oct 4, 5 & 6 STAG 233 2 UHC Credits

Instructor: John Buckhouse

The 2013 Oregon Outback Tour will visit several remote and seldom seen places east of the Cascades in Oregon and Washington's Columbia Plateau. This is an area which teems with both ancient and modern history; a land of interesting geology; landslides, waterfalls, deeply dissected canyons; dry sage-covered hillsides; and the "wheat belt" of Oregon. We will study desert ecology, geologic formations, soils, vegetation, and cultural circumstances. We will be hiking and camping in rough and remote areas. Cell phone coverage will be spotty to non-existent. Meals will be prepared on-site and will consist of hearty, healthy, camp-style fare. Persons with dietary constraints are advised to contact Dr. Buckhouse. (john.c.buckhouse@oregonstate.edu). We will be leaving on Friday, Oct. 4 and returning on Sunday, October 6. Individuals will need to provide her/his own sleeping bag, a small tent, clothing, footwear, hats, coats, gloves, and personal items. (Leave 2:00 PM on Friday from STAG 233--return Sunday late afternoon). We will have one evening organizational meeting on Wednesday, October 2, 1900 – 1950 in STAG 233. Satisfies **UHC Colloquia**.

HC 299 Orientation for Transfer Students

CRN: 16519 Section 005 R 1700 - 1850 STAG 211 1 UHC Credit

Instructor: Kevin Stoller

As a part of the requirements of the S-STEM scholarship program, this course is designed to assist students in a successful transition from a community college to Oregon State University. This course aims to provide an orientation experience including discussions surrounding academic study skills, time management, campus resources, goal setting, work/life balance, and professional development. The lecture portion of this course meets during weeks two, four, six, and eight of fall term. A cohort model is utilized during weeks three, five, and seven where outside projects are completed with smaller groups of six to eight students. Although this course is designed for high-achieving transfer students who are a part of the S-STEM scholarship program, any transfer student may enroll. Satisfies **UHC Colloquia**.

HC 407 Microbiomes

CRN: 20029 Section 001 T 1700 - 1750 STAG 233 1 UHC Credit

Instructor: Kathryn Bushley

The unseen world of microbes is both a fascinating and a dangerous one. Lurking in every square centimeter of soil are thousands of bacteria and hundreds of protists and fungi. The human body itself contains over 10 times more microbial cells than human cells. Generally unseen by the naked eye, microbes constitute the largest biomass of any group of organisms on earth and perform such vital functions as producing the earth's atmospheric nitrogen and decomposing much of the organic matter produced by plants. They have also caused some of the most devastating diseases in the history of humankind and the evolution of antibiotic resistant bacteria poses a serious threat to modern medicine. This course will explore the hidden world of microbes by examining "microbiomes," defined as all the microbes, their genetic elements (genomes), and their environmental interactions found in a particular environment, from a variety of habitats ranging from soil to the human gut. In this course, we will explore the ways in which microbiomes influence their hosts and the ways in which host behavior and factors such as global climate change and environmental disturbance in turn influence microbial evolution. Graded P/N. Satisfies **UHC Colloquia.**

HC 407 Oregon's Ocean

CRN: 20030 Section 002 R 1000 - 1150 STAG 237 2 UHC Credits

Instructor: Carmel Finley

"Oregon's Ocean," will focus on developing history material for a synthesis course on the ecology of the North Pacific Ocean. Students will be reacting to a suite of historical documents about the development of fisheries off Oregon and the development of fisheries science at Oregon State University. The course would include one day-long field trip, to Newport, to look at fishing boats and tour an OSU research vessel, such as the Pacific Storm, an 84-foot former commercial fishing trawler. Graded P/N. Satisfies **UHC Colloquia**.

