BA 465H  Systems Thinking and Practice

CRN: 35837  Section 001  TR 1000 - 1150  STAG 237  4 UHC Credits

Instructor: Jonathan King

This course will get you to “think outside the box” by examining the hard and soft systems which both sustain and constrain us. This involves learning how to identify patterns of interactions, the increasing relevance of emotional intelligences, and the realities of “Tools ‘R Us.” The ultimate objective is to enhance our awareness of individual moral responsibilities by moving beyond linear causality and the subjective-objective and fact-value dualisms that continue to plague modern thought and action. Upper-division standing not required, students from all disciplines are welcome. Satisfies UHC Bacc Core Contemporary Global Issues

BB 405H  General Biochemistry

CRN:  Section 010  M 1300 - 1350  STAG 233  1 UHC Credit

Instructor: Phillip McFadden

This course is a weekly one hour session to be taken in addition to BB 451. It is designed to present advanced problem solving methods and to discuss the depth and breadth of biochemistry. The additional work requirement (equivalent to the additional 1 credit hour) will include either a term paper or an oral presentation. Student feedback will help decide which topics to emphasize. Examples could include topics such as the invention of synthetic proteins and antibodies with novel capabilities, the molecular description of diseases such as Alzheimer's dementia and diabetes, or progress in solving the puzzling mechanistic relationship between exercise and muscle strength. Students who sign up for BB 405H must also take BB 451 taught by Kevin Ahern. Satisfies UHC Elective

BI 212H  Principles of Biology

CRN: 34061  Section 001  MWF 1000 - 1050  MLM 026  2 UHC Credits

OR

CRN: 34060  Section 002  MWF 1300 - 1350  MLM 026  Instructor: Lori Kayes

SIGN UP FOR ONE OF THE LAB/401H PAIRS BELOW

CRN: 34062  Section 010  M 1400 - 1650  WNGR 228  Instructor: Indira Rajagopal

AND

CRN: 33461  BI 401H - Section 001  M 1400 - 1650  WNGR 228

OR

CRN: 35855  Section 020  W 800 - 1050  WNGR 228

AND

CRN:  BI 401H - Section 002  W 800 - 1050  WNGR 228  Instr: Luis Sayavedra-Soto

Cell biology, organ systems, plant and animal biology. Lecture common with non-Honors. Lab is reserved for UHC students enrolled in lecture/lab sections of BI 212. The BI 401H credit is an additional credit for research done during the lab section. Lecture, lab, and additional lab research credit (BI 401H) total 5 OSU credits. Additional $30 lab fee. Satisfies UHC Bacc Core Biological Sciences PREREQ/COREQ: General Chemistry
**BI 306H  Environmental Ecology**

CRN: 38417  Section 001  MWF 1000 - 1050  WITH 217  3 UHC Credits

Instructor: Kate Lajtha

This class will focus on current controversial issues in environmental ecology at the intersection of science and society, including conservation ecology and reserve design, genetically engineered crops in the food supply, biofuels, mining and toxins in the ecosystem, forest harvest, wetland destruction and restoration, and alternative energy. Students will work in collaborative small groups to research relevant literature and prepare for series of in-class debates about topics that the groups may select. The class will stress effective communication and persuasive argument in addition to the analysis of complex and conflicting data. PREREQ: One year of college biology and chemistry. Satisfies UHC Bacc Core Contemporary Global Issues, and WIC for Biology, Botany and Environmental Science majors.

PREREQ: One year of college biology and chemistry.

**BI 407H  Ecology and Environmental Quality in the Himalaya**

CRN: 38418  Section 001  T 1500 - 1650  CORD 4083  1 UHC Credit

Instructor: Donald Zobel

We will summarize the physical environment and biotic diversity of the Himalayan Mountains, with emphasis on patterns of natural vegetation and its use by people. The types, extent, causes and effects of environmental degradation will be considered, along with the uncertainty and controversy associated with environmental assessments. This course uses and integrates information from physical science, biology, agriculture, and regional cultures. It considers a set of real problems that are causing malnutrition and environmental degradation. It involves the apparent negation of "well-known facts", and the problems of dealing with uncertainty in scientific data as well as in estimating social and economic responses to proposed solutions. THIS COURSE WILL MEET 2 HR/WEEK FOR THE FIRST 5 WEEKS OF THE TERM, ONLY. Satisfies UHC Colloquia Crosslisted with BOT 407H.

