Olin College Registration Booklet

Spring 2014

Classes begin Tuesday, January 21, 2014

Volume 12, Number 2.3 revised 1/17/2014

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Table of Contents

Important Advice Regarding YOUR Course Selections for Spring 2014

First Year Students: Two courses you must enroll in are Real World Measurements AND Linearity. In addition to these two, it is STRONGLY suggested you complete your foundation physics requirement. Other topics available to you are Modern Biology, Materials Science, Chemistry, The Entrepreneurial Initiative, Software Design … to name a few.

All Students: Reminder that you must complete your Biology requirement and your Materials Science / Chemistry requirement by the end of your junior year.

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

Session	Add	Drop and Pass/No Credit	Withdraw
Full Semester (Jan 21 – May 1)	February 3, 2014	April 2, 2014	May 1, 2014
Session I (Jan 21 – Mar 10)	January 27, 2014	February 24, 2014	March 10, 2014
Session II (Mar 11 – May 1)	March 24, 2014	April 22, 2014	May 1, 2014

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 Self Study – Please see information on the StAR Center website for details. You will need to complete a form with your OSS intention by the last day to add a course for the spring 2014 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 spring 2014 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 mid-semester.

What is EG grading?
The 'EG' grade represents an "Experimental Grade" designation, implemented in a small number of courses during a curricular experiment that began in 2009. Each student may undertake no more than one "EG" course per semester. An 'EG' grade in a student's transcript indicates that a student completed the course's learning objectives and received instructor feedback based upon criteria that do not have direct mapping onto the ABCDF grading system. Students who do not complete the learning objectives will receive a "no credit" designation on their transcript (similar to the "no credit" option for pass/no credit courses). [Spring 2014 EG courses are: Failure Analysis and Prevention, Intro to Information Theory and Its Applications, Nonlinear Dynamics and Chaos.]

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 prerequisites 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 http://my.olin.edu. 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:
November 18 – December 20 (4:30 p.m.); January 9 – January 27 (4:30 p.m.)
You can find their offerings at
https://fusionmx.babson.edu/CourseListing/index.cfm?fuseaction=CourseListing.DisplayCourseListing&blnShowHeader=true&program=Undergraduate&semester=Spring+2014&sort_by=course_number&btnSubmit=Display+Courses

Brandeis University Cross Registration dates:
January 9 – 27, 2013
Courses that are closed or specifically state you need permission must have a permission code.
You can find Brandeis offerings at
http://www.brandeis.edu/registrar/schedule/classes/2014/Spring/100/UGRD

Wellesley College Cross Registration dates:
November 25 – February 7 (11 p.m.)
You can find their offerings at Wellesley Schedule .
https://courses.wellesley.edu/

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 http://star.olin.edu for more information.

What About Co-Curriculars?

Registration and descriptions for Co-Curriculars will be released during the add period in January. If students have a particular interest in a co-curricular that they would like to see offered, they 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.

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 https://my.olin.edu .

How and When Do I Register?

Registration is done online using https://my.olin.edu.

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:

I. 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.
II. 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.
III. 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 non-registration 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.
IV. Please avoid using the system during other groups' registration times. Again, this adds additional work to an already busy system.
V. With the exception of one session, we have seen the fewest slowdowns and smallest workloads on the registration system this semester that we have seen in several years thanks to many students following these guidelines.
VI. We do realize the importance of registration to every student on campus. If you encounter errors from 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 November 11-14 during the evening hours. Information regarding the groups is available via your registration login. In general, seniors will go Monday night, juniors Tuesday night, sophomores Wednesday night and first year students on Thursday night.

(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 January 21, 2014 and end on February 3, 2014. Add requests can be processed in person at the StAR Center and on-line. Add/Drop forms can be found at http://star.olin.edu.

The Drop period begins January 21, 2014 and ends April 2, 2014 (for ½ 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.

(*Additionally, students wishing to participate in cross-registration will be allowed to alter their Olin schedule to accommodate cross-registration requests if the host schools' add/drop period extends beyond February 3, 2014. This will be done at the StAR Center once the confirmation of the cross-registered request is received. The reason for this is due to the variable times at which we can honor cross-registration requests depending on the host school's registration times.)

Waitlists

Waitlists are available on some courses. These are indicated in the offerings list at the end of this booklet and in the Course Catalog on MyStAR. 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.

Spring 2014 Supplement to Current Course Catalog

Degree requirements are outlined in the 2013-14 Course Catalog.

Course descriptions can also be found in the 2013–14 Course Catalog. Courses for Spring 2014 that are not listed in the 2013-14 Olin Catalog wiki AND Special Topics descriptions are listed here.

Highlighted FAQs related to Courses

- There are 3 offerings that are using Experimental Grading. You may only take 1 of the 3. (Failure Analysis and Prevention, Intro to Information Theory and Its Applications, Nonlinear Dynamics and Chaos)
- The Olin Self Study (OSS) Requirement can be satisfied by AHSE4190, AHSE4590 and ENGR3820, in addition to a standard Independent Study Activity that meets the OSS objectives.
- Courses that satisfy the Probability and Statistics (MTH2130) course requirement. There are two being offered in the spring. If you wish to use the course as your prob/stat requirement, you need to do a CSTB for to inform your degree audit of this choice. You need only the form and your signatures (no others). If you previously took a prob/stat course you should inquire with Professor Downey and/or Patel if you will duplicate subject material by enrolling in one of these new versions.
- Professor Mechtenberg's Physics of Conservation Laws can be taken as either SCI or ENGR. You need to make this designation at registration and cannot change after the add period ends on February 3, 2014.

AHSE2199: Special Topics in Arts, Humanities, Social Sciences

Eco-Docs: Environmental Activism in Documentary Cinema

Instructor: Vitols

Credits: 4 AHS

This course explores the diverse ways documentary filmmakers have used cinema for environmental activism. Whether sounding an alarm over the catastrophic effects of global warming or expressing concern regarding genetically modified food, these documentarians strive to raise awareness about widely debated contemporary ecological issues. Through a consideration of such non-fiction works as Koyaanisqatsi (1982), An Inconvenient Truth (2006), Food, Inc. (2009), and Gasland (2010), students will investigate the strategies and the science documentary filmmakers employ to inspire discussion and to motivate action in the viewing public. Students will also analyze the efficacy of media activism in the implementation of concrete, sustainable solutions.