HC 407 Leadership and Positive Psychology

CRN: 20031 Section 003 W 1000 - 1150 STAG 226B 2 UHC Credits

Instructor: Don Johnson

This seminar will examine the relationships between leadership and positive psychology using Seligman's PERMA theory as a contextual base for examining "action orientated leadership" and "visionary orientated leadership." Students will compare and contrast the differences between the two forms of leadership. Students will learn about the foundations of Seligman's PERMA Theory on Positive Psychology/Well Being, and how this theory can serve as a baseline for leading groups through visionary leadership design. Graded P/N. Satisfies **UHC Colloquia.**

HC 407 God, Pain, and the Problem of Evil: An Introduction to C.S. Lewis

CRN: 18763 Section 004 M 1500 - 1550 STAG 237 1 UHC Credit

Instructor: Gary Ferngren

C. S. Lewis (1898-1963), Oxford don, novelist, literary critic, and theologian, was one of the most gifted and popular theological writers of his generation. From the point of view of orthodox Christianity, Lewis dealt in his theological and imaginative works with some of the most basic and perennial moral and religious questions. Graded P/N. Satisfies **UHC Colloquia.**

HC 407 The Science of Art – The Art of Science

CRN: 20033 Section 006 R 1000 - 1050 STAG 226B 1 UHC Credit

Instructor: Randall Milstein

What do ballerinas and spiral galaxies have in common? Why is photography one of the pivotal inventions of human history? Is the Golden Ratio really a mathematical expression of beauty? This colloquium challenges the mindset that science and art are opposing endeavors, but instead suggests neither would be as powerful without the other since both require great imagination and creativity to move forward. Guests to aid in our discussions will include visual artists, musicians, dancers, and scientists whose interests and skills blend science and art. Graded P/N. Satisfies UHC Colloquia.

HC 407 The News of Science

CRN: 18777 Section 007 TR 1600 - 1650 STAG 237 2 UHC Credits

Instructor: Christopher Mathews

This colloquium is designed to acquaint you with the excitement in all areas of contemporary science. Because of the impact of science on all aspects of our lives, educated citizens, whether or not in technical fields, should maintain awareness of current science and its effect on formation of public policy. One way to do this is to read Science, the weekly newsmagazine of the American Association for the Advancement of Science. In this colloquium students will read in recent issues of Science, available on line in the Valley Library. Each student will select articles of his/her own choosing and deliver brief oral reports in class, to be followed by general discussion of the article. Articles selected may be either general, aimed at the educated lay public, or more technical. All presentations, however, must be intelligible to undergraduates who may be taking their first college-level science courses. Topics covered in presentations may include DNA robotics, earthquake prediction, arsenic-loving bacteria, teaching evolution in public schools, issues connected with mass vaccination, maintenance of forensic DNA data banks, DNA-based computing, or increased occurrence of "freak" weather patterns. Satisfies **UHC Colloquia.**

HC 407 Crises, Catastrophes, and Cataclysms: It's all fun and games until your planet is blown up

CRN: 20034 Section 008 T 1000 - 1050 STAG 226B 1 UHC Credit

Instructor: Randall Milstein

Often Earth has a bad day: a discussion of asteroid impacts, extreme volcanism, solar storms, climate change, and mass extinctions - events and outcomes that have, and will, alter life on Earth. This colloquium will review the scientific evidence, scenarios, and after-effects of significant Earth-altering processes. What would happen if Earth was struck by a two kilometer in diameter asteroid? What would happen to American culture if a large coronal mass ejection from the Sun destroyed our power grid? What would be the byproduct of a SARS or avian influenza pandemic among humans? Graded P/N. Satisfies **UHC Colloquia.**

HC 407 The Evolution of Airplanes

CRN: 20035 Section 009 T 1800 - 1950 STAG 237 2 UHC Credits

Instructor: David Ullman

Machines that fly have evolved for over 200 years and the arc is continuing - beginning with George Caley in the early 19th century, through the Wright Brother in the early 20th century, the era of records in the 1920s and 30s, the evolution of the war machine in the 1940s, the pilotless eye in the sky of the last 10 years, and on to the promise of unmanned, composite, electric aircraft. This course examines the development of the technologies, politics and cultural attitudes toward commercial, military, general aviation and science fiction air travel. We examine the trajectory of these evolutions and try to predict what air travel will look like by mid 21st century. What will your grand-children see when they look up, how will they fly? Graded P/N. Satisfies **UHC Colloquia.**

HC 407 Writing About Film

CRN: 20345 Section 010 MW 1200-1250 STAG 237 2 UHC Credit

Instructor: Eric Hill

This class will explore how we experience film before, during, and after the fact. We often bring expectations to the films we see based on what we have heard from others, as a result of advertising (posters, previews, etc.), or in reaction to the film's subject matter. Many films must overcome these expectations, while others rely on public expectations as a way of drawing an audience into the theater. When we watch a film, much of what we experience can be contextualized by expectations (some become shattered, some are met, some get reworked), environment (going to a theater versus renting DVD), and our frame of mind at the time (consider a film you saw years ago that you experience anew).