**BOT 407H  Ecology and Environmental Quality in the Himalaya**

CRN: 38419  Section 001  T 1500 - 1650  CORD 4083  1 UHC Credit

Instructor: Donald Zobel

Crosslisted with BI 407H. See above for description.

**CH 225H  Honors General Chemistry -- Choose a lecture and one of the corresponding lab/rec sections**

CRN: 34017  Section 001  MWF 1200 - 1250  LPSC 125  5 UHC Credits

AND

CRN: 34018  Section 010  T 1400 - 1750  GBAD 209

OR

CRN: 34019  Section 011  R 1400 - 1750  GBAD 209  Instructor: Margie Haak

Second course in General Chemistry sequence for Honors College students with one-year high school chemistry and acceptable aptitude test scores. This sequence examines the characteristics of molecular and atomic behavior and the way in which these influence chemical properties and reactions. Additional $30 lab fee. Satisfies UHC Bacc Core Physical Sciences PREREQ: CH 224H or CH 221.
CH 362H  Experimental Chemistry I -- Choose one of the lecture/lab combinations

CRN: 34020  Section 010 - LEC  T 1300 - 1350  GBAD 409  3 UHC Credits
CRN: 34021  Section 011 - LAB  T 1400 – 1650 &  GBAD 409
Instructor: Emile Firpo  R 1300 - 1650  GBAD 409

OR
CRN: 34022  Section 020  W 1300 - 1350  GBAD 409
CRN: 34023  Section 021  W 1400 – 1650 &  GBAD 409
Instructor: John Loeser  F 1300 - 1650

This is the second term of integrated laboratory for students majoring in chemistry and biochemistry/biophysics covering first hand experimental techniques of organic, physical chemistry, analytical, and inorganic chemistry for two projects. Students will do a two step synthesis to first produce a cyclic acid and then convert it into a cyclic ester. Techniques of vacuum distillation are developed with characterization of the product by GC, FTIR, and refractive index. In the second project students will use 2D NMR and GCMS to uncover the identity of an unknown compound, determine the Keq as a function of solvent polarity for Hacac, and synthesize and characterize a metal acetylacetonate complex. Additional $44 lab fee. No-show-drop. Must be taken in order. Contact Chemistry Department for registration.  Satisfies UHC Elective  PREREQ: 361H and CH 335 (may be taken concurrently)

CH 462H  Experimental Chemistry II

CRN: 34024  Section 001  M 1300 - 1350  GBAD 309  3 UHC Credits
CRN: 34025  Section 010  M 1400 - 1650  GBAD 309
W 1300 – 1650  GBAD 309

Instructors: Michael Lerner/Christine Pastorek

Advanced integrated laboratory course for junior level chemistry majors concentrating on physical and analytical chemistry of polymers and materials. Students synthesize a synthetic rock, zeolite, and make PMMA, a polymer. Students learn first hand techniques of: PXRD, INAA, DSC, TGA, GPC, electrochemistry, reaction kinetics by flash photolysis, pulsed polarography and ASV. Additional $44 course fee. Satisfies UHC Elective WIC for Chemistry majors  PREREQ: (CH 362 or CH 362H) and CH441 (may be taken concurrently), (CH 324 or CH 461 or CH 461H) CH 422 is recommended

COMM 111H  Public Speaking

CRN: 37535  Section 001  T 800 - 1050  STAG 233  3 UHC Credits

Instructor: Gregg Walker

This course features public communication as social influence. Students will study theoretical and practical aspects of public discourse. They will experience public speaking as serve as presenters, analysts, and critics. Assignments include speeches, a strategy report, and a speech critique. Satisfies UHC Bacc Core Speech
COMM 114H  Argument and Critical Discourse

CRN: 37456  Section 001  TR 1200 - 1320  STAG 233  3 UHC Credits

Instructor: Robert Iltis

The course is divided into two main components. The first deals with the fundamental principles of the theory of argument. It is designed to provide an introduction to the principles involved in practical argumentation. In this section of the course, we will read assignments in the text, discuss them in class, and work exercises based on the reading material. There will be one midterm and a final exam over these materials. There also will be a take-home essay assignment designed to have you apply your understanding of these materials in critical analysis.

