Fall 2015 Supplement and Course Offerings List

Information Contained In this Document

- 1) Course Tips & Info and Catalog Supplement (courses new to catalog for 2015-16 or special topics)
- Course Offerings List (you can also search this here: <u>Course</u> <u>Search</u>
- 3) Course Offerings Grid
- 4) Tentative Spring 2016 Offerings

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	C	N	
(Sept 3 – Dec 11)	September 17, 2015	November 6, 2015	December 11, 2015
Session I			
Tues/Fri Offerings	September 10, 2015	October 5, 2015	October 16, 2015
(Sept 3 – Oct 16)			
Session II			
TBD; if needed	TBD	TBD	TBD

Questions? Contact the Registrar's Office at Olin College, Campus Center, Room 320 <u>registrar@olin.edu</u> 781-292-2340 Degree requirements are outlined in the course catalog: <u>http://www.olin.edu/course-catalog/2015-16-course-catalog/</u>

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

Helpful Tips & Information On Planning Your Fall 2015 Courses

- A. ENGR2210: Principles of Engineering: Beginning in the 2016-17 Academic Year, ENGR2210: Principles of Engineering will be offered in the fall only. For the upcoming year, 2015-16, we will have four sections in the fall 15 semester and one in the spring 16 semester. Please keep this change in mind when planning your schedules.
- B. Engineering: Computing Offerings: The two courses, Software Systems and Foundations of Computer Science will be taught once/year beginning in 2015-16. For fall 2015, we will be offering Software Systems and in spring 2016, we will offer Foundations of Computer Science.

Additional options at Wellesley College for E:C majors: Fundamental Algorithms (sub for FOCS)* Artificial Intelligence Languages and Automata (sub for FOCS)* Machine Organization Computer Networks (sub for SoftSys)* Programming Languages Computer Graphics Computational Biology

*Please note that any change to your existing Plan of Study (POS) with a course above will require a new POS. Acceptance of substitutions is not automatic, rather dependent on your overall degree plan.

- C. Entrepreneurship Foundation Requirement: AHSE1515: Products and Markets is a Fall offering available to rising juniors-senior students. If you have not yet completed your foundational entrepreneurship (formerly FBE or TEI) requirement, please consider the fall offering. You can also satisfy this requirement with a substitution by completing AHSE3510: New Tech Ventures or the Babson course, EPS3501: Entrepreneurship and Opportunity. (Note: using these substitutions will negate their use in any E! Concentration).
- D. NEW COURSE! Diane Covello is teaching AHSE3599-01: Special Topics in Business and Entrepreneurship: Intellectual Property Protection for Innovative Designs. See below for full description.
- E. ENGR2125 The Engineer's Orchestra I: Acoustics, Waves, Vibrations has been CANCELLED.
- F. **RESCHEDULED** select times: **AHSE2199:** Critical Reflective Writing: A Journey to Knowing Oneself : The two first sessions of this class will be rescheduled. Students interested in taking this course should contact instructors, Gillian Epstein and Zhenya Zastavker, at their earliest convenience to make sure they are able to attend the two new rescheduled sessions.
- G. Kent Lundberg's courses (ENGR3370 Controls and ENGR3430 EE Prototyping) are being transitioned to a fallonly schedule. They will not be offered in the spring.
- H. The date to register for Fall 2015 co-curriculars will be **Tuesday, September 8** at noon.

New and Special Topics Courses

AHSE 1199: Arts, Humanities and Social Science Foundation Topic

Section 01: Robots, Mutants and Monsters: Envisioning Science in Cinema

Instructor: Maruta Vitols Credits: 4 AHSE Hours: 4-0-8 AHS FOUNDATION; priority given to first year students

Throughout the history of cinema, filmmakers have experienced both fascination with and fear of technology. Contemporary scientific advancements have inspired countless cinematic representations that express cultural excitement, ethical concern and social anxiety regarding such innovations as artificial intelligence and nuclear engineering. By placing such films as Metropolis (1927), 2001: A Space Odyssey (1968), and The Matrix (1999) in their historical and cultural contexts, this course will consider multiple approaches to the representation of science on screen. This course **requires** attendance at Monday evening film screenings from 7:30-10pm.

AHSE 1199: Arts, Humanities and Social Science Foundation Topic Section 02: Media Revolution: Activism and Technology Instructor: Maruta Vitols Credits: 4 AHSE Hours: 4-0-8

AHS FOUNDATION; priority given to first year students

Since their inceptions, radio, film and television have been utilized for political purposes. Yet the advent of digital technology has profoundly altered the traditional relationships between media and activism. From "hacktivism" to the events of the Arab Spring, new media provide an influential contemporary forum for advocating for change. This course explores the way media are employed for political and social purposes, investigating the different approaches used today to transform our virtual and real worlds.

AHSE2199A/ SCI1210A

Special topics in AHS and SCI: 6 Microbes that Changed the World

Instructors: Jean Huang, Rob Martello Credits: 4 AHS, 4 SCI

Registration notes: students must register for both parts of this course. This course satisfies the Introductory Biology requirement at Olin.

"It has long been an axiom of mine that the little things are infinitely the most important." - Arthur Conan Doyle, "A Case of Identity" in *The Adventures of Sherlock Holmes*

Penicillium. Vibrio cholera. Escherichia coli. Cyanobacteria. The archaea. Microbes surround us, and impact our lives, our health, our societies, and our environment. Research with microbes, the smallest of all living creatures, has enabled discovery and understanding of the fundamental workings of life, opens up rich historical narratives of diseases and cures, and may provide sustainable solutions to problems we face from bioremediation to bioenergy. And best of all, microbes open the door to a thrilling new integrated course for a lucky group of students.