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

Critical Reflective Writing: A Journey to Knowing Oneself

Instructors: Zastavker, Epstein
Credits: 2 AHS
Hours: 2-0-4

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.

AHSE 2199B: Special Topics in Arts, Humanities, Social Sciences

Narrative Psychology

Instructor: Adler
Credits: 4 AHS

Humans are natural storytellers. Indeed, it has been suggested that the natural mode of human thought takes a narrative form. This course will present an examination of the scientific study of humans' approach to meaning-making through the crafting and telling of personal stories. The course will include consideration of the ways in which we create meaning out of our experiences with a special emphasis on identity development, drawing on scientific research from personality, developmental, and clinical psychology. This course is being offered in the Psychology Department at Wellesley; it will meet on Wellesley's campus on Mondays and Thursdays from11:10am-12:20pm. It will be primarily filled with Wellesley students, many of whom are majoring in Psychology. Professor Adler will reserve no more than five slots for Olin students and all will be admitted only by permission of the instructor. If you are interested in taking this course, you should email Jon (jadler@olin.edu) to let him know you are interested and determine if it will be a good fit for you.

AHSE3100: Issues in Leadership and Ethics

Instructors: Miller, Healey
Credits: 2 AHS
Prerequisite: students must be in their final semester of their undergraduate program

This course, taught by President Healey of Babson College and President Miller of Olin College, will explore ethics and morality and the role that they play in business, engineering and across various industries. What role should ethics play in various professions and where is the intersection between leadership and ethics? Students will explore these questions as they relate to current events and issues. This is a seminar-type course and enrollment will be limited to 8 students each from Babson, Olin, and Wellesley Colleges.

ENGR 2599: Special Topics in Computing

Computer Networks

Instructor: Morrow
Credits: 4 ENGR
Prerequisite: Experience with object oriented programming (i.e. java or python) or permission of instructor

Computer Networks is a laboratory class in the design and implementation of … computer networks. This Spring 2014 class is the third iteration of an Olin educational research project sponsored by Juniper Networks. Our goal in the research project is to make computer networks into an Olin lab- and project-

based class. Classes in computer networking are usually lecture classes with exercises. Students will implement computer networks on Raspberry pi computers using the Python programming language. This is a good way to discover that computer networks are more computer than network. The postal service, telegraphs and telephones were all networks. Each had its own physical plants. gMail, Twitter and Skype are versions of the postal service, the telegraph and the telephone. However, they are all just application programs sharing the same physical network of bridges, routers, gateways and services.
The Fall 2013 class created TCPy, a collection of Python modules that simplfy the use of Python to implement Internet protocols. The Spring 2014 class will use TCPy to implement a collection of IETF RFCs. Their team projects will be network related. We expect students to investigate new areas of computer networking. Some possibilities are: using alternate hardware, such as content-addressable memory, to speed up computer networks; bouncing IP packets off the moon; and permitting students to operate timing-exact models of computers that no longer exist.

By the end of the course students will have both a theoretical and a practical understanding of computer networking; of the broad range of potential goals and policies for computer networks; of the policies and implementations of the current Internet; of the areas of strength and weakness in that implementation; and of how to extend a computer network.

ENGR 3199: Special Topics in Engineering
Energy Harvesting
Instructors: Lee, Mur-Miranda
Credits: 4 ENGR
Prerequisites: ENGR 2340 Dynamics or ENGR 2410 Signals and Systems or permission of instructors
This course may be used to satisfy the ME or ECE advanced elective requirement.
After background study into energy transduction and the state-of-the-art of energy harvesting devices, students (individually or in teams) will design, analyze, fabricate, and evaluate the performance of prototype electro-mechanical systems that can convert ambient energy (e.g., vibration, solar, thermal) into electricity for low-powered electronics. Students will be responsible for defining and structuring their own projects. Technical content will be delivered in a 'just-in-time' fashion as needed to support ongoing tasks. Documentation of work done will be developed to a level of a professional conference publication and/or presentation.

ENGR3260: Design for Manufacturing (revised course description)
Instructor: Tong
Credits: 4 ENGR
Prerequisite: UOCD
This course may be used to satisfy the Design Depth requirement OR it may count as an ECE or ME advanced elective.
In the process of creating a new product, device or system, a "proof of principle" prototype is built to demonstrate both that such an object can be built and to test how well it works. At a practical level, in the process of creating this prototype, many sub-optimal design concessions are made in the choices of components, cost and functionality in order to meet prototyping time and budget constraints. Upon the completion and successful testing of a prototype, the next phase in the design stream required to bring the product, device or system to a final user or market, is to re-design the prototype such that it can be manufactured at both an acceptably low price point and at an acceptably high enough level of quality to give enduring value to the final end user.

Design for Manufacturing will build the specialized design skills needed to professionally redesign a prototype in order to meet target price, reliability and functionality goals, whether the final market requires a single unit per year (i.e. space systems, like satellites) or fifty thousand units a week (i.e. consumer products). This course will be heavily team and project based and will involve the re-design for manufacture of several products, devices and services at the discretion of the instructor. The overall course projects will incorporate a significant mechanical, electronic and software components (but perhaps not all three in any one project) and will be drawn widely from the consumer, industrial, and sustainable market

sectors. Course will potentially involve field trips to manufacturing facilities and invited "DFM " lecturers as appropriate to support the particular projects offered in a given semester.

ENGR3299: Special Topics in Design

Design of Energy Systems

Instructor: Mechtenberg
Credits: 4 ENGR
Prerequisite: UOCD
This course may be used to satisfy the Design Depth Requirement
Students engage in energy system design within an optimization design theory. Using Ragone plot analysis, energy and power Pareto curves are developed within student-defined constraints. Designing laboratories and assignments frame the inquiry-based pedagogy via building small-scale electricity-generating prototypes that include the following: vertical and horizontal wind turbines; hydroelectric turbines; solar panels powering varying loads; battery, capacitor and hydrogen fuel cell cars. These are combined into a designed and microcontrollable sustainable city or hybrid vehicle (with Arduino or Raspberry Pi). Together simulation assignments (using Homer Energy API/Python) and laboratory experiments (using Vernier) solidify students' ability to design and control energy systems. Design projects follow two pathways: (pathway 1) medium scale system with low complexity and constrained in developing country context [2-3 devices at 100-500 Watts/device] or (pathway 2) small scale system with high complexity constrained in developed country context [10-30 devices at 1-5 Watts/device].

