

## Courses with Honors Add-Ons 10/20/2016

### Sorted by Parent Course

**Add-Ons MUST be taken in the SAME SEMESTER as the associated regular course.**

**(Exceptions to this policy are at the discretion of the Instructor)**

Parent Course							Add-on Course						
Subject	Course	CRN	General Ed	Pre 2016 Honors	2016 Honors	Title	Subject	Course	CRN	Title	Instructor	Time	Add-on Description
AGEC	1113	Any	S	5	Social Sciences	Introduction to Agricultural Economics (S)	AGEC	2990	26345	Deep Issues of AGEC: Honors	Cheryl Sinn Devuyt	R2:00-2:50	Deeper Analysis of AGEC Issues: Honors - Discussion of selected agricultural and rural issues related to agricultural family finances, agribusiness planning, consumer behavior, agribusiness start-ups, current agricultural news topics, and history of economic thought.
AMST	2103	ANY	DH	2	Humanities	Introduction to American Studies	AMST	3980	27449	American History in 15 Songs: Honors	Douglas Miller	W14:30:00-15:20:00	The idea here is to embrace popular and unpopular music as windows into some of the major contours and themes of United States history. Songs can function as both primary and secondary sources, and many classic songs have the potential to offer fresh insights into familiar topics. The reverse can also be true in that an appreciation for historical context can deepen the meaning and importance of music as a popular medium and cultural artifact.
ANSI	2233	26701		6	STEM	The Meat We Eat	ANSI	4900	27811	Retail/Food Service Meat Value: Honors	Gretchen Mafi	T14:30-15:30	Retail / Food Service Meat Value: Honors Students will evaluate meat cuts of different value offered in grocery stores and restaurants. Quality and yield traits will be calculated and value determined. Products will range from high quality USDA Prime Beef to low value chicken/pork hot dogs. Students will gain an understanding of meat processing and how meat is valued because of different ingredients, fat levels, raw product sources, and cooking methods. Product prices, cooking methods and cooking loss, edible portions percentages, and values will be determined of all products. Students will summarize findings and at conclusion of course better understand retail and food service meat prices and values depending on initial product sources.
ANSI	3543	21485		6	STEM	Principles of Animal Nutrition	ANSI	4900	20084	Principles of Nutrition: Honor	TBA	F15:30:00-16:20:00	Honors Add-on to Principles of Animal Nutrition
BIOL	1114	ANY	LN	4	STEM	Introduction to Biology	HONR	1000	27582	BioFuels Honors	William J Henley	W14:30:00-15:20:00	The Biology of Biofuels - The world is at a crossroads with increasing demand for energy to run the global economy. With most energy still derived from fossil fuels, energy use remains an environmental liability and a national security concern. Biofuels are one potential alternative. What are the environmental implications of fossil fuels vs. biofuels? What are the physiological, ecological and technological barriers to achieving economically viable and environmentally benign biofuels? In discussing these topics, we will integrate biological concepts spanning cellular, organismal and ecological levels of biology.
BIOL	1114	ANY	LN	4	STEM	Introduction to Biology	HONR	1000	27584	The Science and Art of Pollen: Honors	Ming Yang	R14:00:00-14:50:00	This course will explore the biology and beauty of pollen. It will be based on the book "Pollen: The Hidden Sexuality of Flowers" by Rob Kessler and Madeline Harley (2014). This book is a product of a collaboration between an artist and a scientist, which provides a concise scientific content about, and stunning microscopic images of, pollen.
CS	VAR.	VAR.		6	STEM	Spring 2017 CS Courses. See list in Description	HONR	1000	22396	Programing Intelligent Robots	Christopher Crick	W4:30-5:20	Programming Intelligent Robots - Students in this course will learn to develop applications for autonomous robots, from simple reactive architectures to multirobot teams that engage in sophisticated planning and coordination. Students will be introduced to problems in distributed systems, artificial intelligence and computer vision. Prior programming experience at the level of CS I is required. - Crick - CO-REQUISITE NOTE: Must be an honors student enrolled in Computer Science II (CS 2133) or C/C++ (CS 2433) C/C++ course or any other mid-level CS class for the Spring 2016 semester.]

