# Olin College Registration Booklet

Fall 2012

Classes begin Thursday, August 30, 2012

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

Session	Add	Drop and Pass/No Credit	Withdraw
Full Semester (Aug 30 – Dec 7)	September 13, 2012	November 2, 2012	December 7, 2012
Session I (Aug 30 – Oct 17)	September 6, 2012	October 3, 2012	October 17, 2012
Session II (Oct 18 – Dec 7)	October 25, 2012	November 26, 2012	December 7, 2012

# **Frequently Asked Questions and Instructions**

# What do I register for?

Students are allowed to register for a maximum of 20 credits. All students have a minimum requirement of 12 degree credits to be eligible for the Olin tuition scholarship.

The maximum credits can be distributed between degree and non-degree activities.

**Degree** activities are defined as counting toward graduation credit and course requirements (all students must have a minimum of 12 degree credits). Examples of registered degree activities are standard courses, cross-registered courses, independent study and research for degree credit. Consult the catalog for your specific degree requirements.

**Non-degree** activities are defined as **not** counting toward degree and subject requirements. An example is a passionate pursuit. Non-degree activities are not graded and appear on your transcript if you have met all of your objectives for the activity. Remember these do not count in your minimum requirement of 12 degree credits.

# How do I choose my activities for degree and non-degree credit?

Use this booklet as a tool to assist you in preparation for advising discussions. Meet with your adviser BEFORE your registration date. Your adviser will "clear" you to register. If you are not cleared, you will not be permitted to register.

# I am doing a Study Away Program next semester. Do I need to register?

YES! Students in approved semester away programs must register for a single course: **AWAY1000: Study Away Program**. This course will allow Olin to certify you as a full-time student during the semester you are away. Your approved course work will be transferred to your academic record upon receipt of a transcript from the host institution (provided you have received the minimum required grade). Note: All registrations will be cross-referenced with the Study Away Committee.

# Olin Self Study, Independent Study and Research - - - How do I register?

- Olin's Self Study Please see information on the <u>StAR Center website</u> for details. If you are doing an
  independent activity or research, you will need to complete a form with your OSS intention by the last day
  to add a course for the Fall 2012 semester.
- Independent Study and Research Students interested in doing research and/or independent study must complete a Cover Sheet for Independent Study and Research. This form can be found on the forms tab of the StAR Center website.
- All forms must be received by the add deadline for the Fall 2012 semester. There are no exceptions.

# I am interested in doing a Passionate Pursuit next semester. How do I register?

If you are interested in doing a Passionate Pursuit, consult the Student Handbook for FAQ's. Passionate Pursuits require approval from the Executive Committee of the Passionate Pursuit Board in addition to consent of a faculty sponsor and the student's adviser. Passionate Pursuit proposals should be sent to the chair of the executive board, the Dean of Student Life. The deadline is around mid-semester.

# CROSS-REGISTRATION: How do I participate in Cross-Registration with Babson, Brandeis, or Wellesley (BBW)?

Olin students are allowed to take one course per school, per semester; with the exception of first semester freshmen. First semester freshmen are not permitted to participate in cross-registration.

When selecting a BBW course, keep in mind the time constraints of your Olin courses. Additionally, it is important to check for course pre-requisites and the enrollment. Under most circumstances, if the course is full, you will not be able to register for the course. Enrollment is generally found under course "tally" or listed with the course info. All BBW courses will be noted on your Olin degree audit by 'color' (the area of discipline). It is the student's responsibility to review the ARB approved 'coloring' on the ARB website and note the color on the cross-reg form. If a course is not found on the 'list', the student must petition the CSTB for appropriate coloring.

In order to submit a cross-registration request, use the cross-registration portlet under the MyStAR tab at <a href="http://my.olin.edu">http://my.olin.edu</a>. The StAR Center will work with the host school to facilitate the registration. The following dates reflect the dates that the host school will accept cross-registration requests from Olin's StAR Center. Olin students may submit requests to the StAR Center any time before the later of the dates listed below.

# **Babson College Cross Registration dates:**

# April 3 - September 5

You can find their offerings at

https://fusionmx.babson.edu/CourseListing/index.cfm?fuseaction=CourseListing.DisplayCourseListing&blnShowHeader = true&program=Undergraduate&semester=Fall+2012&sort by=course number&btnSubmit=Display+Courses.

# Brandeis University Cross Registration dates:

# August 16 - September 13

All courses require instructor permission in writing (email) or via a permission code to submit with your request. You can find Brandeis offerings at

http://www.brandeis.edu/registrar/bulletin/provisional/courses/index.html

# **Wellesley College Cross Registration dates:**

# April 23 - July 31; September 4–13

You can find their offerings at <a href="https://courses.wellesley.edu/">https://courses.wellesley.edu/</a>. 100-level courses are not open to cross-registrants until the Wellesley add/drop period that begins September 4. However, you may submit requests earlier and they will be held for processing until then.

# How do I Cross-Register to Olin College?

Olin welcomes students from Babson, Brandeis and Wellesley to register for Olin courses. In general, all courses except for some first year courses are eligible for cross-registration with the permission of the Olin faculty member. BBW students should send a request for a course through their Registrar's Office to the Student Accounts and Records (StAR) Center. Cross-registration request forms can be found at the home institution. Visit <a href="http://star.olin.edu">http://star.olin.edu</a> for more information.

# What About Co-Curriculars?

Registration and descriptions for co-curriculars will be released during the add period in September. If you have a particular interest in a co-curricular that you would like to see offered, you are encouraged to seek out a "faculty/staff" sponsor before the end of this semester and notify the Dean of Student Life. Co-curricular offerings will be posted at http://star.olin.edu.

# How and When Do I Register?

Registration is done online using SIS.OLIN.EDU (we are not using the portal as it is still under maintenance for web registration) <a href="https://sis.olin.edu">https://sis.olin.edu</a>

Here are some useful tips from Olin's Information Technology Department:

During course registration sessions, the IT Help Desk often receives reports about sis.olin.edu and my.olin.edu being slow or unresponsive. In almost all cases, this is due to an excessive and often unnecessary workload placed on the system. By following these guidelines, you can help minimize this load and increase system responsiveness:

- Please use only one browser tab on one computer. In past sessions, some students were
  connecting from as many as four different computers or opening multiple sessions in
  multiple tabs. Each additional session consumes resources on the server and only serves
  to slow the system down.
- Please be patient and do not refresh the page. This causes the background system
  processing for the same task to be executed multiple times, adding additional load to
  the system.
- Please remember that everyone else in your group is trying to register at the same time. As much as we would like the system to be as responsive as it is during nonregistration periods, this simply cannot happen when over 60 students are attempting to register for classes at the exact same moment. It takes time for the system to process all incoming requests and reconcile them with each other.
- Please avoid using the system during other groups' registration times. Again, this adds additional work to an already busy system.

With the exception of one session, we have seen the fewest slowdowns and smallest workloads on the registration system in the recent past than we have seen in several years thanks to many students following these guidelines.

