# University Honors Program Course Descriptions Fall 2016

You must **take 3 UHP courses before the end of Spring Quarter 2016.** You can register for one UHP course during **Pass 1 (5/9-5/20)**. Undertaking a second UHP course requires **prior approval** from **Assistant Director Heidi van Beek**. If approved and space is available, you may add the course during **Pass 2 (8/22-9/2)**. All of the Honors courses are **capped at 25 students** each, except for MAT 17A, MAT 21B, and BIS 2A, which are capped at 40, 60, 48 respectively.

These courses are restricted to Honors students and can only be accessed using a **Course Registration Number (CRN)** distributed by UHP. You **cannot** search for them in Schedule Builder.

Please review the course descriptions below. You should select your <u>top five</u> classes. The course selection survey will be sent on <u>Wednesday</u>, <u>April 27th at 10:30PM</u>.

## **COURSE OFFERINGS**

<b>TITLE</b> Intro to Archaeology	<b>TERM</b> 201610 <b>(</b> )		<b>CRSE</b> 003	<b>SEC</b> 001	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Darwent, Christyann M	<b>TYPE</b> Lecture Discussion	MW	<b>TIME</b> 1:10 PM - 2:30 PM 2:40 PM - 3:00 PM	<b>BUILD</b> YOUNG YOUNG	00302

### **Description:**

This course is designed to introduce the methodological and theoretical underpinnings of archaeology. Goals of archaeological research and techniques used to extract data from the archaeological record are discussed in general terms and illustrated with examples from various parts of the world. Lectures are supplemented with films and computer visuals. It is designed to supply you with a basic understanding of the methods of archaeological analysis. Discussions will relate to concepts covered during class lectures and are intended to provide supplementary information on archaeological methods with a "hands-on" focus (e.g., real examples of bone, stone, ceramic and metal artifacts).

I expect you to leave this class with a much better understanding of what it is that archaeologists do, and how we reconstruct the past; become a more informed viewer of such channels as *Discovery* and *History*; and realize that culture history is a non-renewable resource to be protected. GE credit: SE, SL.

**Text:** Kelly, Robert L. and David Hurst Thomas (2014) *Archaeology: Down to Earth, 5th edition*\*. Wadsworth, Cengage Learning. \***note that a previous edition of this book is just** fine.

<b>TITLE</b> Introduction to Biology	<b>TERM</b> 201610 <b>(</b> )		<b>SEC</b> C01	<b>CREDITS</b> 5.000
<b>INSTRUCTOR(S)</b> Roth, John R	<b>TYPE</b> Lecture	 <b>TIME</b> 1:10 PM - 2:00 PM	<b>BUILD</b> CHEM	<b>ROOM</b> 00179

#### **Discussion Sections:**

Section 02: 10:00-11:50 AM Section 03: 2:10-4:00 PM

# Note: All discussion sections will all be held on Mondays in Sci Lab 2067. Choose one section.

## **Description:**

Essentials of life including sources and use of energy, information storage, responsiveness to natural selection and cellularity. Origin of life and influence of living things on the chemistry of the Earth. Not open for credit to students who have completed course 1A with a grade of C- or better. GE credit: SE.

<b>TITLE</b> Mod Lit In Transl	<b>TERM</b> 201610 (	SUBJ CHN (		<b>CRSE</b> 010	<b>SEC</b> 001	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Chen, Xiaomei	<b>TYPE</b> Lecture		<b>TIME</b> 4:10 PM - PM	6:00	<b>BUILD</b> SOCSCI	<b>ROOM</b> 00090

# **Description:**

This is a survey class of modern Chinese literature from the 1910s to the1990s in the contexts of Chinese historical and cultural circumstances and Western impacts. We will examine examples of the major literary genres such as fiction, autobiography, film, drama, and women's literature. Among some of key questions to be asked are: What is modern Chinese literature? What does it tell us about the cultural, social, psychological, and historical changes that occurred in twentieth century China? Who are the main literary and cultural figures of that century and what did they contribute to the mentality and historical understanding of the Chinese people and the Chinese nation? What was the impact of Western thought and how did it affect the way Chinese reflected on their own cultural identities, individuality, social, and family and gender relationships?