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Subject	Course	CRN	General Ed	Pre 2016 Honors	2016 Honors	Title	Subject	Course	CRN	Title	Instructor	Time	Add-on Description
ENGL	VAR	Var	H	2	Humanities	All Spring 2017 creative writing courses offered by the Department of English. See list in Description	ENGL	3200	21639	Frontier Mosaic: A Hands-On Experience in Creative Publishing: Honors	Aimee D Parkison	W14:30:00-15:20:00	<p>Course Description: In this add-on course, Honors students enrolled in eligible creative writing courses may receive one-hour credit for helping Frontier Mosaic, OSU's student-run literary magazine, which serves as a forum for the creative work of undergraduate students at Oklahoma State University. The annual publication, released each spring, includes poetry, fiction, creative nonfiction, and visual art (painting, drawing, photography, collage, etc.). Frontier Mosaic offers undergraduate students hands-on experience and training in the areas of publication, event planning, fundraising, public relations, community engagement, editing, writing, web design, and the selection of creative works. Frontier Mosaic also holds readings and other events. We are looking for people who are passionate about writing, literature, and the arts, as well as those who are interested in participating in and promoting OSU's community of student writers and artists. Sample issues are available at &lt;www.frontiermosaic.com&gt;</p> <p>Eligible courses for the add-on: All Spring 2017 creative writing courses offered by the Department of English</p> <p>ENGL 4620 26469 ADV CREATIVE NONFICTION WRTG ENGL 2513 21597 INTRO TO CREATIVE WRITING ENGL 4640 21708 ADV POETRY WRITING ENGL 4630 21706 ADV FICTION WRITING ENGL 2513 21594 INTRO TO CREATIVE WRITING ENGL 2513 21595 INTRO TO CREATIVE WRITING ENGL 2513 21598 INTRO TO CREATIVE WRITING ENGL 2513 21599 INTRO TO CREATIVE WRITING ENGL 2513 25251 INTRO TO CREATIVE WRITING (online).</p>
ENTO	2003	21814	N	4	STEM	INSECTS AND SOCIETY	ENTO	4400	21820	Honors Insects & Society	William Wyatt Hoback	T10:30:00-11:20:00	Insects and Society examines the role insects have played in human lives historically and in the present day. Insects contribute more than \$50 billion dollars to the U.S. economy and they kill more than one million people worldwide every year. For the fall Honors option, we will read and discuss <i>Locust</i> by Jeff Lockwood. The Rocky Mountain migratory locust was the most abundant animal on the planet and caused great hardships until the early 1900s as the western United States was settled. Today, it is extinct. This book examines the impact of the locust on the American west and reasons for its unintended extinction. Students will investigate the roles of biodiversity, ecology, and human disturbance in shaping our world in the past, present, in order to consider the future.
GEOG	1113	ANY	IS	5	Social Sciences	Introduction to Cultural Geography	GEOG	4930	22171	Readings in Cultural Geography: Honors	Rebecca Ann Sheehan	T12:30:00-13:20:00	This one credit-hour honors class will emphasize critical discussion. Accordingly, students will 1) read and discuss additional readings associated with each textbook chapter's theme 2) write short critical reaction papers on additional reading associated with each textbook chapter's theme and 3) do a creative research project based on a theme from the course, presenting that research to the class. (May be taken with any GEOG 1113 section EXCEPT GEOG 1113 CRN 22068
HIST	1103	ANY	CORE	1	Humanities	Survey of American History	HIST	3980	27448	American History in 15 Songs: Honors	Douglas Miller	W14:30:00-15:20:00	The idea here is to embrace popular and unpopular music as windows into some of the major contours and themes of United States history. Songs can function as both primary and secondary sources, and many classic songs have the potential to offer fresh insights into familiar topics. The reverse can also be true in that an appreciation for historical context can deepen the meaning and importance of music as a popular medium and cultural artifact.