We do realize the importance of registration to every student on campus. If you encounter errors from either sis.olin.edu or my.olin.edu during the registration process, please take a screenshot of the error you receive and send it, along with a detailed description of what you were doing when it occurred, to helpdesk@olin.edu so that we can resolve the issue as quickly as possible.

# **REGISTRATION TIMES:**

On-line registration will take place April 9-12 during the evening hours. You can see your registration date and time by logging on to <a href="https://sis.olin.edu">https://sis.olin.edu</a>; select the session FA and year 2012; access the 'registration' menu option.

(Registration will be open to cleared and eligible students only. A cleared student is one who has met with his/her adviser and has an updated learning plan. An eligible student is one who does not have an outstanding financial balance with the college.)

# When is the Add Period – the Drop Period – the last day to withdraw from a course? – REFERENCE HANDY CHART at beginning of this Booklet.

The Add period\* is the first 10 class days of the semester. The Add period will begin on August 30, 2012 and end on September 13, 2012. Add requests can be processed in person at the StAR Center and on-line. Add/Drop forms can be found at <a href="http://star.olin.edu">http://star.olin.edu</a>.

The Drop period begins August 30, 2012 and ends November 2, 2012 (for  $\frac{1}{2}$  session deadlines see chart). During this time, students can alter their schedule as long as they remain in a minimum of 12 credits of degree activities. A "drop" is removed from the student schedule and does not appear on transcripts. Drops and withdrawals after the add period require a hard copy form and must be processed at the StAR Center. There are no on-line drops after the add period ends.

The last day to withdraw from a course is the last day of instruction.

# **Waitlists**

Waitlists are available on most courses. In sis.olin.edu, a waitlist comment is included in the course catalog offering section by clicking on the "VIEW" button under requirements if there is indeed a waitlist.

# **Cancellations**

Note that all courses listed each semester are subject to cancellation due to insufficient enrollment.

#### Textbooks

Pursuant to the Higher Education Opportunity Act (HEOA) of 2008, information regarding required and recommended textbooks and supplemental course material may be viewed from the Olin's internet course schedule via <a href="https://my.olin.edu">https://my.olin.edu</a>.

# Fall 2012 Supplement to Current Course Catalog

Degree requirements are outlined in the 2011-12 Course Catalog.

**Course descriptions** can also be found in the 2011-12 Course Catalog. Fall 2012 courses that were approved after the catalog printing AND Special Topics course descriptions are listed here.

# AHSE1145: The Human Connection: Tools and Concepts from Anthropology for Understanding Today's World

Instructor: Lynch Credits: 4 AHS Hours: 4-0-8

Enrollment note: AHS Foundation course

The book Wired to Care opens with the story of a designer who disguised herself as an elderly person to better understand the experiences of the elderly in our society. Author Dev Patnaik explains his interest in this experiment. It comes down to empathy: "All of this is to reclaim a very old idea, that quantitative data and facts are no substitute for real-world experience and human connection." Anthropologists have long-argued for the importance of putting oneself in other people's shoes for better understanding. The anthropologist Bronislaw Malinowski wrote in 1922 that the goal of the anthropologist "is to grasp the native's point of view, his relation to life, to realize his vision of his world." In this course, students will try out the anthropological methods of participation, observation, interviews, and analysis of cultural materials and texts. This is a hands-on course for students who want to get out and meet people — all with the aim of greater understanding. The course focuses on three thematic topics important to our society in the twenty-first century. Past offerings have focused on aging, religion, health, and globalization. The class includes assignments, events, and interactions that will take students off campus (perhaps to the Needham Senior Center, local coffee shops, and to Boston's ethnic neighborhoods) and will include visitors from area institutions.

# AHSE 1199: Arts, Humanities and Social Science Foundation Topic Section 01: / Subtitle: Movies with a Mission: Politics and the Media

Instructor: Vitols Credits: 4 AHS Hours: 4–0–8

In an election year, the public is bombarded with political advertisements for candidates. Yet, this is nothing new. Politicians have employed the media to their advantage throughout history, while there have always been media-makers using film, television, and, lately, new media to call into question government policies. This course explores the rich and complicated relationships between media and politics, examining the visual and rhetorical strategies employed by media-makers to persuade audiences to adopt their viewpoints. Students will learn how to critically analyze visual media, gaining a deeper understanding of how films, television, and new media shape and are shaped by society.

# AHSE1599-01: Entrepreneurship Foundation Topic

Reimagining Entrepreneurship at Olin

Instructors: Neeley Credits: 4 AHSE Hours: 4-0-8

Enrollment notes: Designated Alternative for AHSE1500

This is an experimental course to re-imagine a first experience in entrepreneurship at Olin and will serve as a designated alternative for The Entrepreneurial Initiative. Via a semester-long project, students will explore the theory and practice of design and entrepreneurship through the creation and delivery to market of a physical product of their own imagining.

# AHSE1599-02: Entrepreneurship Foundation Topic

Entrepreneurship Foundation Topic, The Founder's Journey at MIT

Instructors: Chang Credits: 4 AHSE Hours: 4–0–8

Enrollment notes: Designated Alternative for AHSE1500

The Founder's Journey is an entrepreneurship course at MIT led by Ken Zolot. The course description below is from Ken at MIT.

In 6.933, we will see what it takes to prepare the mind of a start-up founder. This is a class about finding and activating your entrepreneurial energy. What road are you embarking upon in starting a company, and what obstacles threaten your success? What else and who else will you need?

If you want to start a company, 6.933 will give you the chance to live the steps to bring that passion to fruition, with substantial exposure to mentors and leaders from the business community. You'll learn by doing. We'll have guest speakers who have travelled this path, successfully and unsuccessfully. 6.933 is about grasping the essence of the journey you're about to undertake.

Even if you're not ready for a startup, this class provides an exploration of leadership, innovation, and creativity as seen through the lens of a startup founder. We'll gain a broader insight into turning any novel vision into action.

We have several guest speakers over the course of the semester: entrepreneurs, investors, and other professionals who are involved in new venture creation. The guest speakers will provide an overview of their experience as well as insights on the specific topic of the session they attend.

#### AHSE2199: Special Topics in Arts, Humanities, Social Sciences

Representing Olin Experience and Olin Outcomes

Instructors: Wagner, Somerville

Credits: 4 AHS Hours: 4–0–8

Enrollment notes: Enrollment by permission only.

The mission of Olin College is to prepare students to become innovators, and to help lead change in engineering education more broadly. In this course we will examine both what aspects of the Olin experience contribute to helping students develop as innovators, as well as asking how we can best communicate student outcomes and the aspects of Olin that contribute to these outcomes, to the rest of the world.

The first half of the semester will build on work done by a small team of students in the spring of 2012 to develop a model for how Olin helps students develop as innovators. By drawing on current literature from diverse fields (education, psychology, business, creativity, and design), and by employing interviews and focus groups inside and outside the Olin community, the class will develop a coherent, grounded framework for the Olin experience and Olin outcomes. In the second half of the semester, teams will work in parallel to begin realizing possible methods of documenting and communicating Olin to the outside world. These projects will be dependent on students' specific interests based on the work done in the first half of the semester.