Since ethnic Chinese constitute one-fourth of the world population in the contemporary world, a deeper understanding of modern Chinese literature, as seen in the major writers and thinkers, will help us understand the perception of Chinese by Chinese and by non-Chinese. It will also help us understand how we can contribute to the mutual understanding between the Chinese people and peoples from other part of the world. No background in Chinese culture, history, and language is required. This is your best entry way into learning something about modern China, which is now the second world economy in the world. GE credit: AH, WC.

TITLE	TERM	SUBJ	CRSE	SEC	CREDITS
Design of Coffee	201610 🕦	ECM (	001	A01	3.000
C					
<b>INSTRUCTOR(S)</b>	TYPE	DAYS	TIME	BUILD	ROOM
<b>INSTRUCTOR(S)</b> Ristenpart, William Dean			<b>TIME</b> 10:00 AM - 11:50 AM	-	

Non-mathematical introduction to how chemical engineers think, illustrated by elucidation of the process of roasting and brewing coffee. Qualitative overview of the basic principles of engineering analysis and design. Corresponding experiments testing design choices on the sensory qualities of coffee. Not open for credit to Chemical Engineering and Biochemical Engineering majors or students who have completed Chemical and Materials Science 5. GE credit: SE, SL, VL.

Note: You will attend the regular lecture for this course, but this lab section is designated for honors students only and is led by the professors.

<b>TITLE</b> Princ Of Microecon	<b>TERM</b> 201610 (1)	SUBJ ECN		<b>SEC</b> 001	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Clark, Gregory	<b>TYPE</b> Lecture	DAYS MW	<b>TIME</b> 10:00 AM -		<b>ROOM</b> 00129
	Discussion	MW	11:20 AM 11:30 AM - 11:50 AM	MN WELL MN	00129

#### **Description:**

Course 1A and 1B may be taken in either order. Analysis of the allocation of resources and the distribution of income through a price system; competition and monopoly; the role of public policy; comparative economic systems. GE credit: ACGH, QL, SS.

<b>TITLE</b> Intermed Macro Theory	<b>TERM</b> 201610 ①	SUBJ ECN ①	<b>CRSE</b> 101	<b>SEC</b> 001	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Geromichalos, Athanasios	<b>TYPE</b> Lecture	<b>DAYS</b> TR	<b>TIME</b> 2:10 PM 3:30 PM	0200	2 10 0112
	Discussion	TR		- OLSC	ON 00163

Prerequisite: course 1A, 1B; Mathematics 16A-16B or 21A-21B with grade of C- or better in each. Theory of income, employment and prices under static and dynamic conditions, and long term growth. GE credit: None.

<b>TITLE</b> Intl Econ Relations	<b>TERM</b> 201610 <b>(</b> )	5020	<b>CRSE</b> 162	<b>SEC</b> 001	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Swenson, Deborah		<b>DAYS</b> TR	<b>TIME</b> 10:30 AM 11:50 AM	- HAR	LD ROOM T 01128

### **Description:**

Prerequisite: courses 1A-1B or consent of instructor. International trade and monetary relations, trade policy, exchange rate policy, policies toward international capital migration and investment. Emphasis on current policy issues. Course intended especially for non-majors. Not open for credit to students who have completed course 160A or 160B. GE credit: SS, WC.

<b>TITLE</b> Intro Topics in Lit	<b>TERM SUBJ</b> 201610 @ENL @		C <b>RSE</b> )40	<b>SEC</b> 001	<b>CREDITS</b> 4.000	5
<b>INSTRUCTOR(S)</b> Chaganti, Seeta	) <b>TYPE</b> Lecture/Discussion	21220	<b>TIME</b> 12:10 P	M - 1:30 PM	<b>BUILD</b> OLSON	<b>ROOM</b> 00151

### **Description:**

Beowulf: Monsters in Many Disciplines

This class will focus on the epic poem *Beowulf*. In order to enhance our understanding of the text, we will adopt an interdisciplinary approach to the poem's cultural context, considering visual art, weaponry, technology, animal studies, and other disciplines to inform a new perspective on the poem's mysterious and sometimes misunderstood monsters. In addition, students will have the unique opportunity to learn how to read and translate passages of the poem's original Old English, a beautiful and intriguing language entirely different from the English we speak today. Learning this deep history of the language we speak now will fundamentally change students' relationship to modern English. This knowledge will empower students to use the language they speak every day in vibrant new ways, making them compelling and effective communicators. GE credit: AH, WE.