ENGR3399: Special Topics in Mechanical Engineering

Biomedical FEA and CAD

Instructor: Lee
Credits: 4 ENGR
Prerequisite: ENGR 2320 or ENGR 2330 or an advanced Material Science course or a related project experience.
This course may be used to satisfy the ME advanced elective requirement.
Computer aided design, including rapid prototyping, and finite element analysis are regularly used in engineering, especially in product design and development. In this class, you'll apply these technologies to biomedical applications and human anatomy in order to create modeling and analysis tools to advance clinical practice and treatment. We'll start by covering the fundamentals of FEA focusing on proper usage rather than mathematical theory. You'll then define your own projects in which you can apply these tools. Projects can come from extensions of ongoing work, e.g., 3D model generation from 2D MR images, including programming automation into the model generation process; measuring material properties of tissue to generate FE constitutive models; creating high-imaging-contrast materials for 3D printing. New topics can be developed with collaborators at Boston University School of Medicine or Tufts University School of Dental Medicine.

ENGR3499: Special Topics in Electrical and Computer Engineering

EE Prototyping

Instructors: Lundberg, Minch
Credits: 4 ENGR
Prerequisite: ENGR 2210
Through a series of projects, we will learn to design, build, and debug electronic prototype systems. We will cover multiple aspects of the prototyping process, including circuit and system design, soldering, deadbugging, troubleshooting, component selection, schematic capture, printed-circuit board (PCB) layout, PCB fabrication, PCB assembly, and thermal analysis. We will discuss the tradeoffs among "faster, better, cheaper", and explore examples in the realms of analog, digital, RF, and power. In addition to hands-on reverse engineering and fabrication experience, students will learn technical communication through design documentation.
This course is approved for use as an advanced ECE elective.

ENGR 3499A: Special Topics in Electrical and Computer Engineering

Introduction to Information Theory and its Applications

Instructor: Govindasamy

Credits: 4

How much information do you gain when the outcome of a fair flip of a fair coin is revealed to you? How much information can you gain about a random quantity by observing a noisy version of it? In this course, you will learn how to mathematically model and characterize information based on probabilistic descriptions of systems. The topics to be covered include information entropy, mutual information, compression and channel capacity. In the latter part of the class, we will discuss applications of these concepts to areas such as digital communications, data compression, genetics and portfolio management.

ENGR 3599: Special Topics in Computing

Programming Language Design and Implementation

Instructor: Pucella

Credits: 4 ENGR

Prerequisite: Software Design

Knowing how to design and implement programming languages not only fosters a deeper understanding of the programming process itself, but it adds a new and powerful tool to the programmer's toolbox: in some application domains, programming tasks amount to developing small languages that solve a specific class of problems, such as creating animations, optimizing complex matrix computations, or querying databases.

The goal of this class is to introduce students to the design and implementation of programming languages, either via interpreters or via compilers. Design principles range over the different programming models available, including imperative, functional, dataflow, object-oriented, logical. Implementation techniques include abstract syntax representations, parsing, control structures, data abstraction mechanisms, types, environments and closures, optimization, code generation. The approach is applied, and class work revolves around the implementation of interpreters and compilers for a variety of small programming languages.

MTH2188: Special Topics in Mathematics

Linearity 1

Instructors: Byrne, Geddes, Hoffman

Credits: 4 MTH

Note: This course is required for first year students, and is open to first year students only, except by permission of instructor. **Designated alternative for required mathematics**

It will include treatment of discrete-time dynamical systems in the context of age-structured population models as well as continuous-time dynamical systems in the context of mechanical, electrical and chemical oscillators. Students must have background equivalent to ModSim2013 and ModCon2013 to take this course. This course is a designated alternative to Linear Algebra and Differential Equations. Linearity 1 will be an active learning experience, and students should anticipate significant pre-class preparation in order to participate actively during class meetings.

MTH 2199: Special Topics in Mathematics

Modeling with Probabilities

Instructor: Patel

Credits: 4 MTH

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

How can we find structure in seemingly random processes? Can we model chance events? In this course, we'll see how probabilistic reasoning offers an approach to these questions. First, we'll explore the fundamentals of probability theory, looking at toy examples to motivate our discussion. Then we'll move on to more complex real-world applications. The course will end with student projects. Depending on time and student interest, topics may include martingales and market behavior, queuing theory, branching processes in biology, or information theory.

MTH 2199A: Special Topics in Mathematics

A Mathematical Introduction to Cryptography

Instructor: Patel

Credits: 2 MTH

This course is offered in Session I (the first half of the spring semester).

Public key encryption systems are the cornerstone of secure electronic communication. At their heart is the notion of an asymmetric key: roughly speaking, mathematical operations that are easy to carry out, but hard to "undo". In this course, we'll develop some of the beautiful mathematics -- from areas such as number theory and algebra -- that underlie these methods, and see how they lead to the Diffie-Hellman key exchange, the RSA cryptosystem, and other such systems. The only mathematical prerequisite is linear algebra, but some experience with abstract mathematical reasoning, such as in a course on Discrete Mathematics, may be useful.

MTH 2199B: Special Topics in Mathematics

The Logic of Logicomix

Credits: 2 MTH

Instructor: Patel

This course is offered in Session II (the second half of the spring semester).