For the second component we apply the principles studied in the first in oral presentations. First, students will present an oral argument and written brief organized around a deductive structure. Second, students will participate in a mock congress in which they will argue opposed positions on controversial topics. This assignment requires both oral and written presentations. Satisfies UHC Bacc Core Speech

CS 325H  Analysis of Algorithms

CRN: 38420  Section 001  MWF 1400 - 1450  STAG 107  4 UHC Credits

Instructor: Paul Cull

Informally, an algorithm is a procedure which solves a problem and is suitable for implementation as a program for a digital computer. The exact definition of "algorithm" is a major intellectual achievement of the Twentieth Century. At once, this definition solves the philosophical problem of "truth" versus "proof", and, it also lays the foundation for the digital computers which are the defining technology of our current era.

For philosophers, knowing that something can be done may be sufficient, but technologists also want to know HOW to do it. Even after they have a method for a problem, technologists want to know if their method is "best" or whether there are "better" methods to solve the problem.

In CS325H we will survey these important problems, and learn techniques to design, prove, and analyze algorithms. We will use these techniques to program and profile several of these algorithms. Students will study one algorithm in depth and give oral and written reports on their studies. Since this is an HONORS course, I expect that students will read the assigned material, and that some of the lectures will be replaced by discussions. Satisfies UHC Elective  PREREQS: CS 261; MTH 232 Prereq waived for Honors students

ENG 245H  The New American Cinema

CRN: 38421  Section 001  T 1600 - 1850  OWEN 103  4 UHC Credits

CRN: 38421  Section 001  W 1900 - 2250  OWEN 103

Instructor: Jon Lewis

This class will combine a close look at American Cinema from 1975-present with work on the American Film Institute’s Academic Network Project. All students enrolled in this class will, along with students at UCLA, Pitt, and the University of Texas at Austin, research and write entries for publication in the prestigious AFI “basic records” catalog. Additional $20 fee. Satisfies UHC Bacc Core Literature Arts Co-taught with ENG 452H
EN 452H  Studies in Film

CRN: 38422  Section 001  T 1600 - 1850  OWEN 103  4 UHC Credits
CRN: 38422  Section 002  W 1900 - 2250  OWEN 103

Instructor: Jon Lewis

This class will combine a close look at American Cinema from 1975-present with work on the American Film Institute’s Academic Network Project. All students enrolled in this class will, along with students at UCLA, Pitt, and the University of Texas at Austin, research and write entries for publication in the prestigious AFI “basic records” catalog. Additional $20 fee. Satisfies UHC Bacc Core WIC PREREQS: Sophomore standing; 8 credits of ENG 200-level or above. Co-taught with ENG 245H

ENG 275H  The Bible as Literature

CRN: 38423  Section 001  MWF 1400 - 1450  STAG 233  4 UHC Credits

Instructor: Chris Anderson

In this class we’ll try to set aside everything else and look closely at the language and style of the book of Genesis and the book of Job as if we are reading any other story, the work of any other creative writer: the narrative arcs, the development of character, what the stories say and what they don’t. I’ll ask you to do a number of short in-class “thought poems” as a tool for reading and discussion, and these will lead to several revisions of an out-of-class paper at the end of the term. I’ll also give you three multiple-choice exams over the course of the term as a way of helping you stay grounded in the words on the page. Our emphasis will be on ways of reading and in particular on the issue of literal interpretation versus metaphorical and symbolic interpretation--on kinds of truth and methods of interpretation. Satisfies UHC Bacc Core Literature and the Arts, Western Culture

ENGR 212H  Dynamics

CRN: 38426  Section 001  MWF 800 - 850  COVL 218  3 UHC Credits

Instructor: Nancy Squires

The study of dynamics has many interesting applications in engineering. The focus of the course is to solve practical problems using mathematical tools and computer programming. This course will emphasize the solutions of a wide range of problems encountered in engineering, including the control of robotic devices, design of rotating machinery and linkages, trajectory mechanics of flight vehicles and vibrations. Satisfies UHC Elective PREREQS: ENGR 211/211H, PH 211/211H
ENGR 350H  Sustainable Engineering

CRN: 37890  Section 001  TR 1200 - 1320  KIDD 238  3 UHC Credits

Instructors: Kenneth Williamson/Christine Kelly

Examination of technological innovations and alternatives required to maintain quality of life and environmental sustainability. Introduction to the present worldwide issues related to maintaining sustainable societies and to the search for an industrial system that is compatible with sustainability goals. Includes introduction to life cycle assessment, environmental auditing, design for the environment (DFE), environmental management systems (EMS), full cost accounting (FCA), and pollution prevention (P2). Open to students from all disciplines. Satisfies UHC Bacc Core Science, Technology, Society