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HIST, ART, ARCH	Var.	Var.	H	2	Humanities	Spring 2017 courses in History Art and Architecture listed in the description	HIST	3980	27646	Leonardo da Vinci: Honors	David M Dandrea	W11:30:00-12:20:00	From the Mona Lisa to The Da Vinci Code, Leonardo da Vinci (1452-1519) has captured the western imagination for centuries. An extraordinary painter, sculptor, and engineer, Leonardo won the admiration of his contemporaries and set the standard for a well-rounded individual dedicated to artistic perfection and scientific discovery. In this course we will study Leonardo da Vinci in his historical context and discuss the transformation of this Renaissance man into a cultural icon. Eligible courses for the add-on: The following Spring 2017 in History Art and Architecture  HIST 1613, Western Civ. to 1500 HIST 3913, History of Medicine ART 1503, Art History Survey I ART 1513, Art History Survey II ART 1603, Introduction to Art ART 3543, Leonardo, Art, and Science ARCH 3083, History and Theory of Baroque Architecture
MATH	2144 or above	ANY	A	3	STEM	Enrollment in any MATH class numbered 2144 or above.	MATH	2910	27586	High Performance Computing in Mathematics: Honors	Dana Sue Brunson	T15:30:00-16:45:00	This course will provide students with an introduction to the use and value of high performance computing in mathematics and its applications. Students will learn the key issues in supercomputing while learning to use OSU's supercomputer Cowboyy.
MATH	2144 or above	ANY	A	3	STEM	Any MATH course at the level of MATH 2144 or above	MATH	2910	27891	Games of Strategy: Contract Bridge	Dr. Jeffrey Mermin	T 4:00-5:15	In this course we will learn the basics of playing the game Contract Bridge, one of the most difficult games of strategy with incomplete information (as opposed to games such as chess or go in which both players have complete information). Students will learn the rules of the two phases of the game: the auction, or the bidding phase, and then the play of the cards. Students will learn to analyze card positions and think strategically. This involves mental counting of cards that have been played, and drawing inferences from those counts of what cards opponents are likely to hold. We will touch on permutations and combinations, as they help us determine the number of options for ways the cards can be distributed, and then use basic probability to determine the most likely outcomes. The game also has social and information-theoretic aspects, requiring respectful and accurate communication with fellow players using the abstract language of bidding.
MATH	2144 or above	ANY	A	3	STEM	Any MATH course at the level of MATH 2144 or above	MATH	2910	27892	The Mathematics of Perspective	Lisa Mantini	T 12:30-1:45	In this course we will use mathematics to study images of objects in 2 and 3 dimensions. Topics will include mathematical patterns behind repetitive patterns in 1-dimensional and 2-dimensional patterns and how these appear in visual images such as the art of M.C. Escher. Then we will use analytic geometry principles to determine how to describe 3-dimensional objects in two dimensions including one-point, two-point, and 3-point perspective. Students will complete 2-3 projects and approximately 10 short assignments. We will also take a field trip to an art museum if possible.  Prerequisites: The students should have a high-school background in plane geometry and should be comfortable using coordinates in 2 and 3 dimensions to describe points in the plane and in space. We will use a spreadsheet program such as Excel and digital photography as tools.
MATH	2144 or above	ANY	A	3	STEM	Any MATH course at the level of MATH 2144 or above	MATH	2910	27893	The Mathematics of Perspective	Lisa Mantini	T 12:30-1:45	In this course we will use mathematics to study images of objects in 2 and 3 dimensions. Topics will include mathematical patterns behind repetitive patterns in 1-dimensional and 2-dimensional patterns and how these appear in visual images such as the art of M.C. Escher. Then we will use analytic geometry principles to determine how to describe 3-dimensional objects in two dimensions including one-point, two-point, and 3-point perspective. Students will complete 2-3 projects and approximately 10 short assignments. We will also take a field trip to an art museum if possible.  Prerequisites: The students should have a high-school background in plane geometry and should be comfortable using coordinates in 2 and 3 dimensions to describe points in the plane and in space. We will use a spreadsheet program such as Excel and digital photography as tools.

