

Spring 2016 Supplement and Course Offerings List

(vol14, v2.2, January 15, 2016)

Information Contained In this Document

- 1) Course Tips & Info and Catalog Supplement (courses new to catalog for 2015-16 or special topics)
- 2) Cross-Registration Links and Deadlines
- 3) Course Offerings List (you can also search this here: [Course Search](#))
- 4) Course Offerings Grid

General Registration Information and FAQs (formerly contained in the registration booklets), please visit our [web page](#).

Registration Timelines for Add; Drop and Pass/No Credit ; Withdraw

Session	Add	Drop and Pass/No Credit	Withdraw
Full Semester (Jan 19 – Apr 28)	February 1, 2016	March 30, 2016	April 28, 2016
Session I (Jan 19 – Mar 4)	January 25, 2016	February 18, 2016	March 4, 2016
Session II (Mar 7 – Apr 28)	March 11, 2016	April 12, 2016	April 28, 2016

Cross-Registration Deadlines

	Babson	Brandeis	Wellesley
Cross-registration open period	11/2/2015 – 1/25/2016 at 4:30 p.m.	1/5/2016 – 1/27/2016	11/9/2015 – 12/21/2015; 1/25/2016 – 2/5/2016 at 11 p.m.
First day of classes	1/19/2016	1/13/2016	1/25/2016
Drop deadline	1/25/2016 at 4:30 p.m.	3/2/2016	2/19/2016 at 11 p.m.

Questions? Contact the Registrar's Office at Olin College, Campus Center, Room 320; registrar@olin.edu 781-292-2340

Degree requirements are outlined in the course catalog: <http://www.olin.edu/course-catalog/2015-16-course-catalog/>

Course descriptions can also be found in the catalog and in the portal course search. New, highlighted, and Special Topics course descriptions are listed below.

Helpful Tips & Information On Planning Your Spring 2016 Courses

- A. Entrepreneurship Foundation Requirement: AHSE1515: Products and Markets is available to first year students only. If you have not yet completed your foundation entrepreneurship (formerly FBE or TEI) requirement, you can satisfy this requirement with a substitution by completing the Babson course, EPS3501: Entrepreneurship and Opportunity. (Note: using this substitution will negate their use in any E! Concentration).
- B. You spoke, we listened! In addition to Numerical Methods and Scientific Computing, we are offering Partial Differential Equations for advanced mathematics courses.

New and Special Topics Courses

AHSE 2199A-01: Special Topics in Arts, Humanities, Social Sciences

Narrative Psychology

Instructor: Adler

Credits: 4 AHS

Humans are natural storytellers. Indeed, it has been suggested that the natural mode of human thought takes a narrative form. This course will present an examination of the scientific study of humans' approach to meaning-making through the crafting and telling of personal stories. The course will include consideration of the ways in which we create meaning out of our experiences with a special emphasis on identity development, drawing on scientific research from personality, developmental, and clinical psychology. This course is being offered in the Psychology Department at Wellesley; it will meet on Wellesley's campus on Mondays and Thursdays from 11:10am-12:20pm. It will be primarily filled with Wellesley students, many of whom are majoring in Psychology. Professor Adler will reserve no more than five slots for Olin students and all will be admitted only by permission of the instructor. If you are interested in taking this course, you should email Jon (jadler@olin.edu) to let him know you are interested and determine if it will be a good fit for you.

AHSE2199B-01: Special Topics in Arts, Humanities, Social Sciences

World Creation as Cultural Commentary

(Session I)

Instructor: Vitols

Credit: 2 AHS

The worlds and cultures of fictional works echo perspectives and commentaries on the state of society and often project into the future, forecasting potential utopia or destruction. This class will explore the relationship between our political, cultural, and socioeconomic reality and those of the fictional worlds created by many science fiction and fantasy writers. Students will discuss and analyze common themes and ideologies expressed in fictional media and investigate how literature, film, and television express commentary on our worlds. The course was developed by Ben Kahle as part of his AHS Capstone and will be co-taught by him.

AHSE2199C-01: Special Topics in Arts, Humanities, Social Sciences

Virtualities: An Introduction to Video Gaming History and Theory

(Session II)

Instructor: Vitols

Credit: 2 AHS

Though a relatively new technology and art form, video gaming has become an integral part of daily life in many societies. Deeply connected to the birth of the computer and the internet, video games today shape and are shaped by our society. How have video games evolved over the past few decades? How do massive multi-player role playing games affect how people conceptualize community? Why do certain games develop an intense cult following, while others sink into obscurity? This course will offer a broad introduction to the history of video game technology, from its inception to the present day. It will also examine major theoretical concerns involved in video gaming, such as the constructions of gender, identity, and community.

AHSE2199E-01: Special Topics in Arts, Humanities, Social Sciences

Designing the 21st Century Engineer: Leadership, Values, and Innovation

Instructors: Martello/Gentile

Credit: 2 AHS

Do you want to contribute to a paradigm shift in the education of engineering professionals? Do you want to make a positive impact on engineering education at Olin and beyond?