"Six Microbes that Changed the World" is an interdisciplinary course taught by Jean Huang and Rob Martello this fall. We will use six influential microbes as a window into a rich study of the interactions between science and societal context. This course will connect biological and historical knowledge through discussions, integrated assignments, presentations, and hands-on laboratory activities. We are looking for a motivated group of students to join us in this experimental course; let's explore the thrill of biology and history, together.

AHSE2199: Special Topics in Arts, Humanities, Social Sciences: Critical Reflective Writing

Instructors: Yevgeniya Zastavker, Gillian Epstein Credits: 4 AHSE

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. Besides having the pragmatic value of opening doors for opportunities beyond Olin, learning to leverage analytical thinking and writing to perceive and share a personalized academic story gives our students an invaluable habit of mind for life-long learning: the understanding that what we do and learn has an ever-changing shape and story, and that at any given moment we can tap into that story and reflect on who we are, who we want to be, and what we hope to accomplish. This course is particularly intended for students writing a portfolio, personal narrative, or academic narrative for graduate schools, fellowships, job opportunities, or current Olin courses or program requirements. However, this course has value for any and every Olin student seeking to deepen analytical understanding of their work, processes, accomplishments, motivations, and goals—at Olin and beyond.

AHSE3599-01: Special Topics in Business and Entrepreneurship: Intellectual Property Protection for Innovative Designs

Instructor: Diane Covello Credits: 4 AHSE

Prerequisite – AHSE 1515 Limited to 12 students

The objectives of this project-based course are to engage in the process of real-world innovation and to learn how to legally protect innovative solutions. During the semester, students will prepare and file patent applications for their inventions. The class will begin with an overview of the types of intellectual property protection available in the United States for inventive products and processes. Students will design their own solutions to technical problems during the first few weeks of the course, or will come to class with a significant product and/or process innovation already in mind. With guidance from the instructor, each student will work individually or as part of a small group to research the "prior art" and then prepare the text and drawings for a utility patent application directed to their invention. The final project for the class will be e-filing the utility patent applications with the U.S. Patent and Trademark Office. While the course primarily is directed to patents, several class periods will be devoted to other types of intellectual property, including trademarks, copyrights, trade secrets and cyber law. During the first two months of the course, students will prepare a Problem-Solution Notebook containing their innovative ideas. Readings throughout the semester will include articles on the topic of innovation.

If you would like more details about the class, or have questions about whether this class is right for you, please email the instructor at <u>diane.covello@olin.edu</u>

ENGR2125: The Engineer's Orchestra I: Acoustics, Waves, Vibrations CANCELLED

ENGR2199B/MTH2188B: Special Topics in Engineering and Mathematics

Regional Analysis for Development Instructor: Mur-Miranda, Staff Credits: 2 ENGR, 2 MTH Hours: 4-0-8 Prerequisites: MTH 1111 and SCI 1111 or Permission of Instructor(s) Registration note: This course may be used to satisfy the Probability and Statistics requirement.

Students perform qualitative and quantitative analyses at the regional level to gain insight into development challenges and propose new ways of thinking, with an emphasis on the role of technology. For example, a student might study maternal health in Sub-Saharan Africa. Students select topics and regions based on interest and levels of unmet need, as well as other considerations such as cultural, climatic, technological, economic, political, and ecological ones.

Students will gain experience with analysis and modeling tools and data sets relevant to development with an emphasis on probability and statistics, GIS, and dynamic systems modeling. Guest speakers will share their experiences practicing data driven development. Students will create formal briefings with recommendations supported by a synthesis of quantitative data, analysis, and visualization and informed by the published literature. Students may have an opportunity to publish their work.

This course provides valuable preparation for students planning to enroll in ENGR 3290/4290 Affordable Design and Entrepreneurship (ADE) or perform research or work in international development. Wellesley and Babson students are encouraged to enroll.

ENGR3299: Special Topics in Design Engineering: Investigating Normal: Adaptive and Assistive Technologies Instructor: Sara Hendren

Credits: 4 ENGR Prerequisites: ENGR 2250 (UOCD) This course satisfies the Design Depth Requirement.

Assistive technologies usually refer to prosthetics and medical aids: tools, devices, and other gear that either restore or augment the functioning of body parts. Historically, these have been designed for people with diagnosable disabilities. In this course, we look at medical as well as cultural tools that investigate the "normal" body and mind, and we design our own devices—high-tech, low-tech, digital or analog—with these ideas in mind. Through readings, site visits, guest speakers, and projects, we investigate both traditional and unusual prosthetics and assistive technologies, broadly defined. We talk to end-users, to engineers and industrial designers, to artists, and to others whose technologies assist with visible and invisible needs, externalize hidden dynamics, and create capacities far beyond or outside ordinary functionality. The course is organized to facilitate both functional projects in design-engineering and projects that are much more speculative and experimental.