ES 221H  Survey of African American Studies I: Empire and Emancipation

CRN: 39169  Section 001  TR 1200 - 1320  STAG 107  3 UHC Credits

Instructor: Robert Thompson

This interdisciplinary course will introduce students to the African American experience(s) beginning with Africa prior to Europe’s emergence from its dark-age and subsequent empire building. We will touch on indigenous African social structures, religious practices, and class relations at the time of Africa’s Third Golden Age. The course covers the European incursions into the African coastal states that led to the capture of Africans to be slaves. The course readings and class discussions will touch on aspects of the forced migration of Africans to the “New World,” the seasoning process, resistance of Africans to their enslavement at every point of being transported from their African homeland to the so called New World. The course also discusses the politics, economics, and culture of slavery in the United States (both North and South), the post Civil War Reconstruction, and its eventual overthrow in the National election of 1877. We will, end the Franklin/Higginbotham reading with a discussion of the rise of a new American Global Empire/Imperialism beginning in 1898 with the Spanish/American war. Satisfies UHC Bacc Core Difference, Power, and Discrimination

H 491H  Mental Health and Social Policy

CRN: 38427  Section 001  TR 1600 - 1650  STAG 237  2 UHC Credits

Instructor: Ray Tricker

This course is designed to examine the effects of important past and current issues related to mental health and mental disability in the United States today, in particular: the mental health professions and different approaches to treatment; risk factors and causes of mental illness; the residual impact of deinstitutionalization; housing and homelessness among the mentally ill; the right to refuse treatment; some major mental disorders – schizophrenia, depression and suicide, phobia/anxiety disorders; post Second World War mental health policy; the influence and relationship among philanthropic groups and government; innovations in mental health-supportive housing and assertive community treatment (ACT); the legal system; and the concept of dangerousness and mental illness, are areas of study for this class. Students will be able to apply innovative analytical techniques to examine how many mental disorders are reinforced by psycho-social and socio-psychological interactions. Satisfies UHC Colloquia
HC 199  
**Honors Writing/Multidisciplinary**

CRN: 34707  
Section 001  
MW 800 - 920  
OWEN 101  
3 UHC Credits

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. Required for Honors Scholar track. Satisfies UHC Bacc Core Writing II  PREREQ: WR 121

HC 199  
**Honors Writing/Science**

CRN: 31765  
Section 002  
TR 800 - 920  
STAG 203  
3 UHC Credits

Instructor: Eric Hill

This course is designed to help you develop strategies and skills to communicate scientific research and information. In this class you will assess the various modes of written communication, practicing them through in-class exercises and formal assignments. You will address key components of scientific and technical communication:

• Working collaboratively,
• Connecting with specific and multiple audiences,
• Maintaining an ethical stance,
• Doing research,
• Evaluating and reporting information,
• Writing in a variety of forms,
• Critically analyzing articles in scientific fields,
• Preparing an oral presentation and final research project.

Through individual and collaborative writing assignments, you will develop a strategy for effective written and oral communication. Required for Honors Scholar track. Satisfies UHC Bacc Core Writing II  PREREQ: WR 121

HC 199  
**Honors Writing/Engineering**

CRN: 38429  
Section 004  
TR 1000 - 1120  
GILK 115  
3 UHC Credits

Instructor: Eric Hill

This course is designed to help you develop effective communication and analytical skills through a variety of in-class and formal assignments. You will learn to use a variety of rhetorical strategies to create documents such as proposals, reports, letters, working bibliographies, and simple process descriptions. You will also use the tools of critical analysis to “get under the hood” of written and oral communication, using a critical eye to analyze audience, technique, and the various types of rhetorical purposes. Engineers must think critically about information, analyzing, summarizing, and communicating information in a variety of contexts. Because workplace communication is a complex social transaction, each situation must be evaluated both ethically and culturally in order to effectively exchange information in a global community. The final assignment for the class will be a group project that will require a group of students to pool their communication skills for both process and the product. Required for Honors Scholar track. Satisfies UHC Bacc Core Writing II AND equivalent to WR 327 for Engineers  PREREQ: WR 121
HC 299  The Art of Healing: Physician-Patient Relationships

CRN: 38503  Section 001  TR 1400 - 1450  STAG 233  2 UHC Credits

Instructor: Courtney Campbell

This is a special colloquium on physician-patient relationships open by instructor permission to interested honors, medical humanities, and pre-medical students. Students will read a best-selling book, Every Patient Tells a Story, by Dr. Lisa Sanders who is a physician, writer for the New York Times Magazine, and medical consultant for the award winning TV drama “House.” Students will also read a philosophical account of the calling to be a physician, The Physician’s Covenant: Images of the Healer in Medical Ethics, by scholar William May in order to reflect critically on the humanistic dimensions of medical practice.