This two-credit course offers a chance to learn about a new approach to values-driven leadership development called “Giving Voice To Values” (GVV). This approach has made a dramatic impact on business education and business practice around the world, having been used in hundreds of schools and organizations, including engineering-driven businesses. GVV has yet to be adapted for use in the engineering profession... until now.

Our class will begin by exploring the GVV framework and its applicability to engineers. We will work in teams to research the most critical leadership and values conflicts faced by engineering professionals in their careers and to understand faculty aspirations and reservations around addressing these conflicts. We will conclude with a design project that will give you the chance to develop workshops or co-author educational materials for use in Olin courses and beyond. The course will be run by Rob Martello and Babson Professor Mary Gentile (an educational consultant and the author of *Giving Voice to Values*), using Olin’s experimental grading (EG) system.

AHSE2199F-01: Special Topics in Arts, Humanities, and Social Sciences

What’s Your Story? Narrative with Purpose

Instructors: Epstein, Zastavker

Credit: 2 AHS

Picture this: you are sitting across a desk from a person who holds your future in their hands. You are watching this gatekeeper read through your CV or essay or business proposal or design portfolio and that’s when they look up from your work, drop the easy demeanor and point blank ask you: “Everyone I have talked to today has impressive credentials just like you. What makes you special? What’s your story?” And that’s when you think to yourself: “I wish the work they were holding was already making my story clear.” Do you want your future to hinge on three minutes of improvisational thinking about who you are? We don’t! Use this class to think through and narrate your personal and professional story and ensure that when you meet your next gatekeeper your work will speak for itself. In this course students will have multiple, iterative opportunities to try various theoretical models for thinking and writing analytically about their work and life during their time at Olin, with the ultimate aim of producing a coherent suite of incisive analytical reflections that tell a compelling and original story for direct use in portfolios, applications, and interviews.

ENGR2199-01: Special Topics in Engineering
Designing Resources for Empowerment and Making (DREAM)

Instructor: Millner

Credit: 4 ENGR

The DREAM course will engage students in designing multiple types of resources for making, those related to: space, tools, and activities. Students enrolled in the course will leave empowered to passionately pursue making in contexts that enable others to make in ways that they may not have otherwise been able to. The course will entail rethinking the ways in which spaces are designed to facilitate young people creating physical objects; extending toolkits that afford hands-on exploration of making in technical domains such as programming and electronics design; and developing activities that take advantage of what new tools and spaces for making have to offer. The ideal offering being experiences that compel pre-college learners to feel empowered to extend their own (and their peers') engagement in science, technology, engineering, art, and math (STEAM) endeavors.

This project-based course is running for the second time in the Spring of 2016, following a successful first offering the Spring of 2015. The early weeks will expose students to principles and practices for transforming living rooms, community centers and cities into areas conducive to making, and situate the ways in which doing so can empower groups to redefine their relationship with information and individuals around them. The following weeks entail exploring existing tools for making interactive systems (e.g., microcontroller-powered development boards with sensing and actuation modules geared toward integrating with clothing or outdoor environments). Students will have opportunities to extend the kits based on an open-hardware design ethos, which could entail adding a "bit" to the library of littleBits (littlebits.cc). Students will then grapple with experience design to envision what should become possible at the intersection of new spaces and new tools. A field trip to a maker space will highlight innovative empowerment in practice. After prototyping experiences, students will contribute their curricular resources to appropriate online outlets (such as instructables.com). See <https://sites.google.com/site/olindream2015/>.

ENGR3110-01: Elecanisms

Instructors: Hoover; Minch

Credits: 4 ENGR

Prerequisites: ENGR 2210 (POE) and at least one of ENGR 2330 (Mech Proto), ENGR 3330 (Mech Design), ENGR 2420 (Circuits), or ENGR 3410 (Comp. Arch.)

Note: This course can be used to satisfy either the ME and ECE advanced elective requirements.

Mechatronics involves the synergistic integration of mechanical engineering with electronics and intelligent computer control in the design of products. In this course, we will develop topics critical to the engineering of modern mechatronic systems including electromechanical actuators (e.g., DC motors, stepper motors, and solenoids), practical electronics design including interfacing sensors and actuators to embedded processors, and embedded software design in the C programming language. During the first part of the course, students will work in small groups on a series of miniprojects to gain experience with course concepts and develop core engineering competencies. During the second part of the course, students will work in teams to engineer a mechatronic system of their choosing subject to realistic constraints.

ENGR 3440-01: Principles of Wireless Communication

Instructor: Govindasamy

Credits: 4 ENGR

Prerequisite: Introduction to Analog and Digital Communication

Advanced ECE Elective

Through a series of project-based exercises and a final project using a combination of computer simulations and software-defined radios, students will learn about and implement modern wireless communications systems. The project based exercises will culminate in an assignment where students design and implement an Orthogonal-Frequency-Division Multiplexing (OFDM) system, which is the modulation scheme used in many modern wireless communications systems such as WiFi and LTE. The final third of the course will be devoted to a project where students work in small teams to design and implement a wireless communications system of their own choosing.

Topics covered in the course include wireless channel modelling and characterization, synchronization, multi-antenna techniques, multiple access and OFDM.