This is not a film theory class as much as it is an opportunity to examine how and why we respond to film in certain ways. The goal here is to keep a written record of those responses (before, during, and after watching the film); this will serve as your film "diary." We will be employing some film theory as a way of analyzing how these experiences get shaped by directors, actors, writers, etc., but the focus here is to examine our own responses to film and what elements shape these responses. We will watch films in class, discuss them, write about our responses to them, and explore some of the ways to express these responses. Some of these written assignments will be informal (the film diary) and some will function as formal analyses. Students will also bring in their own examples and present them to the class. Graded P/N. Satisfies **UHC Colloquia.**

HC 407 Bicycle Rights!: Bike Culture(s) in American History

CRN: 20346 Section 011 MW 1300 – 1350 STAG 226B 2 UHC Credits

Instructor: Thomas Bahde

This course examines the bicycle in American culture from the 1890s through the present. We will be especially focusing on how bicycling has been represented in popular culture, the ways in which images and advertising have shaped assumptions about bicycling, and how bicycle advocates have articulated their right to the road. The bicycle revolutionized individual mobility in the 1890s, but by World War II had been relegated to sport, recreation, and childhood as cities increasingly prioritized automobile travel. The 21st century has seen a new interest in bicycling, especially for transportation. As we examine the trajectory of the evolving cultures and images of the bicycle in American life, we will seek to understand the multiple roles played by the bicycle over time, and consider the bicycle as one way to access the cultural life of material objects. Graded P/N. Satisfies **UHC Colloquia.**

HC 407 Fungi in Society

CRN: 20347 Section 012 F 1300-1450 STAG 237 2 UHC Credit

Instructor: Genevieve Weber

While fungi receive significant attention in terms of their wide culinary uses, these fascinating organisms are so much more than simply mushrooms. Fungi play integral roles in nearly every aspect of life, and are in fact hugely responsible for maintaining the cycle of life on our planet. Without continual decomposition by these life forms, the leaves that coat forest floors at the end of each fall season would never break down; essentially, the world would be lost under a layer of organic debris. Fungi are found in essentially all ecosystems, from soil to human skin. They make us ill, but they also save our lives in vast numbers. Fungi feed humanity, promote the growth of most plants, and protect important food crops against insects, but they also cause famine. Humans manipulate these organisms for use in art, culture, and industry; fungi have even won wars. This course will explore the diverse roles played by fungi in relation to humanity and the natural environment, and will touch on some of the ways in which humans have in fact influenced fungi. Graded P/N. Satisfies **UHC Colloquia.**

HC 407 Playing in the Street: Cityscapes and Public Space in American History

CRN: 20401 Section 013 MW 900 - 950 STAG 237 2 UHC Credits

Instructor: Thomas Bahde

For this course we will immerse ourselves in the American street from the mid-19th century to the mid-20th century, associating with vagrants, strumpets, pickpockets, and thieves, picking our way through vast piles of manure and the rotting carcasses of dead livestock, dodging runaway horses, streetcars, bicycles, and automobiles. We will analyze the physical transformation of the street over time and seek to understand the street as a public space, and thus a place of conflict, a locus of identity formation, and a medium for social, cultural, and political expression. The meaning of the street has evolved over time to signify both a place of danger, and a conduit for legitimacy and authority ("street cred"). It has also recently come to signify a hopeful vision of the future of urban form ("Complete Streets"). We will address how the evolving cultural image of the street is reflected and shaped by what happens on actual streets. Graded P/N. Satisfies **UHC Colloquia.**