Class sessions will use an interactive seminar format, with discussion of the readings focused through short student papers that will highlight important themes in the readings, including the concepts of professionalism, professional relationships, healing, disease, illness and suffering; the skills of the ideal physician; the experience of being a patient; and the role of story as the medium through which the physician-patient relationship is experienced. Satisfies UHC Colloquia

HC 407  Managing Meaning in the Healthcare Context

CRN: 38438  Section 011  T 1700 - 1850  STAG 233  1 UHC Credit

Instructor: Judy Bowker

This one-credit course may appeal to first year university students who may be considering healthcare as a field of study. In the first meeting, we will create a theoretical frame for studying interpersonal communication in healthcare. [Readings made available online.] Then, in a series of evening presentations once a week, a hospice manager, a representative from the Oregon Heath Authority, the victim of a head-on collision, and a career nurse will provide insights about the role of interpersonal communication in their experiences with health care. (Colloquium presenters may vary depending on scheduling priorities.) If the class size is small, some presentations may occur at the healthcare site; otherwise, presenters will come to campus. Students will interact with these presenters and each other. Each student will write three short papers reflecting on the first three presentations and one longer paper at the end of the class applying the communication theory to the healthcare narratives provided by the presenters. THE COURSE CONSISTS OF FIVE, 2-HOUR, EVENING MEETINGS THAT WILL OCCUR DURING THE FIRST FIVE WEEKS OF THE QUARTER. Satisfies UHC Colloquia

HC 407  Power of Context

CRN: 37458  Section 001  T 1200 - 1350  STAG 237  2 UHC Credits

Instructor: Jonathan King

Regular practice in sketching "organized stupidities." Revealing the power of self-reinforcing loops in everyday behaviors. Developing ways to achieve greater response-abilities in your personal, organizational, and national lives. Satisfies UHC Colloquia
HC 407  God, Pain, and the Problem of Evil: An Introduction to C.S. Lewis  
CRN: 37500  Section 003  MW 1500 - 1550  STAG 107  2 UHC Credits  

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. Satisfies UHC Colloquia

HC 407  Energy IQ: Resources, Responsibility, and Renewability Today and Tomorrow  
CRN: 38432  Section 005  MW 1300 - 1350  STAG 237  2 UHC Credits  

Instructor: Dan Arp/Dan Euhus/Skip Rochefort  
We will take both a qualitative and quantitative look at energy resources and uses in the United States. We will consider how energy is generated or obtained and consumed in the US. We will also explore the global implications of energy use and consumption. We will examine predominant and emerging technologies on both the resource and consumption sides. We will also examine the role of ethics, values, and public policy in influencing choices regarding energy use. Students will participate in and lead discussions, give presentations, and generate a personal energy philosophy/statement. Satisfies UHC Colloquia

HC 407  Writing About Film  
CRN: 38433  Section 006  W 1200 - 1350  STAG233  2 UHC Credits  

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 hear 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. Satisfies UHC Colloquia
HC 407 Science, Aesthetics, and the Invention of Altered States

CRN: 38435  Section 008  R 1200 - 1350  STAG 237  2 UHC Credits

Instructor: Robin Pappas

This course explores texts by artists, scientists, and cultural critics that discuss substance-induced experiences. During the term, we will consider how the strategies used by each author inform what we understand about the substance and its user. In our focus on language, we will also investigate the relationship between rhetorical patterns (like metaphors, similes, analogies, and other figures) and belief. Questions we will ask include the following: how does the way something is worded impact our beliefs and ultimately our actions? What is the impact of this phenomenon over time? Also, how do rhetorical strategies impact an author’s authority and why? The course is reading-intensive. Although there may be several days for which we only cover 10-20 pages, it is essential that you read carefully and critically. Most importantly, it is imperative that you read consistently. Satisfies UHC Colloquia

HC 407 Tantalizing Tales from Mexico

CRN: 38436  Section 009  TR 1000 - 1050  STAG 132  2 UHC Credits

Instructor: Kayla Garcia

Read three stories that take place in Mexico: the kidnapping of a college student who has two children; the death of a patriarch and the ensuing family mayhem; and a train ride from the border down to Mexico City taken by a young Chicana in search of her identity. The professor will share with the students her personal experience of having translated all three novels and having worked closely with the three authors. Class discussions will include Mexican and Chicano history, politics and cultural values as presented in the novels. Knowledge of Spanish is not required. Satisfies UHC Colloquia