ENGR 3599-01: Special Topics in Computing

Computer Networks

Credits: 4 ENGR

Instructor: Morrow

Prerequisite: Experience with object oriented programming (i.e. java or python) or permission of instructor

Computer networks have made fundamental global changes in how we live. ENGR 3599 is a project-oriented class whose goal is to have students understand how computer networks are built. In this course, students learn basic networking by themselves implementing a version of the Internet. In the first part of the course students use the Python programming language to implement network protocols on Raspberry pi computers. Each protocol the students implement corresponds to a layer of the standard OSI network model. The goal is to keep each layer simple and easy to understand. By implementing the layers of the OSI model, students come to understand the functions of each protocol layer and the rationale for a layered model. Students will present the final network for an audience of interested students, faculty and staff. For the second part of the course, students choose an application or area of networking that they would like to investigate and present to the class and interested faculty and staff.

SCI 1130-A1: Mechanics

A Theoretical Approach

Credits: 4 SCI

Instructor: Zastavker

This course may be used to satisfy the Physics Foundation Requirement.

This class will venture to understand the nature of motion from an analytical perspective allowing you to reinforce your previous knowledge from ModSim and previously taken Mechanics courses as well as further developing your analysis competency. This class will use a mixture of more traditional pedagogy, e.g., interactive lectures and “problem set”-like homework assignments, and non-traditional physics classrooms pedagogy, e.g., discussions and group work. In addition, several other components typical of Olin academic culture will be also introduced into the course; specifically, student autonomy will be explored through a choice of final project, more traditional final exam, synthesis paper, etc., as a way of both learning and formative assessment. A large team-work component will be also introduced through both the homework assignments and project, should students choose the latter. For students who choose their final deliverable to be in the form of a project, intermediate level of faculty-supported scaffolding will be provided as it will be expected that the students choosing this route are at least somewhat familiar with the self-directed environment and have intermediate level of sophistication as autonomous learners. Additionally, this course will support and allow for further development and honing of students' analytical writing skills and ability to interpret science in the context of everyday life.

Flavors of Biology at Olin - Spring 2016

SCI 1210: Principles of Modern Biology

Instructors: Donis-Keller, Huang

Credit: 4 SCI

This course introduces students to the fundamental aspects of biological science including biochemistry, molecular biology, human molecular genetics, and cellular communication. Students gain experience with contemporary research methods and scientific reasoning through laboratory experiments. The relevance of biology to the environment and health is emphasized.

Section 01: Human Genetics and Genomics

Instructor: Donis-Keller

The emphasis in this section is on human genetics and genomics. The classical mechanisms and molecular underpinnings of inherited conditions will be investigated as well as an in-depth study of classical Mendelian inheritance and more complex events that influence the outward expression of genes. Genomics examples such as the dog genome and genome modifications including the latest breaking findings in genetics and genomics will be studied in class sessions and in the laboratory.

Section 02: Think like a Biologist

Instructor: Jean Huang

In this survey course we learn fundamental principles of biology in a journey through the field from the molecular to systems levels. We examine different classes of biological problems and interactions across multiple scales through reading and discussion of primary and secondary literature from the field. We draw on examples from the environment, microbiology, biomimicry, and current events. Through analysis of numerous examples we uncover key principles of biology, a toolkit of which can be applied towards examining and solving multifaceted problems. Projects include examination of biology in the context of systems and exploration of ways in which biology informs interdisciplinary problem solving. Through projects and work in the laboratory students develop a practical and foundational understanding of biological principles and practice.

ADVANCED Biology Offering Spring 2016

SCI2214-01: Microbial Diversity

Instructor: Huang

Credit: 4 SCI

Prerequisite(s): SCI1210

This course is an introduction to the tremendous diversity of the microbial world and its applications. Topics include: bacterial growth, energy metabolism, nutrient cycling, symbiosis, bioremediation, biofilm formation, and techniques for culturing and working with bacteria. This course approaches the study of environmental bacteria and their metabolic, physiological and genetic diversity through primary literature and laboratory work. Students will learn biochemical, molecular and bioinformatics techniques for working with microbial systems. Students will explore the microbial world first through guided laboratory exercises followed by development of individual and group special laboratory projects. Students will develop working knowledge of microbiology that may be applied to a range of situations, from study of systems where microbes are a problem to development of biological solutions using microbes.

SCI2130-01: Quantum Physics

Instructor: Holt

Credit: 4 SCI

Prerequisite(s): *permission of instructor or Physics Foundation*

This course is an introduction to quantum physics. Although quantum physics is the most successful description of natural phenomena that has ever been devised, quantum "reality" is so intuitively frustrating that Nobel laureate Richard Feynman once famously said: "Nobody understands quantum mechanics!" The course material includes the origin and development of quantum mechanics and quantum statistics, with the goal of providing an appreciation

for the quantum rationale for the structure and characteristics of nuclei, atoms, molecules, fluids and solids (including semiconductors). With permission of instructor, this course can be used for Physics Foundation credit.