ENGR3590: A Computational Introduction to Robotics

Instructor: Ruvolo Credits: 4 ENGR Hours: 4-0-8 Prerequisite: Software Design Registration Notes: 1) This course may be used as an E: Computing elective in an updated Plan of Study. 2) This new Robotics course increases flexibility in the E:Robotics concentration. Depending on a student's background, either ENGR3390: Fundamentals of Robotics OR ENGR3599A: Special Topics in Computing: Computational Robotics (FA2014) may be used as an introductory course. More information on E:Robotics concentrations will be in the next iteration of the College Catalog.

This course will provide a computationally-focused introduction to the field of robotics. Students will learn how to both select and design algorithms for solving interesting problems in robotic perception and control. Additionally, students will learn to successfully balance tradeoffs between accuracy of an algorithm and its computational efficiency in both space and time. The course will move from structured labs to more open-ended projects as the semester progresses. Specific content areas that the course may address are: computer vision, machine learning, reinforcement learning, path planning, mapping and localization.

ENGR3599: Special Topics in Computing: Visualizing Data

Instructor: Pucella Credits: 4 ENGR Prerequisite: Software Design (ENGR 2510)

Interactive data visualization sits at the intersection of graphic design and programming: the ideal visualization needs to be easy to understand and aesthetically pleasing, but also interactively navigable, permit different views of the data, and be responsive no matter the amount of data being displayed. The course will focus on the technological aspects of data visualization, from databases and data structures and algorithms to process data, to technologies for interactive visualization such as Javascript/D3. Course work will be project-driven, based on

existing available large data sets. By the end of the course, we should be able to construct visualizations such as http://fivethirtyeight.com/interactives/world-cup/ or http://ri.id.au/closethegap.

MTH2188B/ENGR2199B: Special Topics in Engineering and Mathematics

Regional Analysis for Development See ENGR2199B

MTH2220A/ SCI1121A: Special Topics: Electricity and Magnetism: Project Based Approach with Vector Calculus

Instructor: Rebecca Christianson Credits: 2 MTH, 4 SCI

This class will explore the physics and mathematics of electric and magnetic vector fields in the context of modern applications through a combination of analytic calculation, finite element modelling and experimentation. We are surrounded by all kinds of cool devices that function using the basic principles of electric and magnetic fields. For the primary class project, you will pick one of these devices and learn to explain thoroughly and quantitatively how your device operates. Through the beginning and middle of the term, we will complement this with more guided explorations of the fundamental mathematics and phenomenology of capacitors, inductors and electrodynamics which will demonstrate the basic principles involved in vector calculus and electromagnetism. This course will count for Linearity 2 and Physics Foundation; additional math credits may be needed depending on one's major.

SCI1210A/ AHSE2199A

Special topics in AHS and SCI: 6 Microbes that Changed the World Instructors: Jean Huang, Rob Martello Credits: 4 AHS, 4 SCI See AHSE2199A/SCI1210A

SCI1121/ MTH2220A: Special Topics: Electricity and Magnetism: Project Based Approach with Vector Calculus Instructor: Rebecca Christianson Credits: 4 SCI, 2 MTH

See MTH2220A/ SCI1121A

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 104-S1: Work, Play, Balance

Instructor: Jon Betsch Credits: 1 Grading: Pass/No Credit

Limited to 12 students.

Students will design and build a kinetic sculpture or mobile just for the fun of it. Students will be encouraged to use their creativity, sense of design, and engineering know-how to design and build a piece or pieces based on research and concept drawings. Students will discuss scale, location, and choice of materials before beginning the project. Homework will include research of kinetic art and artists, drawing and plotting out concepts. Class discussions will cover choice of materials, types of motion (hand cranks, drive systems, etc.), mechanism design and troubleshooting. Students will have the options of working individually or in groups due to complexity and size of their final design.

SEM 303-S1: Musical Instrument Design and Engineering

Instructor: Alex Dorsk Credits: 1 Grading: Pass/No Credit

Did you know: An average piano has more than 5,000 moving parts. Why?! How?! This seminar explores design and engineering in the context of musical instruments. We will explore the physics of sound to understand how instruments work. We will study the history of instruments to consider how materials and culture affect design. And we will build instruments in hardware and software.

Skills we will practice: sound modeling, mechanical design, software design, and writing.

No musical background is needed, just persistence and curiosity.

SEM 502-S1: Data Dashboard Design Instructor: Matt Ritter

Credits: 1 Grading: Pass/No Credit Prerequisite: Python experience (not necessarily from a class)

In industry, an analysis based on static data will only go so far. Your team will need a regularly refreshed view into the numbers in order to track improvements and react to new events. This course will give you experience in all aspects of dashboards and the architecture supporting them, including unique user oriented design challenges, database setup, and interface prototyping.

In my role with the data science team at athenahealth, I spend about half of my time doing the deep, manual analysis that you'd learn about in the Data Science course. This seminar is about the other half of my work: Enabling non-technical domain experts to answer their own questions through a continuously updated interface to the data.

If you've taken Data Science, this is a great add-on, though it's completely fine if you haven't. The only hard requirement is basic Python experience, through a class or otherwise. Topics will be introduced through readings outside of class, and class time will be spent working on small projects, intended for completion within the period. By the end of this seminar, you will have experiences with a variety of technologies for displaying data, along with an understanding of how to work with non-technical business users to give it meaning.