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MATH	2153	ANY		6	STEM	Calculus II	MATH	2910	27866	Honors Topics in Calculus II	JaEun Ku	T 2:00-2:50	Calculus IIThe course will use the computer software MATLAB to experiment with the concepts presented in Calculus II. In the first part of the course, the students will become proficient with MATLAB. Then we will start to experiment with topics such as the approximation property of Taylor polynomials, convergence of series, etc. If time permits, we will discuss more theoretical issues, like, for example, speeding up convergence
MATH	2163	ANY		6	STEM	Calculus III	MATH	2910	27867	Honors Topics in Calculus III	Walter Rusin	F11:30-12:20	This add-on course for Calculus III will focus on tying in the concepts of multivariable calculus to their single-variable equivalents. In particular, students will learn basic multivariable linear approximation, a basic version of the inverse function theorem, and multivariable Taylor expansions. Students will learn how these concepts are an extension of techniques studied in Calculus I and II. These topics are not part of a regular Calculus III curriculum.
MICR	2123	22923		6	STEM	Introduction to Microbiology	MICR	4990	27489	Introductory Microbiology: Honors	Tyrrell Conway	R14:00:00-14:50:00	Honors Add-on for Introduction to Microbiology
MICR	3033	ANY		6	STEM	Cell and Molecular Biology	MICR	4990	27490	Cell and Molecular Biology: Honors	Rolf Alexander Prade	W14:30:00-15:20:00	Honors Add-on to Cell and Molecular Biology
MICR	3223	22938		6	STEM	Advanced Microbiology	MICR	4990	27492	Advanced Microbiology: Honors	Mostafa Samir Elshahed	T12:30:00-13:20:00	Honors Add-on for Advanced Microbiology
MICR	3253	22939		6	STEM	Immunology	MICR	4990	27493	Immunology: Honors	David K Burnham	T15:30:00-16:20:00	Honors Add-on to Immunology
MICR	4053	22943		6	STEM	Pathogenic Microbiology	MICR	4990	27495	Pathogenic Microbiology: Honors	Erika Ildiko Lutter	F12:30:00-13:20:00	Honors Add-on to Pathogenic Microbiology
MICR	4233	22947		6	STEM	Advanced Cell and Molecular Biology	MICR	4990	27497	Advanced Cell and Molecular Biology: Honors	Wouter David Hoff	W13:30:00-14:20:00	Honors Add-on to Advanced Cell and Molecular Biology
MICR	4900	25288		6	STEM	Peer Reviewed Science Writing	MICR	4990	27498	Peer Reviewed Science Writing: Honors	Wouter David Hoff	F13:30:00-14:20:00	Honors Add-on to Peer Reviewed Science Writing
MUSI	2573	ANY	H	2	Humanities	Introduction to Music	HONR	1000	27581	EDM Electronic Dance Music: Honors	Mark E Perry	M14:30:00-15:20:00	DM (electronic dance music). This course will cover its history since the disco era and students will learn how to DJ-- culminating with an end of the semester dance party, with the students DJing. The instructor specializes in EDM and is a DJ.
PHIL	1213	ANY	H	2	Humanities	Philosophies of Life	HONR	1000	25355	Learning to Argue about Current Events: Honors	Scott David Gelfand	R10:30:00-11:20:00	This course is intended to help students learn how to analyze and discuss current events issues as well as cases from the Ethics Bowl. During the latter part of the semester, students will engage in an in-class Ethics Bowl competition. Students will also learn about how they can participate in the regional and national Ethics Bowl competitions (teams sponsored by the OSU Department of Philosophy and the OSU Ethics Club).
PHIL	1213	ANY	H	2	Humanities	Philosophies of Life	HONR	1000	25356	Evolution and Morality: Honors	Justin Michael Horn	F10:30:00-11:20:00	Ever since the publication of Darwin's Origin of Species in 1859, many have wondered whether the theory of evolution has implications for our understanding of morality. If human beings evolved by a process of unguided natural selection, does this mean that morality is nothing more than "a collective illusion foisted upon us by our genes," as some have suggested? Or, on the contrary, might evolutionary theory provide us with a scientific basis for understanding morality, and even for justifying our moral views? In this honors add on, we'll explore a range of philosophical perspectives on the relationship between evolution and morality.
PLNT	1213	ANY		6	STEM	Introduction to Plant and Soil Systems	PLNT	4470	23943	Honor Intro Plant Soil System	Beatrix Juarice Haggard	M14:30:00-15:20:00	From Hands-on to History: the story of Crop Production - Students will experience hands on laboratories in the greenhouse and the crop science laboratory. These labs will evaluate identification of various growth characteristics for multiple crops grown in Oklahoma. Including germination and etiolation using growth chambers and the greenhouse to evaluate how environment influences plant growth. Students will also read "The Living Fields: Our Agricultural Heritage", and we will discuss the book when not working on labs or in-class demonstrations. This add on will provide a deeper understanding of how production agriculture has evolved into its current form.