Logicomix is a graphic novel about Bertrand Russell and the search for a foundation for mathematics. Set in the first half of the twentieth century, it describes a time of intellectual ferment, when ideas due to Cantor, Godel and others were upending received notions about foundations. Those ideas persist today, forming the basis of our current understanding of provability and computation. Together, we'll read Logicomix, using it as a springboard for mathematico-logical explorations of Godel's incompleteness results, Turing on undecidability, and the like. Along the way, we'll see how history and culture shape the development of mathematical ideas, as well as the influence of individual personalities. No prerequisites, but an enthusiasm for mathematics, biography, history, and comic-book art will be a plus! (Here is the Logicomix website: http://www.logicomix.com/en/. For a review of Logicomix in the December 2010 *AMS Notices*, see: http://www.ams.org/notices/201011/rtx101101427p.pdf)

MTH2199C/ENGR2199C: Special Topics in Mathematics and Computing

Data Science

Instructor: Downey

Credits: 2 ENGR/2 MTH

Prerequisite: Software Design

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

Data Science lies at the intersection of statistics, machine learning, database design, and data visualization. The goal of this class is to prepare students to work on data science projects that involve collecting data or finding data sources, exploratory data analysis and interactive visualization, statistical analysis and machine learning, predictive analytics, model selection, and validation.

Class work includes a substantial project on a real world application of the students' choice; projects might involve work with a social change organization like those on DataKind, or participating in a competition like those on Kaggle.

SCI 1130-A1: Mechanics: Theoretical Approach

Credits: 4 SCI

Instructor: Zastavker

This class will venture to understand the nature of motion from an analytical perspective allowing you to reinforce your previous knowledge from ModSim and previously taken Mechanics courses as well as further developing your analysis competency. This class will use a mixture of more traditional pedagogy, i.e., interactive lectures and "problem set"-like homework assignments, and non-traditional physics classrooms pedagogy, i.e., discussions and group work. In addition, several other components typical of Olin culture will be also introduced into the course; specifically, student autonomy will be

explored through a choice of final project, more traditional final exam, presentation, etc. as a way of both learning and formative assessment. A large team-work component will be also introduced through both the homework assignments and project, should students choose the latter. For students who choose their final deliverable to be in the form of a project, intermediate level of faculty-supported scaffolding will be provided as it will be expected that the students choosing this route are at least somewhat familiar with the self-directed environment and have intermediate level of sophistication as autonomous learners. Additionally, this course will support and allow for further development and honing of students' analytical writing skills.

SCI 1130-C1: Mechanics: ModSim Approach
Credits: 4 SCI
Instructor: Somerville
This course may be used to satisfy the Physics Foundation Requirement.
This class is intended to help improve command of mechanics in the realm of "big" and "slow" stuff (i..e, the world of things that are larger than 10^{-10} meters and slower than 10^{7} meters per second, which covers pretty much everything we deal with on a daily basis). We'll also be reinforcing some of the skills introduced in ModSim (abstracting models, implementing, validating, and using the models to do work). On the communication front, this flavor will focus on technical writing skills — so expect to be doing some writing! The mixture of work will include some relatively focused problem solving, some more ambiguous open-ended diagnostics, some writing practice, some reflecting and mind mapping, and a major project at the end of the course. Because students generally come in with a wide range of backgrounds, and a wide range of interests, this class will be designed to allow students customize their learning while, at the same time, making sure that everyone gets the core knowledge that will be needed in future courses.

SCI 1199 OR ENGR 1199: Special Topics in Physics Foundation
Physics of Conservation Laws: Energy Focused
Instructor: Mechtenberg
Credits: 4 SCI or 4 ENGR
This course may be used to satisfy a Physics Foundation (enroll in SCI1199) or Engineering Distribution Requirement (enroll in ENGR1199)
Noether's Theorem states that the symmetry in our space-time universe fundamentally defines our conservation laws: momentum and energy. This physics foundation/engineering elective course re-evaluates what a student knows about physical laws (traditional mechanics, e&m, and thermo) in terms of these conservation laws and their directional derivatives (i.e. forces derived from energy). Multivariable and vector calculus is reviewed and systematically implemented. This course integrates a laboratory to project-based pedagogy with an introduction to experimental design where students have a specific design choice: pathway from scientific theory to practice (physics foundation) versus engineering practice to theory (engineering). We will be using Eric Mazur's (well-known physics educator at Harvard University) new physics foundation textbook on conservation laws with Mechtenberg's energy-based experimental design approach.

Other Courses of Interest

The Wellesley Russian Department invites Olin students to the following courses, taught in Russian:
RUSS 333: 19th Century Russian Narrative Poetry
RUSS 376: Dostoevsky's Short Stories
RUSS 302: Children and Laughter in Russia

For descriptions, click on "More" in the last column of the Wellesley Course Browser or visit the Russian Department webpage, http://www.wellesley.edu/Russian

SEMINAR COURSES – NEW to You

This spring we are pleased to pilot an idea conceived of by students in the Curriculum Innovation Co-Curricular. We will 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. Each 1-credit seminar course is offered during the evening and this semester will be taught by alumni instructors who have experience teaching at Olin (Eric vanWyk and Gui Calvalcanti). 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 301: Seminar: Fundamentals of Mechanical Design

Instructors: Cavalcanti
Credits: 1
Prerequisite: none
Grading: Pass/No Credit

Have you ever wanted to make a thing, but had absolutely no idea how to get started designing it? Have you ever wondered why McMaster-Carr has 8,215 parts called "Machine Screws", gotten upset about why there could possibly be so many, and despaired at the thought of ever finding the appropriate fastener for your project? Do you want to be able to design simple, effective structures on your own without needing to spend multiple semesters in the Mechanical Engineering curriculum? This course is for you.

In Fundamentals of Mechanical Design, we'll go over the basics of structural design, material selection, parts selection, and component sizing, with the practical goal of enabling students to design simple, robust assemblies on their own by the end of class. The class will include optional design challenges throughout the semester, designed to demonstrate basic concepts of mechanical engineering like structural design, power transmission, and mechanism design.

SEM 302: Seminar: Introduction to Pneumatic and Hydraulic Systems

Instructors: Cavalcanti
Credits: 1
Prerequisite: none
Grading: Pass/No Credit

Have you ever wanted to design a system that can lift 10 pounds? How about 100 pounds? How about 100,000 pounds? Do you have any applications that call for controlled linear motion, and are you at a loss for how to make a motor do such a thing effectively? Do you want to learn about how to move stuff around without using electric motors? Take Introduction to Pneumatic and Hydraulic Systems.