INTEGRATED COURSES

AHSE2199-01 / SCI1310-01: Special Topics in AHS and Chemistry:

Chemistry in Context: Environmental Milestones, Opportunities, and the Human Connection

Instructors: Hersey; Martello

Credit: 4 AHS/4 SCI

People, institutions, and cultures are intricately connected with the natural environment, and these connections are the source of profound scientific and historical insights. Certain combinations of values, technologies, and policies lead to a symbiotic relationship benefiting humans and the natural world. But this relationship often takes a darker turn into natural resource exploitation and environmental degradation, with the potential for catastrophic results. In this course, we will take a holistic look at anthropogenic (human-derived) impacts on the environment, considering the historical, social, and political context surrounding environmental disasters and opportunities at local and global scales, while using chemistry, physics, and engineering to understand the fundamental physical basis of the human-environment relationship (giving particular emphasis to aqueous- and gas-phase chemical processes). *Chemistry in Context* is being developed and offered for the first time by Rob Martello and Scott Hersey as an eight credit course (4 SCI + 4 AHS credits) that satisfies Olin's chemistry and materials science requirement. The pioneering students who enroll in *Chemistry in Context* will participate in the course design process by helping us locate readings, choose different assignments (including at least one project), and design laboratory exercises that you will then carry out. If you join us, you will not merely witness history and science... you will make it!

CIE 2016A: Curriculum Innovation Experiment

Quantitative Engineering Analysis I

Instructors: Christianson, Geddes, Govindasamy, Lee, Mur-Miranda, Somerville

Credit: 8

Note: For first year students only. This is the first class of a two class, 8 credit each sequence. This 2 class, 16 credit sequence is a designated alternative for the following courses: Linearity 1 and Linearity 2, the Physics Foundation course, Signals and Systems, and Dynamics. **You must commit to enrolling in both classes, although you will only register for the Spring 2016 class at this time.**

The application of quantitative analysis of mathematical models and/or data can enable, improve, and speed up the engineering design process. Using quantitative analysis to answer engineering questions, you'll be able to make the choices necessary to successfully complete an engineering design. Whether you are selecting the best part from a catalog, choosing an appropriate material, sizing a component, determining the effect of certain influences on your design, or optimizing your design within a parameter space, you often need to obtain (through experiment or calculation) and interpret quantitative information to inform your decisions. There are many different approaches to getting and interpreting the data you need: you may conduct an experiment, do a rough estimation, perform a detailed calculation based on mathematical models, or create a computer simulation. If you want to engineer effectively, you must be able to choose and use appropriate quantitative tools for a given situation.

In this class, you will be introduced to various approaches to perform quantitative engineering analysis through real-world examples. You will learn how to *select* between different tools and different approaches within the context of an engineering challenge, how to *use* many different tools for quantitative analysis, and how to *acquire* new tools on your own in the future.

ENGR3531/MTH2131: Data Science

Instructor: Ruvolo

Credits: 2 ENGR/2 MTH

Prerequisite: ENGR 2510 Software Design

This course may be used to satisfy the Probability and Statistics requirement.

Data Science lies at the intersection of statistics, machine learning, database design, and data visualization. The goal of this class is to prepare students to work on data science projects that involve collecting data or finding data sources, exploratory data analysis and interactive visualization, statistical analysis and machine learning, predictive analytics, model selection, and validation. Class work includes a substantial project on a real world application of the students' choice; projects might involve work with a social change organization like those on DataKind, or participating in a competition like those on Kaggle.

MTH2132/SCI2032: Bayesian Inference and Reasoning

Instructor: Mahajan

Credits: 2 MTH/2 SCI

This course may be used to satisfy the Probability and Statistics requirement

This course is an introduction to probability and statistics, with applications to mathematics, science, and engineering. The approach is Bayesian and emphasizes making decisions based on incomplete information. Topics include discrete and continuous probability distributions, conditional probability, prior and posterior probabilities, hypothesis testing, Shannon information, decision making, history of the Bayesian approach, and its advantages over the orthodox (frequentist) approach. Applications include: p values and confidence intervals, statistical mechanics and entropy, the Monty Hall problem, code breaking, plausible reasoning in mathematics, how Laplace estimated the mass of Saturn, and playing games of imperfect information such as blackjack or Mastermind.

SEMINAR COURSES

We will again be offering a small number of 1-credit seminar courses intended to give focused opportunities for students to learn and hone skills or increase understanding or appreciation of a new field. These seminar courses are meant to enhance the current curriculum, and are not intended to replace any current course. The 1-credit seminar courses are offered during the evening and are often taught by alumni instructors. To allow the greatest flexibility in coordinating these opportunities and making them available to all students, they are offered on a P/NC grading scale, cannot be used for a student's major or distribution requirements, and do not count towards disciplinary credit.

SEM 105-S1: Seminar: Industrial Media Super-Taster

Instructors: Ecco Pierce and Jon Betsch

Credits: 1

Grading: Pass/No Credit

Think fast and play hard: We'll be introducing a new medium, process, or technique in rapid succession for the duration of the semester, and executing a project/sculpture for each one. The class will terminate with a multimedia project using the new skills acquired. The goal of this class is to explore the practical applications of making beyond the reach of CAD and CNC. Some processes on the table include heat forming, micro forging, plastic fusion, unusual wood, junkyard collage, novelty materials, maybe even glass! Students will emerge with a whole new vocabulary for what things are made of and how. Enrollment limited to 7.