# AHSE 2199A/SCI2099A: Special Topics in Arts, Humanities, Social Sciences and Special Topics in Science

Paradigms, Predictions, and Joules: A Historical and Scientific Approach to Energy and the Environment

Instructors: Martello, Brabander (Wellesley)

Credits: 2 AHSE and 2 SCI

Hours: 4-0-8 Prerequisite: none

This interdisciplinary course, featuring faculty and students from both Olin and Wellesley Colleges, will focus on "grand challenges" at the interface between energy and the environment through the disciplinary lenses of the history of technology and environmental science. We will study the changing relationship between human societies and their natural environment, focusing upon the consequences of human energy use (agricultural production, power generation, and other forms of energy) at the local, regional, and global scales. By combining the tools, analytical frameworks, and skills found in the history and environmental science fields, we will build first-order "hindcast" models that explain the observations and trends that we observe from historical case studies. By the end of the semester we will determine the key components required for assembling forecast-oriented energy use models that extrapolate the impacts of present environmental technologies and practices into the future.

This course will include equal numbers of Olin and Wellesley students, and will alternate class sessions at both campuses. Students will begin the semester with a series of readings and exercises that build skills and familiarity in the broad area of environmental studies: for example, we will work with framing environmental concept maps using environmental engineering principles (e.g. control volumes, flux, residence time) and environmental science concepts (energy conservation and energy density calculations), historical research and analysis, environmental ethics, and writing/presentation exercises centered around important case studies of interactions between societies, energy technologies, and the natural environment. We will use these skills and perspectives for the remainder of the semester as we conduct two research projects related to energy use, sustainability, and environmental impacts in both ancient societies and the modern day. This course involves extensive team project work and will offer many opportunities for students to identify their own goals and shape their studies in order to

achieve those goals. And best of all, you will test-drive a brand new course and help to shape it for future generations who will hail you as a trailblazer and champion.

# AHSE2199B: Special Topics in Arts, Humanities, Social Sciences

Teaching & Learning in Undergraduate Science and Engineering

Instructor: Zastavker Credits: 4 AHSE Hours: 4-0-8 Prerequisite: none

This course will examine select topics in teaching and learning in undergraduate science and engineering. The goal of the class is to help participants become effective tutors, teaching assistants, mentors, and future instructors in these fields through a deep theoretical examination of and practica in teaching and learning in STEM courses. In a seminar format, participants will discuss research on best practices in pedagogy and curriculum design, cognition and learning, student classroom experiences, diversity, and assessment. Students will gain experience in instructional design, pedagogy, and assessment, and will develop a teaching portfolio. While the course materials discussed are largely on research in undergraduate science and engineering education, the course will touch on issues in mathematics education, and many course concepts can be extended to mathematics and technology instruction at K-16 level.

# AHSE3599: Special Topics in Business and Entrepreneurship

Intellectual Property for Engineers and Scientists

Instructor: D. Kerns; S. Gold

Credits: 2 AHSE Hours: 2-0-4

Prerequisite: AHSE 1500 (FBE)

This course introduces the fundamentals of intellectual property (IP): patents, trade secrets, copyrights and trademarks. There is an emphasis on patent protection for inventions, and a major project component of the course in which each student will create elements of patent applications that will be peer-reviewed in student teams. Topics include introduction to patent law, identifying what's patentable, tests for patentability, patent searches to identify prior art and as a resource for further innovation, the structure of a patent, reading and drafting patent claims, the patent prosecution process, international patents, commercialization of patent rights, protecting software, Olin College's unique IP policy, and the basics of trade secrets and copyrights.

# AHSE 4190: Arts, Humanities, Social Sciences Capstone Project

Instructor: Lynch Credits: 4 AHSE

All students must complete either an AHS Capstone project (AHSE4190), an E! Capstone project (AHSE4590), or an AHS Capstone course by the end of their senior year. To complete the AHS or E! Capstone project in the fall of 2011, register for AHSE4190 or AHSE4590 now. The prerequisite for the AHS Capstone project is AHSE 3190 ("Prepstone"), or permission of instructor. To declare an AHS course your AHS Capstone course, register for the AHS course now, complete the form at <a href="http://projects.olin.edu/ahs/forms/form-capstone-proposal.html">http://projects.olin.edu/ahs/forms/form-capstone-proposal.html</a>, and email the form to <a href="mailto:ahs@olin.edu">ahs@olin.edu</a>. Forms are due the Thursday prior to registration. For complete information on the AHS Capstone please consult the AHS website at <a href="http://projects.olin.edu/ahs/capstone.html">http://projects.olin.edu/ahs/capstone.html</a>.

#### **ENGR1199: Special Topics in Engineering**

Introduction to the Microelectronics and Nanotechnology Revolution

Instructor: S. Kerns Credits: 4 ENGR Hours: 4-0-8

This course will develop the general scientific and engineering underpinnings of microelectronics and nanotechnology, and examine how this new technological revolution is influencing a broad array of interdisciplinary fields (engineering, biology, biomedical engineering, material science, chemistry, physics, medicine, technology, management) and civilization as a whole (art, business, film, entertainment, politics). Special "widget deconstruction" topics will address common pieces of modern technology (e.g., cell phone, flash drive, GPS, DVD, digital camera) from the perspective of: "How do they do what they do?"; "How does microelectronics & nanotechnology plan in that functionality?"; and "Where is the technology going and how will it change the way we live our lives?" Student-led "round-table" discussions will examine the transformational impact of the microelectronics and nanotechnology revolution on modern society. No special knowledge of electrical and computer engineering is assumed, but the class will be highly interactive and student participation is key.

# ENGR2699: Special Topics in Bioengineering Microfluidics and Cell Movement

Instructors: Irimia, Storey

Credits: 4 ENGR Hours: 4–0–8

Cell movement is a critical process in many health and disease conditions, e.g. for directing white blood cells towards sites of bacterial infection, epithelial cells to close wounds, cancer cells towards distant tissues where they could trigger the formation of metastasis. Cell movement is also a fascinating process, considering that cells smaller than 10 microns in size can move with speeds up to several times their body length in a minute, make directional decisions in the presence of chemicals at concentrations spanning over several orders of magnitude, or be sensitive to spatial differences in concentrations of less than 1% across their body. How could cells accomplish such unique performance, remains an intriguing question for both biologists and engineers, and although many of the intracellular molecules that participate in cell movement are already known from rigorous studies in biology labs, we still do not understand at a systems level how all the pieces work together during cell movement. A top-down approach to studying cell movement, facilitated by the use of microfluidic technologies and engineering principles could help answer some of these questions and at the same time have an impact in the medical sciences. In this course we will cover some of the basics of cell movement and cellular directional decision making, as well as the basics of microscale engineering and manufacturing. We will study recent microfluidics designs that helped advance our understanding of cell movement in health and disease conditions and will experiment with new design concepts targeting science and practical applications. The course will be project based with students designing and building functional microfluidic devices to measure, perturb, and hopefully better understand cell movement.