HC 407 The News of Science

CRN: 38437  Section 010  TR 1600 - 1650  STAG 233  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 408  Workshop THESIS: LEARN

CRN: 37501  Section 003  R 1700 - 1850  STAG 203  1 UHC Credit
Meets weeks 2, 4, 6

Instructor: Dan Arp/Kevin Ahern/Eric Hill/Indira Rajagopal

In this course you will learn to 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, faculty, and alumni with experience in the thesis process. TheSIS will assist you by tracking 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, questions that are relevant to this stage of their experience. The Undertake module of the TheSIS will then be designed to move students through the steps required to complete a signed thesis proposal and pose some additional questions relevant to this stage of their experience. This course will be team taught. Satisfies UHC Intro to Thesis

HC 499  Workshop in Environmental Leadership

CRN: 38554  Section 005  T 1800 - 2050  STAG 237  3 UHC Credits

Instructor: Kathleen Moore

This course is designed as a weekly series of workshops. Primarily for students whose background is in science/social science/technology, the course introduces humanistic understanding and skills needed to make good decisions in a complex and diverse world. Thus, workshops practice relevant skills in moral reasoning, critical thinking, and effective communication, and invite an appreciation of diverse cultural, moral, and spiritual dimensions of environmental decisions. The premise of the course is that effective environmental leadership requires not only scientific knowledge, but also an understanding of the human context for decisions. The goal of the course is to help empower OSU students to respond creatively and effectively to the world’s emergency call for better ideas about how we might live on earth wisely, justly, and sustainably. Crosslisted with PHL 499H. Satisfies UHC Elective

HST 390H  Middle Eastern Women: In Their OwnWords

CRN: 39391  Section 001  MW 1000 - 1150  STAG 237  4 UHC Credits

Instructor: Jonathan Katz

In this course, students will study contemporary Middle East history through first-person narratives written by Middle Eastern women from several different countries (Egypt, Iran, Turkey, Morocco). Students will also consider the portrayal of women in contemporary Middle Eastern film. While the readings reflect the varying personal circumstances of the writers, several consistent themes emerge. These include the changing role of Middle Eastern women within the family, the engagement of these women in the political and social movements of their day, and the impact of secularization and Westernization upon their lives. Satisfies UHC Bacc Core Contemporary Global Issues
HST 432H  The History of Sexuality
CRN: 38439  Section 001  TR 1200 - 1350  BEXL 211  4 UHC Credits

Instructor: Robert Nye
This course is a general historical survey of sexuality in the West from the Greeks to the present. The emphasis will be on trying to understand changes in sexual behavior, attitudes toward sexuality, law, and ethics in historical context. There will be material on sex and gender, pornography, religion, the biology of the sexual body, and the sexual revolution. There will be a mid-term exam, a final exam, and a brief paper. Satisfies UHC Elective

HSTS 415H  Theory of Evolution and Foundation of Modern Biology
CRN: 38552  Section 001  TR 1000 - 1150  MLM 311  4 UHC Credits

Instructor: Michael Osborne
This class covers historical, cultural, and methodological issues of three so-called revolutions in modern biology. These are the Darwinian revolution in evolutionary theory generally said to have happened in 1859, but not understood in the modern sense until about 1930. The second revolution is the emergence of molecular and structural biology. The class will focus on the 1953 discovery of the double helical structure of DNA, and we will tour the Linus Pauling collections at the Special Collections unit of the OSU Valley Library. The third revolution is a contemporary one and concerns the isolation of human embryonic stem cells and epigenetic mechanisms. No prior knowledge of evolution, DNA, or modern developmental biology is presumed.

The professor will lecture on these three topics and provide students with the intellectual tools to identify and assess "revolutionary science." The class is structured to include discussions of readings and other course content including films. The majority of assigned readings occur in the first six weeks of the course so that students may work intensively on papers in the final four weeks.