Area	Course #	Section #	Course Title	Credits	Instructor	Time	Location	Enroll Limits	Notes
AHS	AHSE 0112	01	The Olin Conductorless Orchestra		Dabby	R 6:45-9:00pm	AC304; AC305; AC318		
AHS	AHSE 2199	01	Special Topics in Arts, Humanties, Social Sciences: <i>Critical</i> <i>Reflective Writing: A Journey to Knowing Oneself</i>		Epstein; Zastavker	M 9:30-12:30pm	MH373	16	
AHS	AHSE 3190	01	Arts, Humanities, Social Sciences Capstone Preparatory Workshop		Epstein	n/a	n/a	n/a	
AHS	AHSE 4190	01	Arts, Humanities, Social Sciences Capstone	4	Lynch	R 3:20-6:00pm	AC318	18	
DSN	ENGR 3220	01	Human Factors Interface Design	4	Stein; Morales	MR 3:20-5:50pm	AC109	24	Design Depth
DSN	ENGR 3250	01	Integrated Product Design	4	Linder	R 3:30-6:30pm	AC213 when at Olin	15	Design Depth (with Babson and Mass College of Art)
DSN	ENGR 3290	01	Affordable Design and Entrepreneurship (DESIGN DEPTH OPTION)	4	Linder; Govindasamy	T 3:30-6:30pm	AC213 when at Olin	15	Design Depth
DSN	ENGR 3299	01	Special Topics in Design Engineering: Investigating Normal: Adaptive and Assistive Technologies	4	Hendren	T 1:30-5:00pm; F 1:30- 3:10pm	AC128	20	Design Depth
DSN	ENGR 3710	01	Systems		Bennett	TF 1:30-3:10pm	AC328	24	Design Depth
DSN	ENGR 4290	01	Affordable Design and Entrepreneurship (CAPSTONE OPTION)	4	Linder; Govindasamy	T 3:30-6:30pm	AC213 when at Olin	15	Capstone Experience
E!	AHSE 1515	01	Products and Markets	4	Neeley	MR 10:50-1:00pm; W 9- 10:40am	AC417	30	Upperclass Offering (Rising Soph-Seniors); Note: Wed time is a project time; students also enrolled in SCOPE will need to find an alternative project time
E!	AHSE 3510	01	New Technology Ventures	4	Klein-Marmer	TR 4:45-6:30pm	AC328	15	Note: This offering may be used as a designated alternative for a students Entrepreneurship foundation requirement. If used, it may not be counted in an Entrepreneurship concentration.
E!	AHSE 3599	01	Special Topics in Entrepreneurship: Intellectual Property Protection for Innovative Designs	4	Covello	MR 3:20-5:00pm	MH273	12	October 22, 2015 Meeting will be held in AC113
E!	AHSE 4590	01	Entrepreneurship Capstone	4	Neeley	MR 1:30-3:10pm	CC214	15	
E:BE	ENGR3630	01	Transport in Biological Systems	4	Sarang-Sieminski	MR 10:50-12:30pm	AC318	20	
E:C	ENGR 2510	01	Software Design	4	Millner	TF 1:30-3:10pm	AC326	25	
E:C	ENGR 3525	01	Software Systems	4	Downey	TF 10:50-12:30pm	AC328	30	
E:C	ENGR 3590	01	A Computational Introduction to Robotics	4	Ruvolo	MR 1:30-3:10pm	AC318	15	
E:C	ENGR 3590	02	A Computational Introduction to Robotics	4	Ruvolo	TF 1:30-3:10pm	AC318	15	
E:C	ENGR 3599	01	Special Topics in Computing: Visualizing Data	4	Pucella	M 6:15-8:45pm	AC326	30	prerequisite of ENGR2510