# ENGR 3290/ENGR4290: Affordable Design and Entrepreneurship (ADE)

Instructor: Linder Credits: 4 ENGR Hours: 2-2-8

Prerequisites: AHSE 1500, ENGR 2210 and ENGR 2250 for Olin Students; FME1000 and EPS 3501 for Babson students;

Junior or Senior standing Usually Offered: Fall, Spring

For information contact: Professor Benjamin Linder

Students gain experience innovating to address social challenges through a design and entrepreneurship approach that emphasizes context, collaboration, and sustainability. The focus is on alleviating poverty by deploying innovations in communities that generate income and meet daily human needs in areas like energy, water, health, agriculture, transportation, and communication. For example, students might create and test the technology for a micro energy utility, such as a concentrated-solar battery charging station, and the business model that makes it viable.

The course is run as a firm where students work in teams with community partners nationally and internationally to co-create and launch new products and ventures. Topics covered include the conditions and causes of poverty, approaches to poverty alleviation, cultural awareness and community engagement, affordable design principles and practices, and social venture models and strategies including financing and scaling. Groups of students travel to partner sites in countries like India, Morocco, Ghana and the U.S. to build relationships, gain contextual awareness, and implement projects.

This course is part of the ADE Program that also includes placement assistance to help students find internship and job opportunities in social enterprise. ADE is offered jointly with Babson College where students enroll in EPS 4515. Olin students can elect ADE as an alternative to the SCOPE Program to fulfill the Capstone requirement by registering for ENGR 4290 for two consecutive semesters beginning in the second semester of their junior year or the first semester of their senior year. They cannot change programs once they have completed registration. Alternatively, students can take this course for one semester to fulfill the Design Depth requirement by registering for ENGR 3290. Students that take ENGR 3290 can switch to ENGR 4290 for Capstone credit.

# ENGR 3299: Special Topics in Design Engineering Real Products, Real Markets

Instructor: L. Neeley Credits: 4 ENGR Hours: 4-0-8

Registration Note: May be used for Design Depth

This experimental course is intended to completely re-imagine the product design + entrepreneurship process. Each participant in the course will imagine, design, prototype, test, market and sell a product in the span of the semester. The products and customers will be real. A key measure of success will be the number of products successfully sold and shipped to complete

strangers. To achieve these lofty goals, we will have to explore, understand and analyze each element of existing processes with an eye towards exploiting best practices, redesigning them when relevant and, if needed, creating processes anew.

### **ENGR 3345 Mechanical and Aerospace Systems**

Instructor: Lee Credits: 4 ENGR Hours: 4-0-8

Prerequisite: permission of instructor

A student team will work in the manner of a small engineering research and development company to develop a mechanical or aerospace system to address a current market need. A comprehensive system design will be developed based upon quantitative analysis using commercial simulation software. Prototype systems will be fabricated, evaluated and refined to meet requirements, specifications, and performance objectives.

This semester will focus on the design and fabrication of a perching landing gear system for small autonomous or remotely controlled air vehicles. The landing gear will enable the air vehicle to grab a hold of and land upon surfaces such as tree branches or ledges. Mechanical aspects dominate but there is a substantial need for hardware and software development of sensors, actuators, and instrumentation.

# **ENGR3499: Special Topics in ECE**

**Probability, Information Theory and Wireless Communications** 

Instructor: Govindasamy Credits: 4 ENGR Hours: 4–4–4

Prerequisites: Probability and Statistics, Intro to Analog and Digital Communications, or permission of instructor.

This course covers the principles of wireless communications with a strong emphasis on developing the mathematical concepts used in analyzing modern wireless communications systems. Students will start by learning about modeling electromagnetic propagation and system noise, followed by modern approaches to modulating information for the wireless channel such as Orthogonal-Frequency-Division-Multiplexing (OFDM). Students will also learn the basic principles of information theory and how it can be used to understand fundamental performance limits of communications systems, independent of specific algorithms or technology. The mathematical basis of these topics will be emphasized throughout the course. The course culminates with a final project which may be implemented on an open-source software radio platform or simulation.

#### MTH2188: Special Topics in Mathematics

Linearity 2 Instructor: Staff Credits: 4 Hours: 4–0–8

Enrollment note: Designated alternative for Vector Calculus requirement

An intradisciplinary approach that builds upon material covered in Linearity 1 to address topics in vector calculus and introductory partial differential equations. Topics include functions of more than one variable; vector-valued functions; gradient, divergence, and curl; boundaryvalue problems; and solutions to common partial differential equations. Emphasis on both numerical and analytical approaches. Note: students who have previously taken multi-variable calculus should consult with mathematics faculty to determine whether taking Linearity 2 is appropriate for their needs.

## SCI2099/MTH2199: Special Topics in Science and Mathematics

**Bayesian Inference and Reasoning** 

Instructor: Mahajan Credits: 2 MTH and 2 SCI

Hours: 4-0-8

Enrollment note: designated alternative for Prob/Stat. If you want the mathematics portion to count as your required MTH2130: Probability and Statistics course, please file a Course Substitution Form (CSTB) with the StAR Center. It is the student's responsibility to make this declaration. If no substitution is requested, the course will count in the math/science distribution area.

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.

### **SCI2299: Special Topics in Biology**

**Emerging Technologies in Cancer Research and Treatment** 

Instructor: Pratt Credits: 4 SCI Hours: 4–0–8

Prerequisites: Principles of Modern Biology or permission of the instructor

More than thirty years have passed since the declaration of a "War on Cancer", yet nearly 600,000 Americans are predicted to die from cancer this year. This course will examine the environmental and biological causes of cancer. We will explore why traditional treatments (chemotherapy, surgery, and radiation) and the early promise of biotechnology have not led to a significant improvement of life expectancy for most forms of cancer. Through analyses of journal articles, clinical trials, and conference reports, we will assess the diverse emerging technologies for cancer research, diagnosis, and therapy. Some of the technologies to be explored are angiogenesis inhibitors, microarrays, stem cell therapy, gene therapy, radiology/imaging advances, biological and immunological modifiers, and nanotechnology.

#### **SUST 2201 Introduction to Sustainability**

Instructors: Linder and Babson and Wellesley faculty TBA

Credits 4 Hours 4-0-8

Prerequisites: none. Open to sophomores and juniors. First-year students may petition to enroll.

This case-based course introduces students to the basic concepts and tools that business, engineering, and the liberal arts (science, social science, and the humanities) bring to a consideration of sustainability. It is team-taught by faculty members from each institution, with coursework fully integrated across the three approaches. The course will draw empirical material from, and apply concepts and tools to, a semester-long case (such as the sustainability of a city block, the transition to clean energy worldwide, or the life-cycle of a common consumer product).