HC 408 Workshop THESIS: LEARN

CRN: 16516 Section 002 R 1700 - 1850 KIDD 364 1 UHC Credit

Meets weeks 2, 4, and 8 Only

Instructor: Toni Doolen/Kevin Ahern/Eric Hill/Indira Rajagopal

This course will guide students through the second step of the Thesis Success in Stages (TheSIS) process, Learn. In TheSIS: Learn, students will lay the groundwork for a successful thesis experience. We will focus on the value of the thesis, what it takes to successfully complete a thesis (e.g. identify a mentor, identify a topic, level of effort required, etc.), and we'll hear from students and faculty with experience in the thesis process. TheSIS: LEARN will assist you in completing three tasks: 1) Summarizing an interview/conversation with a faculty member who could serve as a mentor, 2) Summarizing an interview/conversation with an Honors student currently working on their thesis, or an alum, and 3) Answering a series of "nuts and bolts" questions about what it takes to successfully complete the thesis. Course will be team taught. Graded P/N. PREREQ: HC 408 TheSIS: START. Meets weeks 2, 4, 8 only, dates: 10/10, 10/24, 11/21. Satisfies UHC Elective or Thesis/Research/Projects.

HC 408 Workshop THESIS: UNDERTAKE

CRN: 20036 Section 001 R 1700 - 1850 STAG 132 1 UHC Credit

Meets Weeks 3 and 6 Only

Instructor: Tara Williams

This course will guide students through the third step of the Thesis Success in Stages (TheSIS) process, Undertake. During TheSIS: Undertake, students will select a thesis mentor, create a thesis statement, write a thesis proposal, and begin to develop a research plan. The course will require participants to turn in a completed thesis proposal, signed by a thesis mentor, the end goal of the term. Graded P/N. PREREQ: HC 408 TheSIS: LEARN. Meets weeks 3 and 6 only, dates: 10/17, 11/7. Satisfies **UHC Elective or** Thesis/Research/Projects.

HC 409 PRAC/CONVERSANTS

CRN: 12079 Section 007 TBD TBD 1 UHC Credit

Instructor: Leanna Dillion

The INTO OSU Cultural Ambassador Conversant Program provides an opportunity for honors students to earn credit while participating in a mutual cultural exchange. Participating honors students commit to meeting on average one hour per week with their international partner, keep a log of the times and places they met and the topics discussed, and complete a 2 page reflections paper due at the end of the term. Program information including the application process is available at http://oregonstate.edu/international/cultural-ambassador. Students must meet with a UHC advisor to complete a Learning Agreement. Applications must be submitted online no later than the end of week 1. Graded P/N. Satisfies **UHC Elective.**

HC409 Civic Engagement

CRN: 20468 Section 005 TBD TBD 1 UHC

Credit

The Center for Civic Engagement provides an opportunity for honors students to earn credit while participating in an ongoing community engagement project within the local community. Participating honors students commit to serving on average 2-3 hours per week within their project site, keep track of their service hours, and complete a 2 page reflection paper due at the end of the term. Additional information including placement opportunities is available at: http://oregonstate.edu/cce/ongoing. Students must meet with a UHC advisor to complete a Learning Agreement and a CCE staff member to discuss placement opportunities. Placement must take place no later than the end of Week 1. Graded P/N. Satisfies UHC Elective.

HDFS 447H Families and Poverty

CRN: 20037 Section 001 M 1400 – 1450 & W 1400-1550 STAG 237 4 UHC Credits

Instructor: Leslie Richards

This course will examine families in poverty with attention focused on the causes and consequences of family poverty, including global economic factors, migration patterns, and political/social crises. Included will also be an investigation of policies and programs for poor families, both within the United States and internationally. Over the course of the term, students in this class will work collaboratively to develop a project that provides some sort of service to support a local agency serving low-income children or families. Each student will be required to contribute 20 hours service over the term to this project. Satisfies **Bacc Core Contemporary Global Issues.**

HST 210H Religion in the United States

CRN: 20038 Section 001 TR 1400 - 1550 MLM 319A 4 UHC Credits

Instructor: Amy Koehlinger

A thematic overview of the historical study of religion in the United States, with an eye toward ways that social and cultural contexts have shaped the religious experience of Americans in different places and times. Surveys a wide array of religious movements, groups, and individuals from the colonial period to present. CROSSLISTED as PHL 210H. Satisfies Bacc Core Difference, Power, and Discrimination.