Area	Course #	Section #	Course Title	Credits	Instructor	Time	Location	Enroll Limits	Notes
ECE	ENGR 3410	01	Computer Architecture	4	Hill	MR 10:50-12:30pm	AC326	35	
ECE	ENGR 3420	01	Introduction to Analog and Digital Communications	4	Govindasamy	TF 9-10:40am	AC304	24	
ECE	ENGR 3430	01	EE Prototyping	4	Lundberg	MR 3:20-6pm	AC304	24	NOTE: This was typically a spring offering - moving to fall; won't be offered SP16
ENGR	ENGR 1330	01	Fundamentals of Machine Shop Operations	4	Andruskiewicz	W 1-5:00pm	AC104	6	
ENGR	ENGR 2125	01	The Engineer's Orchestra I: Acoustics, Waves, Vibrations	4	Dabby; Lee	TF 1:30-3:10pm	AC304	45	CANCELLED
ENGR	ENGR 2210	01	Principles of Engineering	4	Hoover; Bennett; Govindasamy; Minch	TF 10:50-12:30pm	AC306	25	beginning in 2016-17 this will be a fall only offering; we will have one section in spring 2016
ENGR	ENGR 2210	02	Principles of Engineering	4	Hoover; Bennett; Govindasamy; Minch	TF 10:50-12:30pm	AC309	25	beginning in 2016-17 this will be a fall only offering; we will have one section in spring 2016
ENGR	ENGR 2210	03	Principles of Engineering	4	Hoover; Bennett; Govindasamy; Minch	TF 1:30-3:10pm	AC306	25	beginning in 2016-17 this will be a fall only offering; we will have one section in spring 2016
ENGR	ENGR 2210	04	Principles of Engineering	4	Hoover; Bennett; Govindasamy; Minch	TF 1:30-3:10pm	AC309	25	beginning in 2016-17 this will be a fall only offering; we will have one section in spring 2016
ENGR	ENGR 4190	01-14	Senior Capstone Program in Engineering (SCOPE)	4	Mulitiple Teams; Various Faculty Advisers and Angels	W 9-10:40am; 1-6:00pm	varied	90	Enroll in section '01; Team Assignments TBD
FYR	AHSE 1100	01	History of Technology	4	Martello	TF 10:50-12:30pm	AC417	16	AHS Foundation
FYR	AHSE 1122	01	Wired Ensemble	4	Dabby	T 3:20-5:pm; F 10:50- 12:30pm	AC304 AC305	16	AHS Foundation
FYR	AHSE 1135	01	The Digital Eye: Photography, Vision, and Visual Communication	4	Donis-Keller	TF 10:50-12:30pm	AC313	14	AHS Foundation
FYR	AHSE 1145	01	The Human Connection: Tools and Concepts from Anthropology for Understanding Today's World	4	Lynch	T 10:50-12:30pm; F 9:30- 12:30pm	AC326	16	AHS Foundation
FYR	AHSE 1199	01	Special Topics in Arts Humanities Social Science Foundation: Media Revolution: Activism and Technology	4	Vitols	TF 9-10:40am	AC318	16	AHS Foundation
FYR	AHSE 1199	02	Special Topics in Arts Humanities Social Science Foundation: Robots, Mutants, and Monsters: Envisioning Science in Clnema	4	Vitols	TF 10:50-12:30pm	AC318	16	AHS Foundation; Students enrolled in this course will need to reserve Monday evenings from 7:30-10p for film screenings.
FYR	ENGR 1125	01	Introduction to Sensors, Instrumentation and Measurement	4	Storey; Minch	M 1:30-3:10pm; T 1- 3:10pm	MH120 Mon; AC428	21	
FYR	ENGR 1125	02	Introduction to Sensors, Instrumentation and Measurement	4	Storey; Minch	M 1:30-3:10pm; W 1- 3:10pm	MH120 Mon; AC428	21	
FYR	ENGR 1125	03	Introduction to Sensors, Instrumentation and Measurement	4	Storey; Minch	M 1:30-3:10pm; R 1- 3:10pm	MH120 Mon; AC428	21	
FYR	ENGR 1125	04	Introduction to Sensors, Instrumentation and Measurement	4	Storey; Minch	M 1:30-3:10pm; F 1- 3:10pm	MH120 Mon; AC428	21	

Area	Course #	Section #	Course Title	Credits	Instructor	Time	Location	Enroll Limits	Notes
FYR	ENGR 1200	01	Design Nature		Linder; Hendren; Coso; Rosenwinkel	MW 3:20-6pm	MH120; AC204	28	
FYR	ENGR 1200	02	Design Nature		Linder; Hendren; Coso; Rosenwinkel	MW 3:20-6pm	MH120; AC206	28	
FYR	ENGR 1200	03	Design Nature	4	Linder; Hendren; Coso; Rosenwinkel	MW 3:20-6pm	MH120; AC209	28	
FYR	MTH 1111 and SCI 1111	01	Modeling and Simulation of the Physical World	2+2	Somerville; Geddes; Patel; Woodard	MR 10:50-12:30pm; W 9- 10:40am	MH120; AC204	28	
FYR	MTH 1111 and SCI 1111	02	Modeling and Simulation of the Physical World	2+2	Somerville; Geddes; Patel; Woodard	MR 10:50-12:30pm; W 9- 10:40am	MH120; AC206	28	
FYR	MTH 1111 and SCI 1111	03	Modeling and Simulation of the Physical World	2+2	Somerville; Geddes; Patel; Woodard	MR 10:50-12:30pm; W 9- 10:40am	MH120; AC209	28	
FYR	OIE 1000	01	Olin Introductory Experience	1	Tatar	R 3:20-5:00pm	MH120	84	
INTEG RATE D	ENGR 2199B MTH 2188B	B1	Special Topics in Engineering and Mathematics: <i>Regional Analysis For Development</i>	2+2	Mur-Miranda	MR 3:20-5:00pm	AC326	30	Prob/Stat Designated Alternative
INTEG RATE D	SCI 1121A / MTH 2220A	A1	Electricity and Magnetism: <i>Project Based Approach w/ Vector Calculus</i>	4+2	Christianson	MTRF 10:50-12:30pm	AC428	25	Experimental Offering; Will satisfy both Physics Foundation requirement and Linearity II (note: additional mathematics credits may be necessary for certain majors)
INTEG RATE D	SCI 1210A / AHSE 2199A	A1	Special Topics in AHS and Science: 6 Microbes that Changed the World	4+4	Huang; Martello	M 1:00-3:10pm; W 1- 6:00pm	AC406; AC417	24	Will satisfy Biology requirement
ME	ENGR 2340	01	Dynamics	4	Lee	TF 9-10:40am; W 9:30- 10:30am	AC328	40	
ME	ENGR 3310	01	Transport Phenomena	4	Storey	MR 10:50-12:30pm	AC328	28	
ME	ENGR 3330	01	Mechanical Design	4	Barrett	MR 9-10:40am	AC128	28	
ME	ENGR 3370	01	Controls	4	Lundberg	MR 1:30-3:10pm	AC304	25	NOTE: This was typically a spring offering - moving to fall; won't be offered SP16
ME	ENGR 3390	01	Fundamentals of Robotics	4	Barrett	MR 3:20-5:00pm	AC128	24	
MTH	MTH 2110	01	Discrete Math		Adams	MR 9-10:40am	AC326	30	
MTH	MTH 2130	01	Probability and Statistics	2	Patel	TF 1:30-3:10pm	AC113	32	Session I
MTH	MTH 2220	01	Linearity II	4	Geddes; Somerville	MR 1:30-3:10pm	CC209-213 Crescent Rm	28	
MTH	MTH 2220	02	Linearity II	4	Geddes; Somerville	MR 1:30-3:10pm	CC209-213 Crescent Rm	28	
MTH	MTH 3170	01	Non-linear Dynamics and Chaos	4	Hoffman	MR 1:30-3:10pm	AC113	24	