In this class, we'll learn the basics of system design, component sizing, part sourcing, and assembly of pneumatic (air powered) and hydraulic (liquid powered) systems. These types of systems are relatively easy to design if you know where to look for parts, are easy to control with binary logic, and are immensely useful in robotics, factory automation, and other motion control applications. The practical goal of the class will be to give students the ability to size, design, order, and (safely) assemble a pneumatic and hydraulic system from scratch.

SEM 401: Seminar: Introductory Power Supplies

Instructors: VanWyk
Credits: 1
Prerequisite: completion of first year curriculum requirements
Grading: Pass/No Credit

An introduction to power supplies with an emphasis on design for mass production. Power supplies covered include linear, buck, boost, SEPIC, and switched capacitor. Emphasis on using actual parts with actual part numbers, and the imperfections that entails.

Area	Course #	Sec #	Course Title	Instructor	Time	Location	Credits	Enroll Limits	Notes
AHS	AHSE 0112	01	The Olin Conductorless Orchestra	Dabby	R 6:45-9pm	AC304, 305, 318	1	30	
AHS	AHSE 2199	01	Special Topics in Arts, Humanities, Social Sciences: *Eco-Docs: Environmental Activism in Documentary Cinema*	Vitols	TF 9-10:40am	AC128	4	24	
AHS	AHSE 2199A	01	Special Topics in Arts, Humanities, Social Sciences: *Critical Reflective Writing*	Zastavker Epstein	T 10:50-12:30pm	CC214	2	24	FULL Semester Offering
AHS	AHSE 2199B	01	Special Topics in Arts, Humanities, Social Sciences: *Narrative Psychology*	Adler	MR 11:10-12:20pm	Wellesley College	4	5 Olin seats	At Wellesley. Enroll with permission of instructor.
AHS	AHSE 3100	01	Issues in Leadership and Ethics	Miller, R.	R 6:00-8pm	AC326	2	8 Olin seats	
AHS	AHSE 3190	01	Arts, Humanities, Social Sciences Capstone Preparatory Workshop	Epstein	n/a	n/a	1	20	Required if you plan on completing an AHS Capstone Project (AHSE4190)
AHS	AHSE 4190	01	Arts, Humanities, Social Sciences Capstone	Epstein	M 9:10-10:40am	CC214	4	30	
AHS	AHSE 4190	02	Arts, Humanities, Social Sciences Capstone	Epstein	M 10:50-12:20pm	CC214	4	30	
DSN	ENGR 2250	01	User Oriented Collaborative Design	Linder; Adler; Stein; Millner; Ben-Ur; Bator	MR 3:20-6pm	MH120; AC204	4	30	
DSN	ENGR 2250	02	User Oriented Collaborative Design		MR 3:20-6pm	MH120; AC206	4	30	
DSN	ENGR 2250	03	User Oriented Collaborative Design		MR 3:20-6pm	MH120; AC209	4	30	
DSN	ENGR 3260	01	Design for Manufacturing	Tong	TF 9-10:40am	AC309	4	25	Design Depth Option; WAITLIST Available
DSN	ENGR 3299	01	Special Topics in Design: *Design of Energy Systems*	Mechtenberg	TF 1:30-3:10pm	AC213	4	24	Design Depth Option
DSN / ENGR	ENGR 3290	01	Affordable Design and Entrepreneurship (as a Design Depth)	Linder; Mechtenberg	T 3:30-6:30pm	AC213	4	15	Design Depth Option; WAITLIST Available
DSN / ENGR	ENGR 4290	01	Affordable Design and Entrepreneurship (as a Capstone)	Linder; Mechtenberg	T 3:30-6:30pm	AC213	4	12	WAITLIST Available
E!	AHSE 1500	01	The Entrepreneurial Initiative	Neeley	MR 10:50-12:30pm	AC328	4	30	
E!	AHSE 4590	01	Entrepreneurship Capstone	Brand	MR 9-10:40am	CC210	4	15	
E:BE	ENGR 3620	01	Cellular Bioengineering	Sarang-Sieminski	MR 10:50-12:30pm	AC417	4	18	
E:C	ENGR 2510	01	Software Design	Ruvolo	MR 3:20-5pm	AC326	4	25	Small WAITLIST Available (5)
E:C	ENGR 2510	02	Software Design	Ruvolo	MR 1:30-3:10pm	AC326	4	25	Small WAITLIST Available (5)
E:C	ENGR 2599	01	Special Topics in Computing: *Computer Networks*	Morrow	MR 3:20-5pm	AC328	4	25	WAITLIST Available