ME 332H Heat Transfer

CRN: 18474 Section 001 TR 1200 - 1350 WNGR 201 4 UHC Credits

Instructor: Deborah Pence

Heat transfer involves the transport of thermal energy. The course will provide the theoretical foundations on which both steady-state and transient heat transfer models are based. This theory will be used to solve practical design problems in engineering, including heat exchangers and heat treatment processes. PREREQS: ((MTH 256 or MTH 256H) and (ENGR 212 or ENGR 212H) and (ME/NE 311 or ME/NE 311H) and (ME 331 or ME 331H)). Major/Minor RESTRICTIONS: Mechanical Engineering, Industrial Engineering, Nuclear Engineering. Crosslisted with NE 332H. Satisfies **UHC Elective.**

ME 382H Introduction to Design

CRN: 18475	Section 001 LEC	MWF 1200 - 1250	COVL 216	1 UHC Credit
CRN: 18476	Section 010 LAB	F 1000 - 1150	ROG 228	

Instructor: Bob Paasch

This Honors section will include short seminars and discussions on contemporary research on topics in design methodology and marine renewable energy. Lecture common with non-Honors. PREREQS: ENGR 248 and COREQS: ME 250, ME 316. ME 316 co-requisite can be waived for honors students. Major/Minor RESTRICTIONS: Manufacturing Engineering, Mechanical Engineering, Industrial Engineering, Nuclear Engineering. Satisfies **UHC Elective.**

ME 430H Systems Dynamics and Controls

CRN: 20353 Section 001 TR 0800-0950 COVL 218 4 UHC Credits

Instructor: Rob Stone & Brady Gibbons

Modeling and analysis of linear continuous systems in time and frequency domains. Fundamentals of single-input-single output control system design. PREREQS: ((ME 317 or (ECE 351 and ECE 352) and (ENGR 212 or ENGR 212H.)) Major/Minor RESTRICTIONS: Electrical and Computer Engineering, Mechanical Engineering, Nuclear Engineering. Satisfies **UHC Elective.**

MTH 251H	Differential Calculus				
				4 UHC Credits	
CRN: 13538 OR	Section 001	MWF 1000 - 1120	KIDD 236	Radu Dascaliuc	
CRN: 18477	Section 002	MWRF 900 - 950	WNGR 201	Scott Peterson	

This is the first term of the calculus sequence for scientists, engineers, and others, including mathematics majors. The first two terms of the sequence, MTH 251 and MTH 252, focus on real-valued functions of a single real variable, including polynomial, rational, algebraic, trigonometric, exponential, and logarithmic functions. Differential calculus involves the study of rate of change in all its forms, including velocity, acceleration, population growth and other natural and physical phenomena. Differential calculus features the derivative, techniques of differentiation, and applications of the derivative, including optimization problems, the geometry of curves, and analysis of motion. This course emphasizes geometric reasoning not just computation. PREREQ: MTH 112 Satisfies Bacc Core Mathematics.

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CRN: 17207	Section 001	MWF 1000-1120	GILB 228	4 UHC Credits

Instructor: Dianne Hart

Integral Calculus

MTH 252H

The integral is the second big idea in calculus. In the same way that the derivative measures rate of change, the integral measures net change. Applications in physics, engineering and geometry are numerous. PREREQ: MTH 251/251H. Satisfies **UHC Elective.**

MTH 254H	Vector Calculus I			
CRN: 16921	Section 002	MWF 900-950 F 1400-1450	WB205	4 UHC Credits Robert Higdon
CRN: 13539	Section 001	MWF 1400 - 1520	WNGR 275	Tevian Dray

Vectors and geometry: coordinate systems, scalar product. Real-Valued Functions of Several Variables: partial and directional derivatives, gradient, extreme values. Multiple Integrals: change of coordinates, applications. Vector valued-functions: arc length and curvature of space curves, normal and tangential components of acceleration. PREREQ: MTH 252/252H. Satisfies **UHC Elective.**

MUS 102H	Music Appreciation II: Periods and Genres - Reggae: A History of Jamaican Music				
CRN: 17208	Section 002	TR 1000 - 1120	BENT 204	3 UHC Credits	

Instructor: Ryan Biesack

This survey traces the roots of Jamaican music, which has become known as Reggae, from just prior to Jamaica's Independence from Great Britain in 1962 starting with the American R & B influenced Ska, through Rock Steady, Dub, Roots Rock, Reggae, DJs, Toasting, and through the early turn of the millennium. We will look at key musicians, producers and performers, as well as examine key social and political events that helped shape this great music. When possible, guest speakers, video clips, audio clips and other media will be used to tell the story of this rapidly changing, wide reaching music. Also, a class field trip to a reggae concert will enhance the study of this music, and give the students an accurate modern day perspective and idea of reggae today. Satisfies **Bacc Core Literature and the Arts.**

NE 332H Heat Transfer

CRN: 18791 Section 001 TR 1200 - 1350 NASH 214 4 UHC Credits

Instructor: Deborah Pence

See ME 332H for course description. Satisfies **UHC Elective**.