Area	Course #	Sec#	Course Title	Instructor	Credits	Time	Location	Enroll Limits	Notes
3 College	SUST 2201	01	Introduction to Sustainability	Linder	4	W 3:30-6:30p	AC213	15	
AHS	AHSE 0112	01	The Olin Conductorless Orchestra	Dabby	1	R 6:45-9:00p	AC305 AC318	30	Audition Required; See Description
AHS	AHSE 2199	01	Special Topics in Arts, Humanities, Social Sciences: Representing Olin Experience and Olin Outcomes	Somerville	4	F 12:30-3:10p	CC214	12	Taught using EXPERIMENTAL GRADING; Enrollment by Permission
AHS	AHSE 2199B	01	Special Topics in Arts, Humanities, Social Sciences: <i>Teaching &amp; Learning in Undergraduate Science and Engineering</i>	Zastavker	4	T 3:20-6:00p	MH373	18	Waitlist Available
AHS	AHSE 3190	01	Arts, Humanities, Social Sciences Capstone Preparatory Workshop	Epstein	1	n/a	n/a	20	
AHS	AHSE 4190	01	Arts, Humanities, Social Sciences Capstone	Lynch	4	T 1:30-4:30p	AC128	25	Prerequisite is AHSE3190: Prepstone
DSN	ENGR 3210	01	Sustainable Design	Linder	4	MR 9-10:40a	AC213	28	
DSN	ENGR 3220	01	Human Factors Interface Design	Bator; Millner	4	MR 3:20-6:00p	AC109	24	
DSN	ENGR 3290	01	Affordable Design and Entrepreneurship	Linder	4	T 3:30-6:30p	AC213	6	Waitlist Available
DSN	ENGR 3299	01	Special Topics in Design: Real Products Real Markets	Neeley	4	MR 10:50-12:30p	AC213	24	
DSN or E:SYS	ENGR 3710	01	Systems	Bennett	4	TF 10:50-12:30p	AC417	25	
<del>E!</del>	AHSE 1500	01	The Entrepreneurial Initiative	TBD	4	TF 9-10:40a	AC326	<del>40</del>	course cancelled
E!	AHSE 1599	01	Entrepreneurship Foundation Topic: Reimagining Entrepreneurship at Olin	Neeley	4	TF 9-10:40a	AC213	15	Desginated Alternative to AHSE1500
E!	AHSE 1599	02	Entrepreneurship Foundation Topic: The Founder's Journey at MIT	Chang	4	TR 7-9:00pm	Off Site	10	Desginated Alternative to AHSE1500
E!	AHSE 3510	01	New Technology Ventures	Parizeau	4	TR 4-5:35p	AC126	15	Cross-listed course with Babson; Waitlist Available
틴	AHSE 3599	01	Special Topics in Business and Entrepreneurship: Intellectual Property for Engineers and Scientists	Kerns, D	2	T 10:50-12:30p	AC128	<del>20</del>	
E!	AHSE 4590	01	Entrepreneurship Capstone	Kerns, D	4	F 9-10:40a	AC128	10	
E:BE	ENGR 2699	01	Special Topics in Bioengineering: <i>Microfluidics and Cell Movement</i>	Irimia; Storey	4	R 3:20-6:30p	AC318	25	
E:BE	ENGR 3600	01	Topics in Bioengineering	Sarang- Sieminski; Williams	4	MR 1:30-3:10p	AC326	25	Taught using EXPERIMENTAL GRADING
E:C	ENGR 2510	01	Software Design	Stein	4	TF 1:30-3:10p	AC326	25	
E:C	ENGR 3525	01	Software Systems	Downey	4	MR 10:50-12:30p	AC318	25	
E:C	ENGR 3525	02	Software Systems	Downey	4	MR 1:30-3:10p	AC318	25	

Area	Course #	Sec#	Course Title	Instructor	Credits	Time	Location	Enroll Limits	Notes
E:MS	ENGR 3810	01	Structural Biomaterials	Chachra	4	TF 1:30-3:10p	AC318	21	
ECE	ENGR 3410	01	Computer Architecture	VanWyk	4	MR 1:30-3:10p	AC304	20	
ECE	ENGR 3410	02	Computer Architecture	VanWyk	4	MR 3:20-5:00p	AC304	20	
ECE	ENGR 3415	01	Digital Signal Processing	Dabby	4	TF 10:50-12:30p	AC304	25	
ECE	ENGR 3426	01	MADVLSI I	Minch	4	MR 10:50-12:30p	AC304	25	
ECE	ENGR 3450	01	Semiconductor Devices	Kerns, S	4	TF 9-10:40a	AC304	25	
ECE	ENGR 3499	01	Special Topics in ECE: Probability, Information Theory and Wireless Communications	Govindasamy	4	MR 1:30-3:10p	AC128	25	Pre-reqs: Probability and Statistics, Intro. to Analog and Digital Communications OR Permission of Instructor
ENGR	ENGR 1199	01	Special Topics in Engineering: Introduction to the Microelectronics and Nanotechnology Revolution	Kerns, S	4	TF 1:30-3:10p	AC126	12	This course does not apply to major course requirements BUT does count toward engineering credit requirements
ENGR	ENGR 1330	01	Fundamentals of Machine Shop Operations	Anderson	4	W 12:30-4:30p	AC104	6	
ENGR	ENGR 2210	01	Principles of Engineering	Govindasamy	4	MR 10:50-12:30p	AC306	28	
ENGR	ENGR 2210	02	Principles of Engineering	Millner	4	MR 1:30-3:10p	AC306	28	
ENGR	ENGR 2210	03	Principles of Engineering	Murphy	4	MR 3:20-5:00p	AC306	28	
ENGR	ENGR 4190	01	Senior Capstone Program in Engineering (SCOPE)	Barrett; Bennett; Chang; Christianson; Downey; Govindasamy; Harris; Hoover; Lee; Minch; Neeley; ALSS; Storey; Townsend	4	W 9-10:40a; 12:30- 6:00p	tbd	tbd	Teams will be formed in the Fall; Enroll in section 01
ENGR	ENGR 4290	01	Affordable Design and Entrepreneurship	Linder	4	T 3:30-6:30p	AC213	12	Alternative Capstone; Must enroll for 2 consecutive semesters; must be within 3 semesters of graduating
Integrated	AHSE 2199A / SCI 2099A	Α	Special Topics in Arts, Humanities, Social Sciences and Special Topics in Science: Paradigms, Predictions, and Joules: A Historical and Scientific Approach to Energy and the Environment	Martello; Brabander	2+2	T 3:20-6:00pm; T 6:30- 7:30p	Olin (AC326) Wellesley (tbd)	9	Waitlist Available
Integrated	SCI 2099 / MTH 2199	02	Special Topics in Science and Mathematics:Bayesian Inference and Reasoning	Mahajan	4	TF 10:50-12:30p	AC328	48	Designated Alternative for Probability and Statistics; Must Enroll in BOTH Courses
ME	ENGR 2330	01	Introduction to Mechanical Prototyping	Hoover	4	MR 3:20-6:00p	AC309	25	Waitlist Available; Course May Be Offered Again in Spring 2013
ME	ENGR 2340	01	Dynamics	Lee	4	MR 1:30-3:10p; T 3:20- 4:30p	AC328	35	
ME	ENGR 3310	01	Transport Phenomena	Storey	4	TF 10:50-12:30p	AC309	30	