Area	Course #	Section #	Course Title	Credits	Instructor	Time	Location	Enroll Limits	Notes
SCI	SCI 1210	01	Principles of Modern Biology (with Lab): <i>Designing Better Drugs to Fight Disease</i>	4	Pratt	TF 1:30-3:10pm; Tues 3:20-6:00pm	AC406; AC417	24	
SCI	SCI 1410	01	Introduction to Material Science and Solid State Chemistry	4	Chachra	TR 3:20-6pm	AC413; AC417	21	
SCI	SCI 1410	C1	Introduction to Material Science and Solid State Chemistry: Biomaterials, Polymers and Mechanical Properties	4	Chachra	MW 3:20-6pm	AC413; AC328	21	
SEM	SEM 104	S1	Work, Play, Balance	1	Betsch	R 6:30-8:10pm	AC128	12	
SEM	SEM 303	S1	Musical Instrument Design and Engineering	1	Dorsk	T 6:30-8:10pm	AC306	20	
SEM	SEM 502	S1	Data Dashboard Design	1	Ritter	T 6:30-8:10pm	AC318	15	Python experience (not necessarily from a class)
ADMIN	AWAY 1000	01	Study Away Program		Administration	n/a	n/a	n/a	
ADMIN	OIP 1000	01	The Olin Internship Practicum	1	Phelps	n/a	n/a	n/a	If engaged in a CPT work activity; see PGP for enrollment

Color Key- Offering Blocks	ECE		ME		ENGR	/ DSN Co	ourses			DIE or Ge	enl Req						
	Monday					Tuesday						Wednesday					
9:00 AM 10:40 AM	MTH ENG 2110-01 333 Discrete Math Me cal Des AC326 AC	0 chani ign		AHSE 2199 Special Topics in AHSE: Critical Reflectiv e Writing			ENGR 2340 Dynamics AC328	ENGR 3420 Analog and Digital Comm AC304			AHSE 1199 - 01 AHS Fnd Topic : Media Revolutio n AC318		ENGR 23 Dynamio 9:30- 10:30a AC328	40 1111 All Sect Modeli	ng and tion Da DAC204	AHSE 1515Pro d & Markets Proj Time along with MR 10:50-1p AC417	ENGR 4190 SCOPE
10:50 AM	MTH 1111/ SCI 1111 All Sections Modeling and Simulation 10:50-12:30p MH120 AC204 AC206 AC209	ENGR 3630ENGR 3410 -01Transpor t in SystemsComput rAC318AC326	e MTH Z220A Transpo	Ma	acts 3525 Software Systems W 40a AC328	SCI 1121A MTH 2220A AC428		ENGR 2210, sec 01 Principle s of Engineeri ng AC306	ENGR 2210 sec 02 Principle s of Engineeri ng AC309		AHS Foundation AHSE1100:Hist of Tech AHSE1135: Digital Eye AHSE1145: Human Connection AHSE1199-02 Topic: AC417; AC313; AC326; AC318			Ope	n Meeting Time	10:50-12:30pn	
	ENGR MTH 1125 2220 ALL Sec 01 & 0 Intro Linear Sensors, II	2 Non- Co linear	70 459 Entr ntrols neu) 3590 that	A 1125 set 01 Intro Sepsors	ENGR 2510 Software	ENGR 3710 Systems	SCI 1210 Prin of Modern Biology: 'Drugs'	ENGR 2210, sec 03 Principle	2210 sec 04 Principles	ENGR 2125 Engineer' S Stats	ENGR ENGR 3590 3299 02 Spectin Computa Desig	Measure			SCI ENGR 1210A 1330 AHSE 2199A Fnd 5 Machi 6 Shop Microbes Opera that ns	
3:10 PM	Instru, Measure CC209 ment 213 MH 120 Cresco Rm	Chaos	304 CC2	tional M 1-3:1 Robotics 1-6pm AC318 417	w 1-3:10p	AC326	AC328	Lecture AC417	s of Engineeri ng AC306	of Engineeri ng AC309	Orchestr a AC304 AC113	tional Adapt Robotics and Assist Tech: AC318 Invest ting Norm	ve 1-3:10p ke AC428			Changed the 1-5:00 World M 1- 3:10p and	entrice ENGR 4190
3:20 PM	ENGR OIE 3220 ENGR Human 1200 Factors ALL and Section Interface Design Design Natur 3:20-	ns Spec Top Entrp: IP Protectn Inno	ENGRSCI 14103430sec C1EEMaterialsPrototypiMaterialsngScienceand SolidStateChemistrAC304y	ENGRENGR2:3390MTH21Spec ToFundameEngr / Mntals ofRegionaRoboticsAnalysisDev'mtAC128AC326	B 1122 Wired th Ensemb) ;		SCI1210 Prin of Modern Biology LAB	SCI 1410 sec 01 Materials Science and Solid State Chemistr y	ENGR 3290 and 4290 Affordabl e Design & Entrp		T 1:30 F 1:30 3:10p AC128	5p	ENGR 1200 ALL Sections Design Nature	SCI 1410 sec C1 Material s Science and Solid State	W 1- 6:00p AC104 AC406& AC 417	SCOPE
5:00 PM 6:00 PM	5:50p MH12 AC109 AC20 AC20 AC20	÷	AC413 & AC328		305	AHSE 3510 New Tech Ventures TR 4:45- 6:30p		AC406	AC413 & AC417	3:30- 6:30p AC213 and Babson				MH120; AC204, AC206 AC209	Chemist ry AC413 & AC328		
> 9:00:00 PM	ENGR 3599 Spec Topic Comput Visualizing Data M 6:15-8:45p AC326	ing:				AC328					SEM 303-S1 Seminar: Musical Inst Design and Eng 6:30-8:10pm AC306	gr SEM 502-S1 Seminar: Data Dashboa Design T 6:30-8:10pn AC318					