Required text: Beowulf: A Facing Page Translation, by R. M. Liuzza

Supplementary materials and images will be posted to Smartsite.

TITLE	TERM	SUBJ	CRSE	SEC CREDITS
Civil War & Reconstruct	201610 (	DHIS 🛈	171B	001 4.000
<b>INSTRUCTOR(S)</b>	TYPE DAYS	TIME	BUILD	ROOM

<b>NUCTOR</b> (b)	ITTE DATS		DUILDROOM
Kelman, Ari	Lecture MWF	10:00 AM - 10:50 AM	HART 01116

Examination of the political and social history of the United States from the Compromise of 1850 to the end of Reconstruction in 1876. Causes of the war, the war itself, and the problems of reconstruction after the war. GE credit: ACGH, AH or SS, DD, WE.

<b>TITLE</b> Natural Sci & Math		<b>TERM</b> 201610		<b>CRSE</b> 008A	<b>SEC</b> 001	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Jamison-McClung, Denneal Sarah	<b>TYPE</b> Lecture	<b>DAYS</b> MW	<b>TIME</b> 10:00 AM - 11:20 AM	<b>BUILD</b> SCILA		
	Discussio	onMW	11:30 AM - 11:50 AM	SCILA	B02060	

#### **Description:**

Title: Challenges in Healthcare, Agriculture and the Environment.

Current global challenges in healthcare, food security, and environmental resource management will be met by advances in biotechnology. Scientists and engineers in biotechnology work in interdisciplinary teams, drawing on a deep knowledge of living systems and the physical world in order to develop platform technologies. This course will explore the interdisciplinary nature of biotechnology and emphasize the importance of scientific communication between all stakeholders (scientists, educators, citizens, businesses, policy makers, etc...) in effectively using biotech advances to meet global challenges. GE Credit: SE

<b>TITLE</b> Natural Sci & Math	<b>TERM</b> 201610 🛈	SUBJ IST 🕦	<b>CRSE</b> 008A	<b>SEC</b> 002	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b>	<b>TYPE</b>	DAYS	<b>TIME</b>	<b>BUILD</b>	<b>ROOM</b>
Wittman, David M.	Lecture	MW	6:10-8:00pm	Physics	TBD

### **Description:**

Title: Relativity!

Einstein's general theory of relativity is one of the triumphs of modern science, and its reputation for being fearsomely difficult to understand is undeserved. In this course we will build a conceptual understanding of general relativity starting from the basic idea of relativity as understood by Galileo. We will devote much of the time to a complete understanding of special relativity, emphasizing careful construction of logical arguments rather than math (a bit of algebra is required). When we move to general relativity in the final weeks, the emphasis will shift to conceptual (but still rigorous) understanding. By the end of the course you will be able to understand the twin paradox, time travel, and black holes.

Note: 2015 marked the 100th anniversary of Albert Einstein's presentation of the complete Theory of General Relativity to the Prussian Academy!

<b>TITLE</b> Calculus for BioSci	<b>TERM S</b> 201610 <b>()</b> M		<b>CRSE</b> 017A	<b>SEC</b> E01	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Lewis, Timothy James	Lecture	MWF	<b>TIME</b> 10:00AM -10:50AM 7:10 PM - 8:00 PM	<b>BUILD</b> HARING	<b>ROOM</b> 02016

#### **Description:**

Prerequisite: two years of high school algebra, plane geometry, plane trigonometry, and analytical geometry, and satisfying the Mathematics Placement Requirement. Introduction to differential calculus via applications in biology and medicine. Introduction to differential calculus via applications in biology and medicine. Limits, derivatives of polynomials, trigonometric, and exponential functions, graphing, applications of the derivative to biology and medicine. Not open for credit to students who have completed course 16B, 16C, 21A, 21B, or 21C; only 2 units of credit to students who have completed course 16A. GE credit: QL, SE, SL.