Area	Course #	Sec #	Course Title	Instructor	Credits	Time	Location	Enroll Limits	Notes
ME	ENGR 3330	01	Mechanical Design	Barrett	4	TF 9-10:40a	AC309	30	Waitlist Available with Addition of a Second Section; Prerequisite=Mechanics Solids & Structures
ME	ENGR 3345	01	Mechanical and Aerospace Systems	Lee	4	MR 9-10:40a	AC309	25	Contingent on demand
ME	ENGR 3390	01	Robotics 1	Barrett	4	TF 1:30-3:10p	AC309	24	
ME	ENGR 3390	02	Robotics 1	Yu	4	MR 6-7:40p	AC309	24	
MTH	MTH 2110	01	Discrete Math	Patel	4	TF 9-10:40a	AC417	40	Waitlist Available
мтн	MTH 2130	01	Computational Probability and Statistics	Downey	2	TF 9-10:40a	AC318	24	SESSION I; EXPERIMENTAL GRADING; This course is taught with a 'computational' flavor. In addition to the catalog description, there will be emphasis on computational methods, stochastic simulation and Bayesian statistics. To this end, a prerequisite of ENGR2510, Software Design or comparable programming experience in Python is required
MTH	MTH 2188	01	Linearity 2	Geddes; Storey; Boy	4	MWR 9-10:40a	MH120 AC318 AC326 AC328	80	Designated alternative for Vector Calculus
МТН	MTH 3170	01	Nonlinear Dynamics and Chaos	Geddes	4	MR 10:50-12:30p	AC326	24	Taught using EXPERIMENTAL GRADING
OIE	AHSE 1100	01	History of Technology: A Cultural and Contextual Approach	Martello	4	MR 10:50-12:30p	CC210	15	AHS Foundation
OIE	AHSE 1122	01	The Wired Ensemble - Instruments, Voices, Players	Dabby	4	T 3:20-5p; F 1:30- 3:10p	AC304 & 305	15	AHS Foundation
OIE	AHSE 1145	01	The Human Connection: Tools and Concepts from Anthropology for Understanding Today's World	Lynch	4	M 9:30-12:30p; R 10:50-12:30p	CC214	15	AHS Foundation
OIE	AHSE 1155	01	Identity from the Mind and the Brain: Who Am I and How Do I Know	Adler	4	MR 9:00-10:40a	AC417	15	AHS Foundation
OIE	AHSE 1155	02	Identity from the Mind and the Brain: Who Am I and How Do I Know	Adler	4	MR 10:50-12:30p	AC417	15	AHS Foundation
OIE	AHSE 1199	01	Arts, Humanities, Social Science Foundation Topic: Movies with a Mission: Politics and the Media	Vitols	4	MR 10:50-12:30p	AC128	15	AHS Foundation
OIE	ENGR 1110	01	Modeling and Control		3	M 1:30-3:10 T 1:30- 3:10p	MH120 M; AC428	24	
OIE	ENGR 1110	02	Modeling and Control	Christianson;	3	M 1:30-3:10 W 1:30- 3:10p	MH120 M; AC428	24	
OIE	ENGR 1110	03	Modeling and Control	Kerns, D; MurMiranda	3	M 1:30-3:10 R 1:30- 3:10p	MH120 M; AC428	24	
OIE	ENGR 1110	04	Modeling and Control		3	M 1:30-3:10 F 1:30- 3:10p	MH120 M; AC428	24	

Area	Course #	Sec#	Course Title	Instructor	Credits	Time	Location	Enroll Limits	Notes
OIE	ENGR 1200	01	Design Nature	Chachra;	4	MR 3:20-6:00p	MH120 AC204	30	
OIE	ENGR 1200	02	Design Nature	Neeley; Zastavker;	4	MR 3:20-6:00p	MH120 AC206	30	
OIE	ENGR 1200	03	Design Nature	BenUr	4	MR 3:20-6:00p	MH120 AC209	30	
OIE	MTH 1111 and SCI 1111	01	Modeling and Simulation of the Physical World		4	TF 10:50-12:30p; W 9- 10:40a	TF AC204, MH120	30	
OIE	MTH 1111 and SCI 1111	02	Modeling and Simulation of the Physical World	Somerville; Townsend; Patel	4	TF 10:50-12:30p; W 9- 10:40a	TF AC206, MH120	30	
OIE	MTH 1111 and SCI 1111	03	Modeling and Simulation of the Physical World	. 5.6	4	TF 10:50-12:30p; W 9- 10:40a	TF AC209, MH120	30	
OIE	OIE 1000	01	Olin Introductory Experience	Tatar	1	W 3:20-5:00p	MH120	90	Non degree credit; Required for all First Year Students
SCI	SCI 1121	01	Electricity and Magnetism: Project Based Experience	Christianson	4	MR 10:50-12:30p; W 1:30-3:10	AC328; AC428 MR	30	
SCI	SCI 1210	01	Principles of Modern Biology with Lab	Pratt, J	4	TF 1:30-3:10p; T 3:20- 6p	AC417; AC404, 406	21	
SCI	SCI 1210	02	Principles of Modern Biology with Lab	Huang	4	MR 1:30-3:10p; W 12:30-3:10p	AC417; AC404, 406	21	
SCI	SCI 1210	03	Principles of Modern Biology with Lab	Huang	4	MR 3:20-5:00p; W 3:20-6p	AC417; AC404, 406	21	
SCI	SCI 1410	01	Materials Science and Solid State Chemistry (with Lab)	Bernal-Ostos	4	MR 3:20-6:00p	AC413	21	
SCI	SCI 1410	02	Materials Science and Solid State Chemistry (with Lab)	Bernal-Ostos	4	TW 3:20-6:00p	AC413	21	
SCI	SCI 2130	01	Modern Physics	Holt	4	TF 10:50-12:30p	AC113	25	
SCI	SCI 2145	01	High Energy Astrophyiscs	Holt	2	TF 1:30-3:10p	AC113	25	Session I
SCI	SCI 2299	01	Special Topics in Biology: <i>Emerging Technologies in Cancer Research and Treatment</i>	Pratt, J	4	TF 10:50-12:30p	AC326	15	
SCI	SCI 2320	01	Organic Chemistry w/ Lab	Morse	4	MR 10:50-12:30p	AC126	30	Choose Lab A or B
SCI	SCI 2320 L	Α	LAB: Organic Chemistry	Morse	0	T 3:20-6:00p	AC409	15	
SCI	SCI 2320 L	В	LAB: Organic Chemistry	Morse	0	W 12:30-3:10p	AC409	15	
	AWAY 1000	01	Study Away Experience		12			99	
	OIP 1000	01	The Olin Internship Practicum	Phelps	1			n/a	SEE PGP for Enrollment information