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AHSE					SCI					Math					Integr	ated Offerii	ng			Color Key- Offering Blocks
				Thu	rsd	av								F	riday					Choing Blook
	MTH 2110-01 Discrete Math	ENGR 3330 Mechar cal Design				J						ENGR 2340 Dynamics AC328	ENGR 3420 Analog and Digital Comm AC304			AHSE 1145 Human Connection 9:30a start AC326	AHSE 1199 - 01 AHS Fnd Topic : Media Revolutio n AC318			9:00 AI
MTH 1111/ 1111 All Sections Modeling an Simulation 10:50-12:30 MH120 AC2 AC206 AC20	nd Op 204	3630 Transpor t in Biological Systems	ENGR 3410-01 Compute r Architect ure AC326		33 Tr. t Ph na	anspor nenome			AHSE 1515 Products & Markets MR 10:50- 1pm; W 9-10:40a AC417	SCI 1121A MTH 2220A	ENGR 3525 Software Systems AC328		ENGR 2210, sec 01 Principle s of Engineeri ng AC306	02 Principles of		AHS Foundatio AHSE1100:Hist AHSE1122: Wir AHSE1135: Digi AHSE1145: Hur Connection AHSE1199-02 T AC417; AC304; AC313; AC326;	of Tech ed Ensemble ital Eye nan opic: AC305;			10:50 Al
ENGR 1125 sec										ENGR 1125 sec		<u> </u>								12:30 PI
03 Intro Sensors, Instru, Measure ment	MTH 2220 sec 01& 02 Linearity II CC209-	MTH 3170 Non- linear Dynamics and Chaos	337			AHSE 4590 Entrepre neurship Capstone		ENGR 3590 01 Computa tional Robotics		04 Intro Sensors, Instru, Measure ment 1-3:10p	ENGR 2510 Software Design	ENGR 3710 Systems	SCI 1210 Prin of Modern Biology: 'Drugs' Lecture	ENGR 2210, sec 03 Principles of Engineeri	ENGR 2210 sec 04 Principle s of Engineeri	ENGR 2125 Engineer' s Orchestr a	MTH 2130 SESS I Prob Stats	ENGR 3590 02 Computa tional Robotics	ENGR 3299 Spec Top Design: Adap & AssistTec h:	1:30 P
1-3:10p AC428	213 Crescent Rm	AC113	AC3	04		CC214		AC318		AC428	AC326	AC328	AC417	ng AC306	ng AC309	AC304	AC113	AC318	Investiga ting Normal AC128	3:10 PI
ENGR 3220 Human Factors and Interface Design 3:20- 5:50p	AHSE 3599 Spec Top Entrp: IP Protectn Inno Designs MH273	ENGR 3250 Integrate d Product Design 3:30- 6:30p	ENGR 3430 EE Protot yping AC304	SCI 1410 sec 01 Materials Science and Solid State Chemistr Y	AHSE 3510	ENGR 3390 Fundame ntals of Robotics AC128	ENGR2199E MTH2188B Spec Top Engr/Math Regional Analysis for Dev'mt AC326	1000 Olin Intro Experien					"Do	o Somethi	ng" Dedicat	ed Time				3:20 PN
AC109		Location: all 3 campuses ; when at Olin AC213		AC413 & AC417	New Tech Ventu TR 4:4 6:30p	15-														5:00 PI
SEM 104 Seminar: Work, Pla Balance		AHSE 011 Conducto 6:45-9pm 304 + 305	rless Orch	estra	AC328	8														V
R 6:30-8: AC128	10pm	504 1 503	510																	9:00:00 PM