Area	Course #	Sec #	Course Title	Instructor	Time	Location	Credits	Enroll Limits	Notes
E:C	ENGR 3525	01	Software Systems	Downey	MR 10:50-12:30pm	AC326	4	30	WAITLIST Available
E:C	ENGR 3599	01	Special Topics in Computing: *Programming Language Design and Implementation*	Pucella	TF 10:50-12:30pm	AC128	4	25	WAITLIST Available
E:MS	ENGR 3810	01	Structural Biomaterials	Chachra	MR 1:30-3:10pm	AC328	4	20	
E:MS	ENGR 3820	01	Failure Analysis and Prevention	Stolk	TF 1:30-3:10pm	AC413	4	20	EXPERIMENTAL GRADING; WAITLIST Available
ECE	ENGR 2410	01	Signals and Systems	Mur-Miranda	MR 1:30-3:10pm	AC126	4	32	WAITLIST Available
ECE	ENGR 2410	02	Signals and Systems	Mur-Miranda	MR 10:50-12:30pm	AC126	4	32	WAITLIST Available
ECE	ENGR 2420	01	Introduction to Microelectronic Circuits with LAB	Minch	TRF 9-10:40am	AC304	4	30	WAITLIST Available
ECE	ENGR 3415	01	Digital Signal Processing	Dabby	TF 10:50-12:30pm	AC304	4	25	WAITLIST Available
ECE	ENGR 3499	01	Special Topics in Electrical and Computer Engineering: *EE Prototyping*	Lundberg Minch	MR 3:20-6pm	AC304	4	25	
ECE	ENGR 3499A	01	Special Topics in ECE: *Introduction to Information Theory and its Applications*	Govindasamy	TF 1:30-3:10pm	AC304	4	25	EXPERIMENTAL GRADING
ENGR	ENGR 1121	01	Real World Measurements	Minch; VanWyk	M 9-10:40am; M 10:50-12:30pm	MH120; AC428	3	23	
ENGR	ENGR 1121	02	Real World Measurements	Govindasamy; Manno	M 9-10:40am; T 10:50-12:30pm	MH120; AC428	3	23	
ENGR	ENGR 1121	03	Real World Measurements	Minch; VanWyk	M 9-10:40am; R 10:50-12:30pm	MH120; AC428	3	23	
ENGR	ENGR 1121	04	Real World Measurements	Govindasamy; Manno	M 9-10:40am; F 10:50-12:30pm	MH120; AC428	3	23	
ENGR	ENGR1199	01	Special Topics in Engineering: *Physics of Conservation Laws: Energy Focused*	Mechtenberg	TF 9-10:40am	AC213	4	24	Small WAITLIST Available (6); Crosslisted with SCI1199. This course number will receive ENGR credit. If you want SCI credit, enroll in SCI1199. You cannot change your designation after the add deadline of Feb 3
ENGR	ENGR 1330	01	Fundamentals of Machine Shop Operations	Andruskiewicz	W 12:30-4:30pm	AC104	4	6	WAITLIST Available
ENGR	ENGR 2210	01	Principles of Engineering	Cavalcanti	MR 1:30-3:10pm	AC306	4	28	
ENGR	ENGR 3199	01	Special Topics in Engineering: *Energy Harvesting*	Lee Mur-Miranda	TF 10:50-12:30pm	AC309	4	15	Small WAITLIST Available (5)
ENGR	ENGR 4190	01-14	Senior Capstone Program in Engineering (SCOPE)	Sarang-Sieminski, et al	W 9-10:40am; 12:30-6pm	team locations	4	tbd	Enroll in same section as you are enrolled in for Fall 2013
INTEGRATED	AHSE 2141 / ENGR 2141	01	Engineering for Humanity	Lynch Ben Ur	M 10:50-1:00pm & W 2-5:00pm	AC109	4	18	WAITLIST Available
INTEGRATED	MTH 2199C / ENGR 2199C	01	Special Topics in Mathematics & Engineering: *Data Science*	Downey	TF 1:30-3:10pm	AC417	4	25	**Satisfies Probability and Statistics Requirement; See notes in Registration Booklet about who is eligible to enroll in this Prob Stat option; WAITLIST Available**

Area	Course #	Sec #	Course Title	Instructor	Time	Location	Credits	Enroll Limits	Notes
ME	ENGR 2320	01	Mechanics of Solids and Structures	Barrett	TF 1:30-3:10pm	AC128	4	28	
ME	ENGR 2330	01	Introduction to Mechanical Prototyping	Hoover	T 3:20-6pm, R 9-10:40am	AC109	4	25	WAITLIST Available
ME	ENGR 2350	01	Thermodynamics	Townsend	MR 1:30-3:10pm	AC318	4	30	Small WAITLIST Available (5)
ME	ENGR 3370	01	Controls	Santarelli	MR 6:30-8:10pm	AC328	4	25	
ME	ENGR 3392	01	Robotics II	Bennett	TF 1:30-3:10pm	AC309	4	20	WAITLIST Available
ME	ENGR 3399	01	Special Topics in Mechanical Engineering: *Biomedical CAD and FEA*	Lee	MR 3:20-5pm	AC109	4	10	Small WAITLIST Available (5)
MTH	MTH 2188	01	Special Topics in Mathematics: Linearity 1	Byrne, Geddes, Hoffman	TF 1:30-3:10pm	AC318, 326, 328	4	90	
MTH	MTH 2199	01	Special Topics in Mathematics: *Modeling with Probabilities*	Patel	MR 9-10:40am	AC128	4	40	**Satisfies Probability and Statistics Requirement; See notes in Registration Booklet about who is eligible to enroll in this Prob Stat option**
MTH	MTH 2199A	01	Special Topics in Mathematics: A Mathematical Introduction to Cryptography	Patel	MR 10:50-12:30pm	AC128	2	40	Session I
MTH	MTH 2199B	01	Special Topics in Mathematics: The Logic of Logicomix	Patel	MR 10:50-12:30pm	AC128	2	40	Session II
MTH	MTH 3120	01	Partial Differential Equations	Byrne	TF 10:50-12:30pm	AC326	4	26	WAITLIST Available
MTH	MTH 3170	01	Nonlinear Dynamics and Chaos	Geddes	TF 10:50-12:30pm	AC318	4	16	EXPERIMENTAL GRADING
SCI	SCI 1130	A1	Mechanics: Theoretical / Experimental Approach	Zastavker	MR 1:30-3:10pm	AC128	4	32	
SCI	SCI 1130	C1	Mechanics: Modeling and Simulation Approach	Somerville	TF 9-10:40am	AC328	4	30	
SCI	SCI 1130	C2	Mechanics: Modeling and Simulation Approach	Somerville	TF 10:50-12:30pm	AC328	4	30	
SCI	SCI 1199	01	Special Topics in Physics Foundation: *Physics of Conservation Laws: Energy Focused*	Mechtenberg	TF 9-10:40am	AC213	4	24	Small WAITLIST Available (6); Crosslisted with ENGR1199. This course number will receive SCI credit. If you want ENGR credit, enroll in ENGR1199. You cannot change your designation after the add deadline of Feb 3
SCI	SCI 1210	01	Principles of Modern Biology (with Lab): *Designing Better Drugs to Fight Disease*	Pratt	TF 10:50-12:30pm; T 3:20-6pm	AC417; AC406	4	25	WAITLIST Available
SCI	SCI 1210	02	Principles of Modern Biology (with Lab): *Human Genetics and Genomics*	Donis-Keller	MR 1:30-3:10pm; W 12:30-3:10pm	AC417; AC406	4	30	WAITLIST Available
SCI	SCI 1310	01	Introduction to Chemistry (with Lab)	Morse	MR 1:30-3:10pm; W 12:30-3:10pm	AC313; AC409	4	24	
SCI	SCI 1410	01	Materials Science and Solid State Chemistry (with Lab)	Christianson	TF 8:30-10:40am	AC413	4	21	
SCI	SCI 1410	02	Materials Science and Solid State Chemistry (with Lab)	Christianson	T 3:20-5:30pm; W 1-3:10pm	AC413	4	21	
SCI	SCI 2130	01	Quantum Physics	Holt	TF 9-10:40am	AC113	4	25	Foundation option for students with strong physics background