Course requirements include completion of a mid-term, final, and peer-review exercise, and submission of an acceptable revised paper. Satisfies UHC Bacc Core WIC, Science, Technology, Society  PREREQ: UHC sophomore standing or higher

LING 251H  Languages of Oregon
CRN: 38440  Section 001  MW 1600 - 1720  STAG 233  3 UHC Credits

Instructor: Juan Antonio Trujillo
Basic lessons in languages spoken in Oregon's minority language communities presented by native informants; discussion, language analysis, and assessment facilitated by linguistics faculty. Languages presented will vary. Satisfies UHC Bacc Core Difference, Power, and Discrimination

ME 312H  Thermodynamics
CRN: 38441  Section 001  TR 1000 - 1150  ROG 332  4 UHC Credits

Instructor: Deborah Pence
Exergy destruction, machine and cycle processes, law of corresponding states, non-reactive gas mixtures, reactive mixtures, thermodynamics of compressible fluid flow. The UHC section will have opportunities to see and work with actual system components to aid in the design of a power cycle, a project requisite for the course. Crosslisted with NE 312H  Satisfies UHC Elective  PREREQS: (MTH 256 or 256H) and (ME 311 or NE 311 or ME 311H or NE 311H)
**ME 331H  Introductory Fluid Mechanics**

| CRN: 37503 | Section 001 | MW 1000 - 1150 | ROG 332 | 4 UHC Credits |

Instructor: Jim Liburdy  
This course introduces the concepts and applications of fluid mechanics and dimensional analysis with an emphasis on fluid behavior, internal and external flows, analysis of engineering applications of incompressible pipe systems, and external aerodynamics. Fluid mechanics is the study of fluids, either liquid or gas, at rest or in motion. This course includes studying the manner in which objects behave in fluids, the manner in which fluids flow through ducts and around obstacles, and the interaction between two fluids. In order to analyze these effects conservation equations of mass, momentum, and energy are developed and applied to engineering situations. The honors section will be more "hands-on" with time spent on problem solving in class and there will be a project/presentation instead of a final exam. Satisfies UHC Elective PREREQS: MTH 256, ENGR or ME212, ME311 or ME311H or NE 311H

**ME 452H  Thermal and Fluid Sciences Laboratory**

| CRN: 39153 | Section 001 | T 1600 - 1750 | COVL 218 | 1 UHC Credit |
| CRN: 39154 | Section 010 | R 1300 - 1550 | GRAF 106 |

Instructor: Vinod Narayanan  
The general catalog description states: "Course emphasis is on experiments related to thermodynamics, heat transfer, and fluid mechanics. Proper experimental methods, data and uncertainty analysis related to thermal and fluids measurements are discussed. "Experiments encompass areas of aerodynamics, power cycles for energy (steam power cycle and a gas turbine power cycle), fluid flow and heat transfer. Honors students will enroll into the regular section of lectures an have a separate lab section. The Honors lab section is meant to be different from the general laboratory section in the following aspects:  
1. Each student (as opposed to a group) will be given the opportunity to apply their creativity in the design of a test model, whose aerodynamic characteristics will be tested in the wind tunnel.  
2. A lab experiment based on thermal visualization using infrared thermography will be added to the Honors section lab. Satisfies UHC Elective PREREQS: ME311 or ME311H

**MTH 252H  Integral Calculus**

| CRN: 34026 | Section 001 | MWRF 900 - 950 | KIDD 236 | 4 UHC Credits |

Instructor: Holly Swisher  
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. Additional $10.00 Fee. Satisfies UHC Elective PREREQ: MTH 251 or MTH 251H
MTH 254H  Vector Calculus I

CRN: 38442  Section 001  MWRF 1300 - 1350  STAG 132  4 UHC Credits

Instructor: Elaine Cozzi

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. Additional lab activities will be provided exploring interesting applications of Calculus to various disciplines. Satisfies UHC Elective

PREREQ: MTH 252 or 252H

MTH 255H  Vector Calculus II

CRN: 37505  Section 001  MWF 900 - 950  STAG 233  4 UHC Credits
CRN: 37506  Section 010  F 800 - 850  STAG 233

Instructor: Tevian Dray

Introduction to vector analysis: line integrals and work, conservative fields, surface integrals and flux, divergence, curl, and the theorems of Gauss and Stokes. Emphasis on geometric intuition, not just computation. Especially suitable for those with an interest in physics and engineering, as well as mathematics. Satisfies UHC Elective

PREREQ: MTH 254

MTH 256H  Applied Differential Equations

CRN: 34027  Section 001  MWF 1200 - 1310  WNGR 287  4 UHC Credits

Instructor: Juha Pohjanpelto

First order linear and nonlinear equations, and second order and higher order linear equations, Laplace transform, and applications appropriate for science and engineering. Satisfies UHC Elective