OC 407H Astrobiology

CRN: 17530 Section 001 TR 1300 - 1350 STAG 237 2 UHC Credits

Instructor: Martin Fisk & Rick Colwell

The question of whether life exists elsewhere in the universe is a verifiable scientific hypothesis. "Astrobiology" is an interdisciplinary course that combines aspects of astronomy, physics, chemistry, geology, and biology that are relevant to the origin and evolution of life and its possible distribution in the universe. Students will use the basic scientific principles of these five fields of science to explore the limits of life in the cosmos. Classroom activities or projects will be used to demonstrate the principles. Altogether the out-of-class assignments and preparation for the next class will take from 1 to 3 hours of out-of-class effort. Optional field trip to observe stars and planets. Optional field trip to demonstrate microbial methane production. PREREQ: High School level Chemistry or higher. Satisfies **UHC Colloquia.**

PH 221H Recitation for Physics PH 211

CRN: 15213 Section 001 T 1100 - 1150 WNGR 304 1 UHC Credit

Instructor: TBD

Honors recitation reserved for UHC students enrolled in lecture/lab sections of PH 211. One-hour weekly session for the development of problem-solving skills in calculus-based general physics. Lecture, Lab, and Recitation combined, total 5 OSU credits. Satisfies **Bacc Core Physical Sciences**.

PH 222H Recitation for Physics PH 212

CRN: 13540 Section 001 R 1100 - 1150 WNGR 304 1 UHC Credit

Instructor: TBD

Honors recitation reserved for UHC students enrolled in lecture/lab section of PH 212. One-hour weekly session for the development of problem-solving skills in calculus-based general physics. Lecture, Lab, and Recitation, 5 OSU credits. Satisfies **Bacc Core Physical Sciences**.

PH 407H Wart Hogs and Boa Constrictors: Topics in Religion and Science

CRN: 16518 Section 001 TR 1400 - 1450 STAG 237 2 UHC Credits

Instructor: Albert Stetz

Are science and religion natural enemies locked in a struggle to the death as some best sellers suggest? Richard Dawkins' The God Delusion, Sam Harris' The End of Faith, and Christopher Hitchens' God is Not Great assert that modern evolutionary theory and genetics refute the claims of religion in general and Christianity in particular. New Earth Creationists, on the other hand, insist that the Bible proclaims that evolution is a lie and the earth is only 6000 years old. In historian Ian Barbour's felicitous phrase, this seems like a battle between a wart hog and a boa constrictor. In the end the victor swallows the vanquished. This can't be the whole story, however. For example, most of the recent winners of the 1.5 million dollar Templeton Award (given for, "exceptional contributions to affirming life's spiritual dimension") have been well-known physicists. Many of the great scientists of the past including Galileo, Isaac Newton, and Johannes Kepler were pious believers. Once one gets past the "warfare" mindset there are many ways in which modern science can inform religion. We can ask for example if modern cosmology can justify the belief in creation ex nihilo, whether quantum indeterminacy leaves room for free will, whether physical laws are consistent with the notion of divine intervention, and whether the intelligent design hypothesis makes sense in the light of modern genetics. These questions should be approached with an understanding of what scientific inquiry can and cannot tell us and discussed in an atmosphere of mutual respect and tolerance. Satisfies **UHC Colloquia.**