Area	Course #	Sec #	Course Title	Instructor	Time	Location	Credits	Enroll Limits	Notes
SCI	SCI 2140	01	Relativity	Holt	TF 10:50-12:30pm	AC113	2	25	Session I
SCI	SCI 2214	01	Microbial Diversity	Huang	W 1:00-4pm	AC417; AC404	4	15	
SCI	SCI 2320	01	Organic Chemistry w/ Lab	Morse	MR 9-10:40am; Tues 3:20-6pm	AC318; AC409	4	30	
SCI	SCI 3320	01	Organic Chemistry II (with lab)	Morse	see Professor Morse		4	8	Will run as an independent study; See Professor Morse
SUST	SUST 3301	01	Sustainability Certificate Synthesis Course	Huang	M 3:30-6:30pm	AC213	4	15	
SEMINAR	SEM 301	S1	Seminar: Fundamentals of Mechanical Design	Cavalcanti	M 6-7:40pm	AC306	1	20	WAITLIST Available
SEMINAR	SEM 302	S1	Seminar: Introduction to Pneumatic and Hydraulic Systems	Cavalcanti	R 6-7:40pm	AC306	1	20	WAITLIST Available
SEMINAR	SEM 401	S1	Seminar: Introductory Power Supplies	VanWyk	M 6-7:40pm	AC318	1	18	Pre-requisite: Completion of First Year Requirements
ADMN	AWAY 1000	01	The Study Away Program				12	30	Enrollment in this course (fulltime, 12 credits) is required for those planning to study away in Spring 2014
ADMN	OIP 1000	01	The Olin Internship Practicum				1	n/a	see PGP for details

Color Key- Offering Blocks: ECE | ME | ENGR / DSN Courses | OIE or Genl Req

Monday

9:00 AM

- MTH 2199 Spec Top: Modeling with Probabilities — AC128
- SCI 2320 Organic Chemistry — AC318
- ENGR 1121 ALL Secs Real World Measurements — MH 120
- AHSE 4590 Entrepreneurship Capstone — CC210
- AHSE 4190 Sec 01 AHS Capstone 9:10-10:40a — CC214

10:40 AM

10:50 AM

- ENGR 3525 Software Systems — AC326
- AHSE 1500 Sec 01 The Entrepreneurial Intitiative — AC328
- MTH 2199A Spec Top Math: "Cryptography" SESS I — AC128
- MTH 2199B Spec Top Math: "Logicomix" SESS II — AC128
- ENGR 1121 sec 01 Real World Measurements — AC428
- ENGR 3620 Cellular Bioengineering — AC417
- ENGR 2410-02 Signals and Systems — AC126
- AHSE 2199B:Spec Top AHS:Narrative Psych 11:10-12:20pm — CC214
- AHSE 4190 Sec 02 AHS Capstone 10:50-12:20 pm — CC214
- AHSE & ENGR 2141 Engineering for Humanity M 10:50-1p and W 2-5pm — AC109

12:30 PM

1:30 PM

- ENGR 2210 Principles of Engineering — AC306
- SCI 1130- A1 Mechanics: Theoretical Approach — AC128
- ENGR 2350 Thermodynamics — AC318
- SCI 1210 sec 02 Prin of Modern Biology: Human Genetics... — AC417
- ENGR 2410-01 Signals and Systems — AC126
- ENGR 3810 Structural Biomaterials — AC328
- SCI 1310 Chemistry — AC313
- ENGR 2510, sec 02 Software Design — AC326

3:10 PM

3:20 PM

- ENGR 2250 Sec 01, 02, 03 User-Oriented Collaborative Design — AC 204, 206, 209 MH120
- SUST 3301 3 College Sustainability Synthesis M 3:30-6:30p Location: all 3 campuses when at Olin — AC213
- ENGR 3499 Spec Top in ECE: EE Prototyping — AC304
- ENGR 2599 Spec Top in Computing: Computer Networks — AC328
- ENGR 2510, sec 01 Software Design — AC326
- ENGR 3399 Spec Top Mech Engr: Biomedical CAD and FEA — AC109

5:00 PM

6:00 PM

- ENGR 3370 Controls 6:30-8:10p — AC328
- SEM 301 Fund of Mech Design Seminar M 6-7:40p — AC306
- SEM 401 Introductory Power Supplies Seminar M 6-7:40p — AC318