<b>TITLE</b> Calculus	<b>TERM</b> 201610 (1)	SUBJ MAT 🕕		<b>SEC</b> D01	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Liu, Fu	<b>TYPE</b> Lecture	DAYS MWF	<b>TIME</b> 12:10 PM -		<b>D ROOM</b> 01130
Liu, i u	Lecture		1:00 PM	111 11 11	01150
	Discussion	R	5:10 - 6:00		
			PM		

#### **Description:**

Prerequisite: course 21A or 21AH. Continuation of course 21A. Definition of definite integral, fundamental theorem of calculus, techniques of integration. Application to area, volume, arc length, average of a function, improper integral, surface of revolution. Only 2 units of credit to students who have completed course 16B, 16C, 17B, or 17C. GE credit: QL, SE, SL.

TITLE Rock	<b>TERM</b> 201610 (	SUBJ MUS ①	<b>CRSE</b> 106	<b>SEC</b> 001	<b>CREDITS</b> 4.000
INSTRUCTOR(S) Reynolds,	<b>TYPE</b> Lecture	<b>DAYS</b> MWF	<b>TIME</b> 9:00 AM -	<b>BUILD</b> EVERSN	<b>ROOM</b> 00266
Christopher A			9:50 AM		

This class is designed to introduce students to a history of rock music that combines a study of the cultures that created and sustained rock with an investigation of its musical styles. The class will discuss music that was composed roughly between 1945 to 1985, spanning the evolution from rhythm and blues to Punk and New Wave, from Fats Domino and Muddy Waters to the Talking Heads. Songs will be examined in their musical contexts (both popular and classical) and social, raising issues of race, gender, sex, drugs, and the commercial aspects of the popular music industry. For non-majors. GE credit: ACGH, AH, VL, WE.

<b>TITLE</b> Religious Ethics	<b>TERM</b> 201610 ①	SUBJ RST 🕦	<b>CRSE</b> 150	<b>SEC</b> 001	<b>CREDITS</b> 4.000	5
<b>INSTRUCTOR(S)</b>	ТҮРЕ	DA	<b>YS TIME</b>		BUILD	ROOM
O'Keefe, Meaghan M.	Lecture/Discu	ssion TR	9:00 AN	4 - 10:20 AM	OLSON	00167

### **Description:**

This course focuses on the role of ethics in the health sciences, focusing on human suffering, as well as the motivations and goals involved in understanding the experience of illness, the practice of medicine, and the concerns and implications of biomedical research. For example, a section on emergent biotechnology might look at powerful new gene modification technologies in terms of its potential to cure genetic diseases weighed against other ethical implications. Sessions devoted to bioethics may include case studies on presymptomatic and pre-implantation genetic diagnosis. Other topics will include professional ethics and religious consideration in clinical and research decision making. The course will also include at least one site visit to a research facility.GE credit: AH, WC, WE.

<b>TITLE</b> Mushroom, Mold, Society		SUBJ CRSE SAS (1) 030	<b>SEC</b> 001	<b>CREDITS</b> 3.000	5
<b>INSTRUCTOR(S)</b> Gordon, Thomas	<b>TYPE</b> Lecture	DAYS TIME MWF 5:10 Pl		<b>BUILD</b> SCILEC	<b>ROOM</b> 00123

Discussion Sections: Section 1: M, 1:10-2:00pm, Wellman 109 Section 2: M, 2:10-3:00pm, Wellman 109

### **Description:**

Fungi as organisms with which humans interact daily, societal issues arising from these interactions. Fungi in medicine, religion, agriculture, and industry, as well as cultural perceptions of fungi. GE credit: SE, SS. Note: You will attend the regular lecture for this course, but the discussion sections are designated for honors students only and is led by the professor.

<b>TITLE</b> Elementary Statistics	<b>TERM</b> 201610 <b>(</b> )		<b>CRSE</b> 013	<b>SEC</b> 001	<b>CREDITS</b> 4.000
<b>INSTRUCTOR(S)</b> Drake, Christiana M	<b>TYPE</b> Lecture Discussion	. –	<b>TIME</b> 3:10 PM - 4:30 PM 4:40 PM - 5:00 PM	<b>BUILD</b> OLSON OLSON	00251

Descriptive statistics; basic probability concepts; binomial, normal, Student's t, and chi-square distributions. Hypothesis testing and confidence intervals for one and two means and proportions. Regression. Not open for credit to students who have completed course 13V or higher. GE credit: QL, SE.