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			TENTATIVE Spring 2016	Offerings		
Sem.	Area	Course #	Course Title	Instructor	Credits	Notes
Spring	ADMIN	AWAY 1000	Study Away Program	Administration	12	
Spring	ADMIN	OIP 1000	The Olin Internship Practicum	Phelps	1	
Spring	AHS	AHSE 0112	The Olin Conductorless Orchestra	Dabby	1	
Spring	AHS	AHSE 2199	Special Topics in Arts, Humanities and Social Sciences: Foundations of Psychology	Adler	4	
Spring	AHS	AHSE 2199A	Narrative Psychology	Adler	4	At Wellesley, limited space for Olin students
Spring	AHS	AHSE 2199B	Special Topics in Arts, Humanities and Social Sciences: TBD	Vitols	2	
Spring	AHS	AHSE 2199C	Special Topics in Arts, Humanities and Social Sciences: TBD	Vitols	2	
Spring	AHS	AHSE 3100	Issues in Leadership and Ethics	Miller, R.	2	
Spring	AHS	AHSE 3190	Arts, Humanities, Social Sciences Capstone Preparatory Workshop	Epstein	1	
Spring	AHS	AHSE 4190	Arts, Humanities, Social Sciences Capstone	Epstein	4	
Spring	DSN	ENGR 2250	User Oriented Collaborative Design	Hendren; Ben-Ur; Stein; Staff	4	
Spring	DSN	ENGR 3210	Sustainable Design	Linder	4	Design Depth
Spring	DSN	ENGR 3260	Design for Manufacturing	Barrett	4	Design Depth
Spring	DSN	ENGR 3290	Affordable Design and Entrepreneurship (DESIGN DEPTH OPTION)	Staff	4	Design Depth
Spring	DSN	ENGR 4290	Affordable Design and Entrepreneurship (CAPSTONE OPTION)	Staff	4	Capstone Experience
Spring	E:C	ENGR 2510	Software Design	Ruvolo; Hill	4	
Spring	E:C	ENGR 3520	Foundations of Computer Science	Staff	4	
Spring	E:C	ENGR 3599	Computing Advanced Elective	Staff	4	
Spring	E:MS	ENGR 3810	Structural Biomaterials	Chachra	4	
Spring	E!	AHSE 1515	Products and Markets	Neeley; Hoover; Staff	4	
Spring	E!	AHSE 3510	New Technology Ventures	Staff	4	
Spring	E!	AHSE 4590	Entrepreneurship Capstone	Staff	4	
Spring	ECE	ENGR 2410	Signals and Systems	Mur-Miranda	4	
Spring	ECE	ENGR 2420	Introduction to Microelectronic Circuits with LAB	Minch	4	
Spring	ECE	ENGR 3415	Digital Signal Processing	Dabby	4	
Spring	ENGR	ENGR 1330	Fundamentals of Machine Shop Operations	Andruskiewicz	4	
Spring	ENGR	ENGR 2199	Special Topics in Engineering: Applications of Microfluidics	Irimia; Storey	4	
Spring	ENGR	ENGR 3199	Special Topics in Engineering: Designing Resources for Empowerment and Making (DREAM)	Millner	4	

			TENTATIVE Spring 2016	Offerings		
Sem.	Area	Course #	Course Title	Instructor	Credits	Notes
Spring	ENGR	ENGR 3199A	Special Topics in Engineering: Elecanisms	Hoover; Minch	4	
Spring	ENGR	ENGR 3499	Special Topics in Electrical and Computer Engineering: Wireless Communication	Govindasamy	4	
Spring	ENGR	ENGR4190	Senior Capstone Program in Engineering (SCOPE)	Staff	4	Mulitiple Teams; Various Faculty Advisers and Angels
Spring	ENGR OR SCI	ENGR 2620 OR SCI2220	Biomechanics	Zastavker	4	Choose either ENGR credit or SCI credit; Decision is irrevocable after the add period
Spring	INTEGRATED	AHSE XXXX /SCI XXXX	Intersection of Art and Science	Donis-Keller	2 + 2	
Spring	INTEGRATED	MTH 2188A / ENGR 2199A	Special Topics in Engineering and Mathematics: Data Science	Ruvolo	2 + 2	Prob/Stat Designated Alternative
Spring	INTEGRATED	MTH 2188A / SCI 2099A	Special Topics in Mathematics and Science: Bayesian Inference and Reasoning	Mahajan	2+2	Prob/Stat Designated Alternative
Spring	INTEGRATED	Various	Placeholder for Spring Curricular Experiments	Various	Various	
Spring	ME	ENGR 2320	Mechanics of Solids and Structures	Lee	4	
Spring	ME	ENGR 2330	Introduction to Mechanical Prototyping	Staff	4	
Spring	ME	ENGR 2350	Thermodynamics	Townsend	4	
Spring	ME	ENGR 3392	Robotics Systems Integration	Bennett	4	
Spring	МТН	MTH 2110	Discrete Mathematics	Adams	4	
Spring	МТН	MTH 2130	Probability and Statistics	Staff	2	
Spring	МТН	MTH 2210	Linearity I	Staff	4	
Spring	SCI	ENGR XXXX / SCI XXXX / SUST	Systems/Sustainability MatSci Advanced Elective	Stolk	4	
Spring	SCI	SCI 1130	Mechanics	Zastavker	4	
Spring	SCI	SCI 11XX	Physics Foundation	Staff	4	
Spring	SCI	SCI 1210	Principles of Modern Biology (with Lab): Human Genetics and Genomics	Donis-Keller	4	
Spring	SCI	SCI 1210	Principles of Modern Biology (with Lab)	Huang	4	
Spring	SCI	SCI 1410	Introduction to Material Science and Solid State Chemistry	Staff	4	
Spring	SCI	SCI 2099	Special Topics in Science: Art of Approximation	Mahajan	4	
Spring	SCI	SCI 2130	Quantum Physics	Holt	4	
Spring	SCI	SCI 2140	Relativity	Holt	2	
Spring	SCI	SCI XXXX	Intermediate Biology Offering	Staff	4	
Spring	SUST	SUST XXXX	A course in the Sustainability 'space'	Staff	4	Tentative