Subject	Course	CRN	General Ed	Pre 2016 Honors	2016 Honors	Title	Subject	Course	CRN	Title	Instructor	Time	Add-on Description
PHYS	1114	ANY	LN	4	STEM	General Physics	PHYS	2020	27868	Honors for PHYS1114	Mario Borunda	M1:30- 2:20	Requirement: Co-enrollment in PHYS1114 or earned credit for PHYS 1114 during Fall 2016  This course will explore the concepts of mechanics, fluids, and heat from the point of view of their application to living systems. Topics to be covered include the role of physics in living matter; mechanical challenges to life resulting from the highly viscous environment present at microscopic scales, constraints on force at the cellular scale, motion within cells, tissues, and fluids; and energy, heat, and entropy in biological systems. The class will also cover how cellular machinery (e.g., molecular motors) can convert chemical energy sources to mechanical forces and motion. Students in this class will be introduced to the physics relevant to DNA and other biological systems, including rigidity and elasticity. The course will not require students to buy a textbook.
PHYS	2014	ANY	LN	4	STEM	General Physics	PHYS	2020	27869	Honors for PHYS2014-1	Joseph Haley	M11:30 – 12:20	This one-hour course will explore force and mass at the most fundamental level. The class will investigate questions such as: What are the fundamental constituents of matter? What are the fundamental forces? Why do some particles decay? Why do particles have mass? Students will also learn about the particle colliders and detectors used to study these questions. The class will conclude with hands-on analysis of collisions produced by the Large Hadron Collider at CERN. No textbook is needed for this add-on course.
PHYS	2014	ANY	LN	4	STEM	General Physics	PHYS	2020	27870	Honors for PHYS2014-2	Staff	W1:30 – 2:20	This one-hour course will explore force and mass at the most fundamental level. The class will investigate questions such as: What are the fundamental constituents of matter? What are the fundamental forces? Why do some particles decay? Why do particles have mass? Students will also learn about the particle colliders and detectors used to study these questions. The class will conclude with hands-on analysis of collisions produced by the Large Hadron Collider at CERN. No textbook is needed for this add-on course.
PHYS	2114	ANY	LN	4	STEM	General Physics	PHYS	2020	27871	Honors for PHYS2114	Kaladi Babu	W9:30-10:20	Requirement: Co-enrollment in PHYS 2114 or earned credit for PHYS 2114 during Fall 2016  This class will introduce the student to Einstein's theory of relativity. The constancy of the speed of light between frames and the resulting phenomena of time dilation and length contraction will be developed. Applications to GPS technology and to lifetimes of elementary particles will be presented. Einstein's special theory of relativity will be shown to unify the laws of electricity, magnetism and optics with the laws of mechanics. The student will be introduced to Einstein's general theory of relativity, and some of its major consequences, such as the formation of black holes and the expansion of the Universe. No textbook is needed for this add-on course.
PSYC	1113	ANY	S	5	Social Sciences	Introduction to Psychology	PSYC	3120	23961	Exploring Science in Behavioral Science: Honors	David Gethin Thomas	M14:30:00-15:20:00	Up off the Couch: Exploring the "Science" in Behavioral Science - The conception of psychology in American culture typically involves the mentally ill, Dr. Phil, and eccentric clinicians revealing the causes of people's flaws by delving into the dark recesses of their minds. This popular conception leaves out the tremendous understanding of mind and behavior that has been built up over the past century through the methods of scientific inquiry. In this course, students will create videos, gather their own data (from cemeteries of all places), and learn how to be intelligent consumers - and creators - of scientific information, with a de-emphasis on lecture and reading and a focus on hands-on activities. (1 credit hour)
PSYC	1113	ANY	S	5	Social Sciences	Introduction to Psychology	PSYC	3120	25988	Thinking, Memory, and Language: Honors	Shelia M Kennison	W14:00:00-14:50:00	Honors add-on to Introduction to Psychology
PSYC	2583		S	5	Social Sciences	Developmental Psychology	PSYC	3120	23965	Biological Bases Development: Honors	Jennifer Byrd Craven	T13:30:00-14:20:00	BIOLOGICAL BASIS OF DEVELOPMENT Students in this course will explore the relationship between biology and developmental outcomes, specifically focusing on key developmental transitions such as early childhood and adolescence. Topics will provide an in-depth look at biology-developmental outcomes are they are covered in PSYC 2583 as they are related to health, social relationships, and cognitive performance.
SOC	1113	ANY	S	5	Social Sciences	Introduction to Sociology	SOC	4990	27745	Introduction to Sociology: Honors	Richard Ellefritz	F 9:30-10:20	Honor Add-on to the Introductory Sociology
SPCH	2713	ANY	S	5	Social Sciences	Introduction to Speech Communication	SPCH	4710	26001	Honors Experience in Speech	David Charles Schrader	W13:30:00-14:20:00	A supplemental Honors experience in Speech Communication to partner concurrently with designated SPCH course(s). This course adds a different intellectual dimension to the designated course.
STAT	2013	ANY	A	3	STEM	Elementary Statistics	STAT	4910	26924	Honors Statistics Add On	Robert Adam Molnar	F15:30:00-16:20:00	Honors Add-on in Statistics
STAT	2023	ANY	A	3	STEM	Elementary Statistics for	STAT	4910	26924	Honors Statistics Add On	Robert Adam Molnar	F 15:30:00-16:20:00	Honors Add-on in Statistics

						Business and Economics							
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