SEM 201-S1: Seminar: An Introduction to Product Design and Engineering in a Large(r) Corporate Environment

Alumni Instructor: Andrew Tsang

Credits: 1

Grading: Pass/No Credit

What do you think the transition will be like from college student/intern to engineering professional?

This seminar will discuss the experience of development engineering in a large corporate environment and will introduce tools such as Failure Modes and Effects Analysis (FMEA), Pugh Matrices, Quality Function Deployment (QFD), and others to help you navigate the potential bureaucratic machine of a Fortune 500 company. Focusing on startups, projects, or academia? The process and activities we will cover are nonetheless valuable; knowing best practices from others could have saved me a lot of headache during that one time I consulted for a startup....

By the end of the seminar, students will be:

- Aware of planning and budgeting tools
- Conversational about design practices in larger companies
- Cautious about bureaucratic pitfalls
- Slightly elucidated about office politics
- Possibly wiser from my mistakes

SEM 503-S1: Seminar: Introduction to Embedded Software

Alumni Instructor: Nate Ting

Credits: 1

Grading: Pass/No Credit

Prerequisite: Principles of Engineering

Embedded software is all around us, from cars to watches to thermostats. We entrust our lives to embedded devices and yet hardly give a thought to these devices. As we head into the age of “The Internet of Things”, understanding the inner workings of embedded systems is becoming increasingly important.

In this class, we’ll cover core concepts in embedded software and develop an understanding of how to design software for highly constrained applications. The majority of the class will be hands on work with development kits, exploring different use cases for embedded software and evaluating different design approaches. By the end of the semester, students should be able to design a robust and efficient embedded system.

Area	Course #	Sec #	Course Title	Instructor	Time	Location	Credits	Enroll Limits	Notes
AHS	AHSE 0112	01	The Olin Conductorless Orchestra	Dabby	R 6:45-9:00pm	AC318; AC305	1	25	
AHS	AHSE 2199A	01	Special Topics in Arts, Humanities and Social Sciences: <i>Narrative Psychology</i>	Adler	MR 11:10-12:20pm	at Wellesley	4	5	
AHS	AHSE 2199B	01	Special Topics in Arts, Humanities and Social Sciences: <i>World Creation as Cultural Commentary</i>	Vitols	MR 1:30-3:10pm	AC318	2	15	Session I; features student led teaching from Ben Kahle, '16
AHS	AHSE 2199C	01	Special Topics in Arts, Humanities and Social Sciences: <i>Virtualities: An Introduction to Video Gaming History and Theory</i>	Vitols	MR 1:30-3:10pm	AC318	2	15	Session II
AHS	AHSE 2199E	01	Special Topics in Arts, Humanities and Social Sciences: <i>Designing the 21st Century Engineer: Leadership, Values, Innovation</i>	Gentile, Martello	T 5:30-7pm	CC209	2	15	Offered Using Experimental Grading
AHS	AHSE 2199F	01	Special Topics in Arts, Humanities and Social Sciences: <i>What's Your Story? Narrative with Purpose</i>	Epstein, Zastavker	M 9-10:40am	AC417	2	20	Full Semester Offering; Offered Using Experimental Grading
AHS	AHSE 3100	04	<i>Issues in Leadership and Ethics</i>	Miller, R.	R 6-8:00pm	AC326	2	8	CANCELLED
AHS	AHSE 3190	01	Arts, Humanities, Social Sciences Capstone Preparatory Workshop	Epstein	n/a	n/a	1	20	
AHS	AHSE 4190	01	Arts, Humanities, Social Sciences Capstone	Epstein	T 9:10-10:40am	AC417	4	15	
AHS	AHSE 4190	02	Arts, Humanities, Social Sciences Capstone	Epstein	T 10:50-12:20pm	AC417	4	15	
CROSSLIST	ENGR 2620	01	Biomechanics	Zastavker	MR 1:30-3:10pm	AC304	4	12	Students should choose ENGR or SCI offering for enrollment depending on the type of credit they desire to earn. Your decision at registration is not reversible. Offered using Experimental Grading
	SCI2220	01							
DSN	ENGR 2250	01	User Oriented Collaborative Design	Hendren, Adler, Ben Ur, Slutsky, Stein, Strong	TF 9:50-12:30pm	AC204; MH120	4	32	
DSN	ENGR 2250	02	User Oriented Collaborative Design	Hendren, Adler, Ben Ur, Slutsky, Stein, Strong	TF 9:50-12:30pm	AC206; MH120	4	32	
DSN	ENGR 2250	03	User Oriented Collaborative Design	Hendren, Adler, Ben Ur, Slutsky, Stein, Strong	TF 9:50-12:30pm	AC209; MH120	4	32	
DSN	ENGR 3210	01	Sustainable Design	Linder	MR 3:20-5pm	AC213	4	25	DESIGN Depth Offering
DSN	ENGR 3290	01	Affordable Design and Entrepreneurship	Linder, Govindasamy, Mur-Miranda	T 3:30-6:30pm	AC213	4	15	DESIGN Depth Offering
E!	AHSE 1515	01	Products and Markets	Neeley, Hoover, Rubenstein, Woodard, Staff	TF 9-12:30pm	AC318	4	28	Note: non-standard pattern
E!	AHSE 1515	02	Products and Markets	Neeley, Hoover, Rubenstein, Woodard, Staff	TF 9-12:30pm	AC326	4	28	Note: non-standard pattern
E!	AHSE 1515	03	Products and Markets	Neeley, Hoover, Rubenstein, Woodard, Staff	TF 9-12:30pm	AC328	4	28	Note: non-standard pattern