Color Key- Offering Blocks	ECE					ME				ENGR /	DSN Cou	ırses			OIE or G	Senl Req	l									
				N	/londa	ay								Tue	esday							Wed	nesda	У		
9:00 AM	MTH 2188 Linearity 2 MH120 AC318 AC326 AC328			ENGR 3210 Sustainab le Design	ENGR 3345 Mechanic al and Aerospac e Systems AC309			AHSE 1155-01 Identity from the Mind and the Brain  AC417	AHSE 1145 Human Connecti on 9:30a start	AHSE 1599-01 Entrp Foundati on Topic: Reimage Entrp @ Olin  AC213	ENGR 3330 Mechanic al Design	MTH 2110 Discrete Math	MTH 2130- Probabil y and Statistics Comput ional w/ Downey SESS I AC318	s at			ENGR 3450 Semicond uctor Devices			MTH 2188 Linearity 2 MH120 AC318 AC326 AC328	MTH 11 1111  All Secti Modelin Simulat  9-10:40 AC204 AC209	ions ng and cion Da AC206			ENGR 4190 SCOPE	
10:50 AM	3170  Nonlinear  Dynamics and	ENGR 2210, sec 01  Principles of Engineeri ng  AC306	ENGR 3426 MADVLSI	ENGR 3525 sec 01 Software Systems	ENGR 3299 SpecTop Design: Real Prod Real Mkts	SCI 2320 Organic Chemistry  AC126	SCI 1121  Electricity and Magnetis m  AC328 & AC428	AHSE1155- AHSE1145: Connection AHSE1199- with a Mission	Hist of Tech 02: Identity Human 01: Movies		ENGR 3310 Transport Phenome na AC309	SCI 2099 / MTH2199 Bayesian Inference and Reasoning AC328	Systems		SCI 2130 Modern Physics	SCI 2299 Special Topics in Biology: Cancer	3415 Digital Signal Processin g	MTH 1111/ SCI 1111 All Sections Modeling and Simulation 10:50-12:30p MH120 AC204 AC206 AC209				Open M	eeting Tir	ne		
																					SCI1210 Sec 02 Prin of Modern Biology	SCI2320 L Sec B Organic Chemistry LAB		ENGR 1330 Fnd Machine		
	OIE ENGR 1110 ALL Sec Modeling and Control	ENGR 2210 sec 02  Principles of Engineeri ng  AC306	ENGR 3410, sec 01 Compute r Architect ure	ENGR 3525 sec 02 Software Systems	ENGR 2340-01 Dynamics AC328		ENGR 3499 SpTopc in ECE: Prob Infor Theory Wireless Comm AC128	SCI 1210 sec 02 Prin of Modern Biology Lecture	ENGR 3600 Topics in Bioengine ering  AC326	OIE ENGR 1110 sec 01 Modeling and Control	ENGR 3390 sec 01 Robotics	ENGR 2510 Software Design	ENGR 3810 Structural Biomateri als		SCI 1210 sec 01 Prin of Modern Biology Lecture	SCI 2145 High Energy Astrophys ics  SESS I AC113	AHSE 4190 AHS Capstone 1:30- 4:30p	ENGR 1199 Spec Top Engr: Microelect ronic & Nanotech Revolution AC126		OIE ENGR 1110 sec 02 Modeling and Control	AC406	AC409	SCI 1121  Electricity and Magnetis m	Operations  12:30-4:30p	ENGR 4190	
3:10 PM 3:20 PM 5:00 PM	ENGR 3220 Human Factors and Interface Design	ENGR 2330 Mechanic al Prototypi ng	ENGR 2210 sec 03  Principles of Engineeri ng AC306	ENGR 3410, sec 02 Computer Architect ure AC304	1200 ALL Sections Design Nature			sec 03 Prin of Modern Biology - Lecture	SCI 1410 sec 01  Materials Science and Solid State Chemistr y	AHSE 1122 Wired Ensemble AC304 & AC305	AHSE 3510 New Tech Ventures TR 4- 5:35p	SCI2320 L Sec A Organic Chemistr Y LAB	ENGR 2340-01 Dynamics 3:20-4:30 AC328	SCI 1410 sec 02  Materials Science and Solid State Chemistr y	sec 01	AHSE 2199 B Special Top AHS Teach Learn UC Sci and Engr 3:20-6p	:	ENGR 3290 and 4290 Affordabl e Design & Entrp	AHSE 2199A / SCI2099A Special Topics in AHS & Scii: Hist/Sci Appr to Energy and Environm	SCI 1410 sec 02 Materials Science and Solid State Chemistr y	SCI1210 Sec 03 Prin of Modern Biology LAB	SUST 2201  3 College Intro to Sustainabili ty  W 3:30- 6:30p	OIE 1000 Olin Intro Experienc e MH120	AC104	SCOPE	
6:00 PM	AC109				MH120; AC204 AC206 AC209				AC413		AC126	AC409		AC413	AC404	MH373		AC213	3:20- 6:00pm	AC413	AC406	Location: all 3 campuses when at Olin AC213				
> 9:00:00 PM		ENGR 3390 sec 02 Robotics MR 6- 7:40p								AHSE 1599-02 Entrp Foundati on Topic: Founders Journey 7-9pm									6:30- 7:30p AC 326							

Fall 2012 Course Offerings.xlsx

AHSE				Ş	SCI					Math				Int	egrated	Offering			Color Key- Offering Blocks
				Thurs	day									Frida	У				
MTH 2188 Linearity 2 MH120 AC318 AC326 AC328			ENGR 3210 Sustainab le Design	ENGR 3345  Mechanic al and Aerospac e Systems  AC309				115 Ide fro Min the	HSE 155-01 entity om the ind and e Brain	AHSE 4590 Entrepre neurship Capstone	AHSE 1599-01 Entrp Foundati on Topic: Reimage Entrp @ Olin  AC213	ENGR 3330 Mechani al Design		MTH 2130- Probabilit y and Statistics Computat ional w/ Downey SESS I AC318		ENGR 3450 Semicon uctor Devices			9:00 AN
MTH 3170 Nonlinear Dynamics and	ENGR 2210, sec 01 Principles of	ENGR 3426 MADVLSI	ENGR 3540 sec 01 Software Systems	ENGR 3299 SpecTop Design: Real Prod Real Mkts	SCI 2320 Organic Chemistry	SCI 1121  Electricity and Magnetis m	AHS Foundati AHSE1100: His AHSE1155-02: AHSE1145: Hu AHSE1199: Mo	ot of Tech Identity man Conne ovies with a	a Mission		ENGR 3310 Transport Phenome na	and Reasoning	Systems	SCI 2130 Modern Physics	SCI 2299 Special Topics in Biology: Cancer	ENGR 3415 Digital Signal Process	All Sec Mode Simula	ling and	10:50 AM
Chaos AC326	Engineeri ng AC306	AC304	AC318	AC213	AC126	AC328 & AC428	CC210, 214; A0 417	C128, 305,	313,		AC309	AC328	AC417	AC113	AC326			0 AC204 5 AC209	
		ц	Ц				ц											AHSE 2199: SpTop AHS: Representi ng Olin Experience	
ENGR 1110 sec 03 Modeling and	ENGR 2210 sec 02  Principles of	ENGR 3410, sec 01 Computer Architect	ENGR 3540 sec 02 Software Systems	ENGR 2340-01 Dynamics	ENGR 3499 SpTopc in ECE: Prob Infor Theory		SCI 12 sec 02 Prin c Mode Biolog	2 360 of Top ern Bio	opics in oengine	ENGR 1110 sec 04	2510 Software	ENGR 3390 sec 01 Robotics	ENGR 3810 Structural Biomateri als	SCI 1210 sec 01 Prin of Modern Biology	SCI 2145 High Energy Astrophys cis	ENGR 1199 Spec Top Engr: Microelect ronic &	AHSE 1122 Wired Ensemble	& Outcomes F 12:30- 3:10p	1:30 PM
Control AC428	Engineeri ng AC306	ure AC304	AC318	AC328	Wireless Comm AC128		AC41	7 AC	C326	and Control	AC326	AC309	AC318	AC417	AC113	Nanotech Revolution AC126	AC304 & AC305	CC214	3:10 PM
ENGR 3220 Human Factors and Interface	AHSE 3510 New Tech Ventures	ENGR 2210 sec 0 Principles of	ENGR 3410, sec 02  Computer Architect	Mechanio al - Prototypi	Bioengine ering:	Design		second of Magy Sci	ec 01 laterials cience nd Solid										3:20 PM
Design	TR 4- 5:35p - AC126	Engineeri ng AC306	AC304	AC309	Microflui dics & Cell Moveme nt	Nature	AC41	7 Cho	ate nemistr	Community Service							5:00 PM		
AC109					R 3:20- 6:30p	MH120; AC204, AC206 AC209		AC	C413										6:00 PM
ENGR 3390 sec 02 Robotics MR 6- 7:40p	AHSE 1599-02 Entrp Foundati on Topic: Founders	AHSE 0112 Conductorle 6:45-9pm 305 + 318	Olin ess Orchestra		AC318														
AC309	Journey 7-9pm	330																	9:00:00 P
				<u> </u>															PM