9:00:00 PM

Tuesday

- ENGR 2420 Intro MicoElectronic Circuits (Tues Thurs & Fri) — AC304
- SCI 2130 Quantum Physics — AC113
- AHSE 2199: Spec Top AHS: Eco Docs — AC128
- ENGR 3260-01 Design for Manufacturing — AC309
- SCI 1199 Physics Fnd Topic: ***Physics of Conservation Laws: Energy*** — AC213
- ENGR 1199 ***Spec Top Engr: Physics of Conservation Laws: Energy*** — AC213
- SCI 1130-C1 Mechanics: Mod Sim Approach — AC328
- SCI 1410 sec 01 Materials Science and Solid State Chemistry TF 8:30-10:40a — AC413
- ENGR 1121 sec 02 Real World Measurements — AC428
- SCI 1210 sec 01 Prin of Modern Biology: .. Drugs & Disease.. — AC417
- MTH 3120 Partial Differential Equations — AC326
- MTH 3170 NonLinear Dynamics and Chaos — AC318
- SCI 2140 Relativity SESS I — AC113
- ENGR 3415 Digital Signals Processing — AC304
- ENGR 3199 Spec Top in Engr: Energy Harvesting — AC309
- SCI 1130-C2 Mechanics: Mod Sim Approach — AC328
- AHSE 2199A: Spec Top AHS: Critical Reflective Writing 2cr — CC214
- ENGR 3599 Sp Top in Computing: Prog Lang Design Implement — AC128
- ENGR 3499A Spec Topics ECE: Intro Info Theory and Appl — AC304
- MTH 2188 Linearity — MH120 AC 318, 326, 328
- ENGR 2320 Mechanics Solids Structures — AC128
- MTH 2199C & ENGR 2199C: Topics: Data Science — AC417
- ENGR 3392 Robotics 2 — AC309
- ENGR 3820 Failure Analysis and Prevention — AC413
- ENGR 3299 Special Topics in Design: Design of Energy Systems — AC213
- SCI 1210 sec 01 Prin of Modern Biology.. :"Drugs & Disease" LAB — AC406
- SCI 2320 Orgo I LAB — AC409
- SCI 1410 sec 02 Materials Science and Solid State Chemistry: 3:20-5:30p and W 1-3:10pm — AC413
- ENGR 2330 Mechanical Prototyping — AC109
- ENGR 3290 and 4290 Affordable Design & E! Tues 3:30-6:30p — AC213

Wednesday

- ENGR 4190 SCOPE
- Open Meeting Time
- SCI 2214 Microbial Diversity Wed 1-4:00p — AC417 AC404
- AHSE & ENGR 2141 Engineering for Humanity W 2-5:00p and M 10:50-1pm — AC109
- SCI 1410 sec 02 Materials Science and Solid State Chemistry: 1-3:10pm and Tues 3:20-5:30p — AC413
- SCI 1310 Intro Chem LAB in AC409
- SCI 1210 sec 02 Prin of Modern Biology: "Human Genetics .." LAB — AC406
- ENGR 1330 Fnd Machine Shop Oper 12:30-4:30p — AC104
- ENGR 4190

AHSE | SCI | Math | INTEGRATED OFFERING (colored via discipline blending) | Color Key-Offering Blocks

Thursday

- ENGR 2420 Intro MicoElectronic Circuits (Tues Thurs & Fri) AC304
- MTH 2199 Spec Top: Modeling with Probabilities AC128
- SCI 2320 Organic Chemistry AC318
- ENGR 2330 Mechanical Prototyping AC109
- AHSE 4590 Entrepreneurship Capstone CC210
- ENGR 3525 Software Systems AC326
- MTH 2199A Spec Top Math: "Cryptography" SESS I AC128
- MTH 2199B Spec Top Math: "Logicomix" SESS II AC128
- ENGR 3620 Cellular Bioengineering AC417
- ENGR 1121 sec 03 Real World Measurements AC428
- ENGR 2410-02 Signals and Systems AC126
- AHSE 2199B:Spec Top AHS:Narrative Psych 11:10-12:20pm
- AHSE 1500 Sec 01 The Entrepreneurial Intitiative AC328
- ENGR 2210 Principles of Engineering AC306
- SCI 1130- A1 Mechanics: Theoretical Approach AC128
- ENGR 2350 Thermodynamics AC318
- SCI 1210 sec 02 Prin of Modern Biology: Human Genetics ... AC417
- ENGR 2410-01 Signals and Systems AC126
- ENGR 3810 Structural Biomaterials AC328
- SCI 1310 Chemistry AC313
- ENGR 2510, sec 02 Software Design AC326
- ENGR 2250 Sec 01, 02, 03 User-Oriented Collaborative Design AC 204, 206, 209 MH120
- ENGR 3499 Spec Top in ECE: EE Prototyping AC304
- ENGR 2599 Spec Top Computing: Computer Networks AC328
- ENGR 2510, sec 01 Software Design AC326
- ENGR 3399 Spec Top Mech Engr: Biomedical CAD and FEA AC109
- AHSE 3100 Issues in Leadership and Ethics 6-8:00p @ Olin Campus AC326
- AHSE 0112 Olin Conductorless Orchestra 6:45-9pm 305 + 304 + 318
- ENGR 3370 Controls 6:30-8:10p AC328
- SEM 302 Intro to Pneumatic and Hydrollic Sys Seminar R 6-7:40p AC306

Friday

- ENGR 2420 Intro MicoElectronic Circuits (Tues Thurs & Fri) AC304
- SCI 2130 Quantum Physics AC113
- AHSE 2199: Spec Top AHS: Eco Docs AC128
- ENGR 3260-01 Design for Manufacturing AC309
- SCI 1199 Physics Fnd Topic: ***Physics of Conservation Laws: Energy*** AC213
- ENGR 1199 ***Spec Top Engr: Physics of Conservation Laws: Energy*** AC213
- SCI 1130-C1 Mechanics: Mod Sim Apporach AC328
- SCI 1410 sec 01 Materials Science and Solid State Chemistry: TF 8:30-10:40a AC413
- ENGR 1121 sec 04 Real World Measurements AC428
- SCI 1210 sec 01 Prin of Modern Biology: ..Drugs & Disease .." AC417
- MTH 3120 Partial Differential Equations AC326
- MTH 3170 NonLinear Dynamics and Chaos AC318
- SCI 2140 Relativity SESS I AC113
- ENGR 3415 Digital Signals Processing AC304
- SCI 1130-C2 Mechanics: Mod Sim Apporach AC328
- ENGR 3199 Spec Top in Engr: Energy Harvesting AC309
- ENGR 3599 Sp Top in Computing: Prog Lang Design Implement AC128
- ENGR 3499A Spec Topics ECE: Intro Info Theory and Appl AC304
- MTH 2188 all sect Linearity AC 318, 326, 328
- ENGR 2320 Mechanics Solids Structures AC128
- MTH 2199C & ENGR 2199C: Topics: Data Science AC417
- ENGR 3392 Robotics 2 AC309
- ENGR 3820 Failure Analysis and Prevention AC413
- ENGR 3299 Special Topics in Design: Design of Energy Systems AC213

Community Service

9:00 AM
10:40 AM
10:50 AM
12:30 PM
1:30 PM
3:10 PM
3:20 PM
5:00 PM
6:00 PM
9:00:00 PM