Area	Course #	Sec #	Course Title	Instructor	Time	Location	Credits	Enroll Limits	Notes
E!	AHSE 4590	01	Entrepreneurship Capstone	Neeley	TF 1:30-3:10pm	CC214	4	15	Waitlist Available
E:C	ENGR 2510	01	Software Design	Hill, Ruvolo	MR 1:30-3:10pm	AC326	4	25	
E:C	ENGR 2510	02	Software Design	Hill, Ruvolo	MR 3:20-5:00pm	AC326	4	25	
E:C	ENGR 3520	01	Foundations of Computer Science	Pucella	R 4-6:30pm	AC318	4	24	Waitlist Available
E:C	ENGR 3599	01	Special Topics in Computing: Computer Networks	Morrow	MR 3:20-5pm	AC328	4	25	
E:MS	ENGR 3610	01	Biomedical Materials	Chachra	MR 10:50-12:30pm	AC406; AC413; AC417	4	20	E: BE, E:MS and ME elective
ECE	ENGR 2410	01	Signals and Systems	Mur-Miranda	MR 3:20-5:00pm	AC304	4	32	
ECE	ENGR 2420	01	Introduction to Microelectronic Circuits with LAB	Minch	MR 1:30-3:10pm; R 9-10:40am	AC309	4	28	
ECE	ENGR 3415	01	Digital Signal Processing	Dabby	TF 1:30-3:10pm	AC304	4	25	
ECE	ENGR 3440	01	Special Topics in Electrical and Computer Engineering: Principles of Wireless Communication	Govindasamy	TF 10:50-12:30pm	AC304	4	24	ECE Advanced Elective
ENGR	ENGR 1330	01	Fundamentals of Machine Shop Operations	Andruskiewicz	W 12:30-4:30pm	AC104	4	6	
ENGR	ENGR 2199	01	Special Topics in Engineering: Designing Resources for Empowerment and Making (DREAM)	Millner	TF 1:30-3:10pm	AC213	4	25	
ENGR	ENGR 3110	01	Electronics	Hoover; Minch	M 9-12:30p; R 10:50-12:30pm	AC306	4	25	Waitlist Available
ENGR	ENGR 4290	01	Affordable Design and Entrepreneurship	Linder; Govindasamy, Mur-Miranda	T 3:30-6:30pm	AC213	4	15	Engineering Capstone Option
ENGR	ENGR4190	01-14	Senior Capstone Program in Engineering (SCOPE)	Lee; Strong, Hill, Barrett, Bennett, Ruvolo, Christianson, Minch, Storey, Millner, Woodard, Somerville, Geddes	W 9-10:40a; 12:30-6pm	n/a	12	99	enroll in the same section number you are presently in for Fall 2015
INTEGRATED	AHSE 2199 / SCI 1310	01	Special Topics in AHS and Science: Chemistry in Context: Environmental Milestones, Opportunities, and the Human Connection	Hersey, Martello	TF 1:30-3:10; W 1-5pm	AC328; AC409	4 + 4	24	
	AHSE 2199D /SCI 2099D	04	Special Topics in AHS and Science: The Intersection of Art, Biology and Technology	Donis-Keller	MR 10:50-12:30pm; W 12:30-3:10pm	AC313; AC406-Wed	2 + 2	45	CANCELLED
	CIE 2016A	01	Curriculum Innovation Experiment: Quantitative Engineering Analysis I	Geddes, Somerville, Lee, Christianson, Govindasamy	MR 9-12:30pm	AC109	8	tbd	Enrollment Based on Lottery; First Year Students Only; Offered Using Experimental Grading
	MTH 2131 / ENGR 3531	01	Data Science	Ruvolo	TF 1:30-3:10pm	AC326	2 + 2	25	PROB/STAT Designated Alternative
	MTH 2132 / SCI 2032	01	Bayesian Inference and Reasoning	Mahajan	TF 10:50-12:30pm	AC113	2+2	32	PROB/STAT Designated Alternative