Area	Course #	Probable Number of Sections	Course Title	Instructor	Credits
AHS	AHSE 0112	1	The Olin Conductorless Orchestra	Dabby	1
AHS	AHSE 2112	1	Six Books that Changed the World	Martello	2
AHS	AHSE 2114	1	Science Fiction and Historical Context	Martello	2
AHS	AHSE 2130	1	Responsive Drawing and Visual Thinking	Donis-Keller	4
AHS	AHSE 2199	1	Foundations of Psychology (at O) -or- Narrative Psychology (at W)	Adler	4
AHS	AHSE 3100	1	Leadership and Ethics Seminar	Miller; Bottomly;	2
AHS	AHSE 3190	1	Arts, Humanities, Social Sciences Capstone Preparatory Workshop	Epstein	1
AHS	AHSE 4190	1	Arts, Humanities, Social Sciences Capstone	Epstein	4
DSN	ENGR 2250	2	User Oriented Collaborative Design	Staff	4
DSN	ENGR 3260	1	Design for Manufacturing	Staff	4
DSN	ENGR 3290 OR ENGR 4290	1	Affordable Design and Entrepreneurship	Linder	4
DSN	ENGR 3299	1	Special Topics in Design: TBD	Staff	4
DSN	ENGR 3299A	1	Special Topics in Design: Real Products Real Markets	Neeley	4
E!	AHSE 1500	2	The Entrepreneurial Initiative	Gold	4
E!	AHSE 4590	1	Entrepreneurship Capstone	Staff	4
E:BE	ENGR 3699	1	Special Topics in Bioengineering: TBD	Sarang- Sieminski	4
E:C	ENGR 2510	1	Software Design	Staff	4
E:C	ENGR 2599	1	Special Topics in Computing: Software Engineering	Staff	4
E:C	ENGR 3599	1	Special Topics in Computing: Artificial Intelligence	Stein	4
E:MS	ENGR 3810	1	Strucutral Biomaterials	Chachra	4
E:MS	SCI 2499	1	Special Topics in Materials Science: TBD	MatSci Visitor	4
ECE	ENGR 2410	1	Signals and Systems	MurMiranda	4
ECE	ENGR 2420	1 with 2 Labs	Introduction to Microelectronic Circuits	Minch	4
ECE	ENGR 3420	1	Introduction to Analog and Digital Communications	Govindasamy	4
ECE	ENGR 3499	1	Special Topics: At the Intersection: Software, Entrepreneurship, and Design	Chang	4

Area	Course #	Probable Number of Sections	Course Title	Instructor	Credits
ECE	ENGR 3499A	1	Special Topics in ECE: MADVLSI II Seminar	Minch	2
ENGR	ENGR 1121	4	Real World Measurements	Staff	3
ENGR	ENGR 1330	1	Fundamentals of Machine Shop Operations	Anderson	4
ENGR	ENGR 2210	1	Principles of Engineering	Staff	4
ENGR	ENGR 3199	1	Special Topics in Engineering: Robotics II	Bennett	4
ENGR	ENGR 4190	many	Senior Capstone Program in Engineering (SCOPE)	Staff	4
INTEGRAT ED	AHSE 2199A / ENGR 2199A	1	Special Topics: Engineering for Humanity	Lynch & Stein	2 + 2
ME	ENGR 2320	1	Mechanics of Solids and Structures	Lee	4
ME	ENGR 2330	1	Introduction to Mechanical Prototyping	Barrett	4
ME	ENGR 2350	1	Thermodynamics	Townsend	4
ME	ENGR 3340	1	Dynamics of Mechanical and Aerospace Structures	Lee	4
ME	ENGR 3370	1	Controls	Lundberg	4
МТН	MTH 2130	1	Computational Probability and Statistics	Downey	2
МТН	MTH 2130	2	Probability and Statistics	Staff	2
MTH	MTH 2188	1	Linearity 1	Staff	4
МТН	MTH 2199	01	Special Topics in Mathematics: TBD	Staff	4
MTH	MTH 3120	01	Partial Differential Equations	Hoffman	4
SCI	SCI 1121 and/or SCI 1130	2	E&M and/or Mechanics	Staff	4
SCI	SCI 1210	1	Principles of Modern Biology (with Lab)	Pratt, J.	4
SCI	SCI 1310	1	Introduction to Chemistry (Green and Environmental Focus - with Lab)	Morse	4
SCI	SCI 1399	1	Special Topics in Chemistry: Intro Chem Supplement for Pre-med students	Morse	2
SCI	SCI 1410	2	Materials Science and Solid State Chemistry (with Lab)	Staff	4
SCI	SCI 2099	1	Special Topics in Science: The Art of Approximation	Mahajan	4
SCI	SCI 2299	1	Special Topics in Biology: Engineered Microbial Systems	Huang	4
SCI	SCI 2499	1	Special Topics in Science: Microscopy	Christianson	2

# Tentative SP13 Offerings

Area	Course #	Probable Number of Sections	Course Title	Instructor	Credits
SCI	SCI 3120	1	Solid State Physics	Christianson	4
SCI	SCI 3130	1	Advanced Classical Mechanics	Zastavker	4
SCI	SCI 3320	1	Group Theory	Morse	4