PHL 160H Quests for Meaning: World Religions

CRN: 17318 Section 001 MW 1000 - 1150 STAG 233 4 UHC Credits

Instructor: Stuart Sarbacker

This course is an introduction to the phenomenon of religion and its many facets. We will begin the course with a discussion of concepts and definitions of religion through a conversation in which our native understandings of religion are brought together with various traditional and academic understandings. This discussion will include an examination of the history of the term "religion" and the ways in which the meaning of the term has shifted, and continues to shift, over time. Following the contemporary work of Ninian Smart, we will look at seven key "dimensions" of religion: narrative, doctrine, ritual, experience, ethics, society, and material. We will also explore different approaches, including literary, historical, and philosophical methods, used by scholars to understand different aspects of the phenomenon of religion. These dimensions and methods will then be applied in an examination of a range of religious traditions, including indigenous traditions, Hinduism, Buddhism, Jainism, Sikhism, Judaism, Christianity, and Islam. Our in-class discussions will be complemented with an off-campus field research project that will involve the application of the dimensional analysis of religions to a field experience of a living religious tradition. Readings from the course will focus on Ninian Smart's dimensional analysis and on the data of the world's religions as represented in Fisher's Living Religions. We will further build upon these sources and issues with supplementary reading and writing assignments and presentations of audio and visual material. The instructor will provide guidance on additional readings upon request. Satisfies **Bacc Core Cultural Diversity.**

PHL 210H Religion in the United States

CRN: 20039 Section 001 TR 1400 - 1550 MLM 319A 4 UHC Credits

Instructor: Amy Koehlinger

See HST 210H for course description. Satisfies Bacc Core Difference, Power, and Discrimination.

PHL 444H Biomedical Ethics

CRN: 18478 Section 001 MWF 1200-1310 MLM 319A 4 UHC Credits

Instructor: Jonathan Kaplan

Application of ethical principles and decision-making processes to selected problems in medicine, health care, and biotechnology. Special attention given to end-of-life choices, reproductive rights and technologies, organ transplantation, research ethics, genetic engineering, and allocating scarce resources. An interdisciplinary focus that draws on social, legal, economic, and scientific issues in ethical decision in medicine. Satisfies **Bacc Core Science**, **Technology and Society.**

PS 407H Principles of Population, then and now: from Malthus to Sustainability

CRN: 17261 Section 001 F 1000 - 1150 STAG 237 2 UHC Credits

Instructor: Richard Clinton & Roberta Hall

See ANTH 407H for course description. Satisfies **UHC Colloquia**.

TA 360H Multicultural American Theater

CRN: 20087 Section 001 TR 1400 - 1520 WITH 173 3 UHC Credits

Instructor: Charlotte Headrick

In the class we explore the drama of five groups: African-American drama, Asian-American drama, Theatre of the Physically Challenged, Gay and Lesbian Drama, and Latino Drama. Additionally, presentations on theatre for the deaf, Holocaust drama, feminist theatre, and Native American theatre have been part of the class in years past. Students in the class will receive free tickets to University Theatre productions for the term. Satisfies **Bacc Core Difference**, **Power**, and **Discrimination**.

TCE 408H Sundown Towns in Oregon

CRN: 18715 Section 001 T 1600 - 1650 VLIB 5759 2 UHC Credits

Meets every other week

Instructor: Jean Moule

This course will provide an opportunity for participants to explore, in-depth, Oregon's racist past through the exploration of Sundown Towns. It is anticipated that such an exploration will help students understand the underpinnings of our United States societal racism. A day-trip to a Sundown town in Oregon will be included in the course. **Meets every other week -weeks 1,3,5,7,9**. Additional \$12.00 field-trip fee. Satisfies **UHC Colloquia.**

WGSS 235H Women in World Cinema

CRN: 20085 Section 001 M 1400 - 1650 STAG 233 3 UHC Credits

Instructor: Patti Duncan

In this discussion-oriented interdisciplinary course, we will examine representations of women and gender through screening films from various genres within a global context. In particular, we will explore films produced by women and/or about women's lives and experiences in order to analyze constructions and practices of gender in a transnational, multireligious, global framework. By examining the context of various films created within particular historical and cultural contexts, we will develop and expand our understanding of the cultural productions, meanings, and intersections of race, gender, culture, class, sexual identity, and nation. Satisfies **Bacc Core Cultural Diversity.**

WGSS 495H Global Feminist Theologies

CRN: 20399 Section 001 M 1400 - 1650 STAG 226B 3 UHC Credits

Instructor: Susan Shaw

Explores the connections between women's religious experiences around the world and the global problems addressed by feminist theology and spirituality. Not recommended for first year students. PREREQS: WS223/223H or WS 224/224H waived for honors students. If needed, see UHC advisor for override. Satisfies **Bacc Core Contemporary Global Issues.**