Area	Course #	Sec #	Course Title	Instructor	Time	Location	Credits	Enroll Limits	Notes
ME	ENGR 2320	01	Mechanics of Solids and Structures	Lee	MR 1:30-3:10p; W 9:30-10:30am	AC328; Wed AC113	4	32	Waitlist Available
ME	ENGR 2330	01	Introduction to Mechanical Prototyping	Barrett	MR 1:30-3:10pm	AC128	4	25	Waitlist Available
ME	ENGR 2350	01	Thermodynamics	Townsend	MR 9-10:40am	AC318	4	25	Waitlist Available
ME	ENGR 3392	01	Robotics Systems Integration	Bennett	TF 9-10:40am	AC128	4	25	
ME	ENGR 3399	01	Special Topics in Mechanical Engineering: <i>Bicycle Dynamics</i>	Storey	TF 10:50-12:30pm	AC428	4	45	ME Advanced Elective; Waitlist AVAILABLE CANCELLED
MTH	MTH 2110	01	Discrete Math	Patel	MR 9-10:40am	AC304	4	30	Waitlist AVAILABLE
MTH	MTH2130	01	Probability and Statistics	Patel	MR 10:50-12:30pm	AC304	2	32	Session I
MTH	MTH 2210	01	Linearity I	Hoffman, Mur-Miranda	MWR 9-10:40am	AC326; AC328	4	48	
MTH	MTH 3120	01	Partial Differential Equations	Hoffman	TF 1:30-3:10pm	AC318	4	28	
MTH	MTH 3150	01	Numerical Methods and Scientific Computing	Storey	TF 9-10:40am	AC304	4	28	
SCI	SCI 1130	A1	Mechanics: A Theoretical Approach	Zastavker	MR 10:50-12:30pm	AC318	4	40	Waitlist Available
SCI	SCI 1210	01	Principles of Modern Biology (with Lab): Human Genetics and Genomics	Donis-Keller	MR 1:30-3:10pm; W 3:20-6:00pm	AC313; AC406	4	24	Waitlist Available
SCI	SCI 1210	02	Principles of Modern Biology (with Lab): Think like a Biologist	Huang	TF 1:30-3:10pm; T 3:20-6pm	AC417; AC406	4	24	Waitlist Available
SCI	SCI 1410	01	Introduction to Material Science and Solid State Chemistry	Christianson	MR 3:20-6:00pm	AC413	4	21	Waitlist Available
SCI	SCI 2130	01	Quantum Physics	Holt	TF 1:30-3:10pm	AC113	4	25	This course may satisfy a Physics Foundation
SCI	SCI 2140	01	Relativity	Holt	TF 9-10:40am	AC113	2	25	Session I
SCI	SCI 2214	01	Microbial Diversity	Huang	W 1-4pm	AC417; AC404	4	24	
SEM	SEM 105	S1	Industrial Media Super-Taster	Betsch; Pierce	M 6:30-8:30pm	AC104 & 1st Flr Hall	1	7	Waitlist Available
SEM	SEM 201	S1	An Introduction to Product Design and Engineering in a Large(r) Corporate Environment	Tsang	R 6:30-8:30p	AC326	1	15	Waitlist Available
SEM	SEM 503	S1	Introduction to Embedded Software	Ting	R 7-9:00pm	AC328	1	15	Waitlist Available
ADMIN	AWAY 1000	01	Study Away Program	Administration			12		

Area	Course #	Sec #	Course Title	Instructor	Time	Location	Credits	Enroll Limits	Notes
ADMIN	OIP 1000	01	The Olin Internship Practicum	Phelps			1		

Color Key-Offering Blocks	ECE					ME					ENGR / DSN Courses					OIE or GenI Req																							
	Monday										Tuesday										Wednesday																		
9:00 AM	MTH 2210 Linearity I AC326 AC328	CIE2016A Quantitative Engineering Analysis I MR 9- 12:30pm	MTH 2110 Discrete Mathematics AC304	ENGR 2350 Thermody namics AC318	ENGR 3110 Elecansim s M 9- 12:30; R 10:50- 12:30p	AHSE 2199F Spec Topic AHS: What's your Story? AC417															MTH 2210 Linearity I AC326 AC328	ENGR 2320 Mechanics Solids Structures M 9:30-10:30a AC113	ENGR 4190 SCOPE																
10:40 AM																					Open Meeting Time																		
10:50 AM	SCI 1130- A1 Mechanic s: Theoretic al Approach AC318	AC109	MTH 2130 Probabilit y & Statistics Sess I AC304	ENGR 3610 Biomedic al Materials AC406 AC413 AC417	AC 306	AHSE 2199A: Spec Topic AHS: Narrative Psych 11:10- 12:20 at Well	AHSE 2199D/SCI2 099D: Spec Topic AHS/Sci Intersection Art/Sci AC313																																
12:30 PM																					AHSE 2199D/S CI2099D: Spec Topic AHS/Sci Intersecti on Art/Sci AC406	SCI 2214 Microbial Diversity W 1-4pm	AHSE2199 / SCI1310: Spec Top AHS + Intro Chemistry: Chemistry in Context: TF 1:30- 3:10; W 1- 5pm AC328; AC409	ENGR 1330 Fnd Machine Shop Oper 12:30-4:30p AC104	ENGR 4190														
1:30 PM	AHSE 2199B Spec Topic AHS: World Creation SESS I AC318	AHSE 2199C Spec Topic AHS: Video Gaming/T heory SESS II AC318	ENGR 2320 Mechanic s Solids Structures MR 1:30 + W 9:30 AC328	SCI 1210 sec 01 Prin of Modern Biology: Human Genetics. AC313	ENGR 2510, sec 01 Software Design AC326	ENGR 2420 Intro MicoElect ronic Circuits MR 1:30 & R 9am AC309	ENGR 2330 Mechanic al Prototypi ng AC128	ENGR 2620 OR SCI 2220 Biomecha nics AC304		AHSE 4590 Entrepren eurship Capstone CC214	SCI 1210 sec 02 Prin of Modern Biology AC417	SCI 2130 Quantum Physics AC113	ENGR 3415 Digital Signals Processi ng AC304	MTH 3120 Partial Differen tial Equations AC318	MTH 2131 & ENGR 2131: Data Science AC326	ENGR 2199 Spec Topic Engr: DREAM AC213	AHSE2199/ SCI1310: Spec Top AHS + Intro Chemistry AC328 / 409																						
3:10 PM																																							
3:20 PM	SCI 1410 sec 01 Materials Science and Solid State Chemistry AC413	ENGR 3599 Spec Top Computi ng: Computer Networks AC328	ENGR 3210 Sustainab le Desgin AC213	ENGR 2410 Signals and Systems AC304	ENGR 2510, sec 02 Software Design AC326																SCI 1210 sec 01 Prin of Modern Biology: Human Genetics LAB AC406	ENGR 3290 and 4290 Affordabl e Design & E! Tues 3:30- 6:30p AC213																	
5:00 PM																																							
6:00 PM																																							
9:00:00 PM	SEM 105 - S1 Seminar: Industrial Media Super- Taster 6:30-8:30p Shop and 1st Floor AC																																						