PREREQ: MTH 254 or instructor consent

MTH 306H  Matrix and Power Series Methods

CRN: 34073  Section 001  MWF 1000 - 1110  WNGR 285  4 UHC Credits

Instructor: Yevgeniy Kovchegov

MTH 306H will move at a fast pace from day one. We plan to cover most of the textbook. Topics will include introduction to matrix algebra, determinants, systematic solution to linear systems, and eigenvalue problems. Convergence and divergence of series with emphasis on power series, Taylor series expansions, convergence tests for power series, and error estimates for truncated series used in practical approximations. Satisfies UHC Elective

PREREQ: MTH 252 or 252H MTH 254 recommended
**NE 312H  Thermodynamics**

CRN: 39422  Section 001  TR 1000 - 1150  ROG 332  4 UHC Credits

Instructor: Deborah Pence  
Crosslisted with ME 312H, see above for course description. Satisfies UHC Elective  
PREREQS: (MTH 256 or 256H) and (ME 311 or NE 311 or ME 311H or NE 311H)

**NE 331H  Introductory Fluid Mechanics**

CRN: 39512  Section 001  MW 1000 - 1150  ROG 332  4 UHC Credits

Instructor: Jim Liburdy  
Crosslisted with ME 331H, see ME 331H for description. Satisfies UHC Elective  
PREREQS: MTH 256, ENGR or ME212, ME311 or ME311H or NE 311H

**PH 222H  Recitation for Ph212**

CRN: 35266  Section 010  T 1100 - 1150  WNGR 304  1 UHC Credit

Instructor: Thomaz Giebultowicz  
Honors recitation reserved for UHC students enrolled in lecture/lab sections of PH 212. 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 UHC Bacc Core Physical Sciences  
COREQ: PH 212

**PH 223H  Recitation for Ph213**

CRN: 35264  Section 020  R 1100 - 1150  WNGR 304  1 UHC Credit

Instructor: Ken Krane  
Honors recitation reserved for UHC students enrolled in lecture/lab sections of PH 213. 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 UHC Bacc Core Physical Sciences  
COREQ: PH 213
Cosmology: The History and Nature of the Universe

CRN: 39398  Section 001  TR 1400-1450  STAG 237  2 UHC Credits

Instructor: Albert Stetz

Cosmology is the study of the universe, its past history, its future, and all the lines of evidence and reason that give us confidence that we at least partially understand so great a subject. Modern cosmology was born with Einstein’s theory of general relativity, but until recently it has been mostly mathematical speculation supported by a little data. In the last fifteen years, however, advances in ground-based and satellite-based astronomy have expanded our knowledge enormously. It now appears that the universe is being torn apart by some mysterious anti-gravity force, that the motions of galaxies are determined by some particles of dark matter unlike anything ever detected in the field of high-energy physics, and that the shape of the cosmos was determined by an initial inflation phase in which the fabric of spacetime expanded at a speed vastly exceeding the speed of light. The physicist’s version of this is highly mathematical, but the qualitative aspects can be understood by anyone with a lively interest in the subject. Satisfies UHC Colloquia.

Workshop in Environmental Leadership

CRN: 38553  Section 005  T 1800 - 2050  STAG 237  3 UHC Credits

Instructor: Kathleen Moore

This course is designed as a weekly series of workshops. Primarily for students whose background is in science/social science/technology, the course introduces humanistic understanding and skills needed to make good decisions in a complex and diverse world. Thus, workshops practice relevant skills in moral reasoning, critical thinking, and effective communication, and invite an appreciation of diverse cultural, moral, and spiritual dimensions of environmental decisions. The premise of the course is that effective environmental leadership requires not only scientific knowledge, but also an understanding of the human context for decisions. The goal of the course is to help empower OSU students to respond creatively and effectively to the world’s emergency call for better ideas about how we might live on earth wisely, justly, and sustainably. Crosslisted with HC 499. Satisfies UHC Elective

Introduction to the Theatre

CRN: 37538  Section 001  TR 830 - 950  WITH 173 (Lab Theatre)  3 UHC Credits

Instructor: Marion Rossi

The theatre, with multiple artistic voices and forms of expression, requires the application and development of effective communication skills. TA 147H activities simulate selected steps in the creative process(es) of theatre artists. Students gain insight and experience in small group communication while exploring how the various arts of the theatre (sets, lights, costumes, acting, directing, writing) communicate individually and collectively. Creative acts and activity make for direct, hands-on learning experiences. Satisfies UHC Bacc Core Literature Arts