AHSE		SCI			Math			INTEGRATED OFFERING (colored via discipline blending)		Color Key-Offering Blocks							
Thursday					Friday												
MTH 2210 Linearity I AC326 AC328	CIE2016A Quantitative Engineering Analysis I MR 9-12:30pm AC109	MTH 2110 Discrete Mathematics AC304	ENGR 2350 Thermodynamics AC318	ENGR 2420 Intro MicroElectronic Circuits MR 1:30 & R 9am AC309						9:00 AM							
SCI 1130-A1 Mechanics: Theoretical Approach AC318		MTH 2130 Probability & Statistics Sess I AC304	ENGR 3610 Biomedical Materials AC406 AC413 AC417	ENGR 3110 Elecanisms M 9:50-12:30; R 10:50-12:30p AC 306	AHSE 2199A: Spec Topic AHS: Narrative Psych 11:10-12:20 at Well	AHSE 2199D / SC12099D: Spec Topic AHS/Sci Intersection Art/Sci AC313		ENGR 2250 Sec 01, 02, 03 User-Oriented Collaborative Design 9:50-12:30p AC 204, 206, 209 MH120	ENGR 3392 Robotics Sys Integration AC128	SCI 2140 Relativity SESS I AC113	MTH 3150 Numerical Methods and Scientific Computing AC304	10:40 AM 10:50 AM					
AHSE 2199B Spec Topic AHS: World Creation SESS I AC318	AHSE 2199C Spec Topic AHS: Video Gaming/Theory SESS II AC318	ENGR 2320 Mechanics Solids Structures MR 1:30 + W 9:30 AC328		SCI 1210 sec 01 Prin of Modern Biology: Human Genetics. AC313	ENGR 2510, sec 01 Software Design AC326	ENGR 2420 Intro MicroElectronic Circuits MR 1:30 & R 9am AC309	ENGR 2330 Mechanical Prototyping AC128	ENGR 2620 OR SCI 2220 Biomechanics AC304	AHSE 4590 Entrepreneurship Capstone CC214	SCI 1210 sec 02 Prin of Modern Biology AC417	SCI 2130 Quantum Physics AC113	ENGR 3415 Digital Signals Processing AC304	MTH 3120 Partial Differential Equations AC318	MTH 2131 & ENGR 2131: Data Science AC326	ENGR 2199 Spec Topic Engr: DREAM AC213	AHSE2199/SCI1310: Spec Top AHS + Intro Chemistry AC328 / 409	1:30 PM
SCI 1410 sec 01 Materials Science and Solid State Chemistry AC413	ENGR 3599 Spec Top Computing: Computer Networks AC328	ENGR 3210 Sustainable Desgin AC213	ENGR 2410 Signals and Systems AC304	ENGR 2510, sec 02 Software Design AC326		ENGR 3520 Foundations of Computer Science 4:00-6:30p AC318		"Do Something" Dedicated Time					3:10 PM 3:20 PM				
AHSE 3100 Issues in Leadership and Ethics 6-8:00p @ Olin Campus AC326		AHSE 0112 Olin Conductorless Orchestra 6:45-9pm AC305, AC318		SEM 201 - S1 Seminar: Intro to Product Design and Engr in a Large(r) Corp Environment 6:30-8:30p AC326		SEM 503 - S1 Seminar: Intro to Embedded Software 7-9:00pm AC328							5:00 PM 6:00 PM				
											9:00:00 PM						