

# Olin College



## Registration Booklet Volume 3, Number 1.2

Fall 2004

**Registration Booklet  
Fall 2004**

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## Frequently Asked Questions and Instructions

### **What do I register for?**

Students are allowed to register for a maximum of 20 credits, with the exception of first semester freshmen who are allowed a maximum of 16 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 subject requirements (all students must have a minimum of 12 degree credits). Examples are standard courses, cross-registered courses, transfer credits, independent study and research for degree credit.

**Non-degree** activities are defined as **not** counting toward degree and subject requirements. Examples are passionate pursuits, independent study and research for non-degree credit. Non-degree activities are not graded and appear on your transcript if you have met all of your objectives for the activity.

Note: Non-degree activities must be declared at the time of application. They cannot be changed to a degree activity after that time. Likewise, courses designated as degree credit cannot be changed to non-degree credit after the end of the add/drop period.

### **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 once you have met and your learning plan is up-to-date. 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 Standing Committee on Study Away.

### **I am interested in doing Research and/or Independent Study next semester. How do I register?**

Students interested in doing research and/or independent study can do so for degree or non-degree credit by applying to the Independent Study and Research Board (ISURB). Look for ISURB details in upcoming emails and on Blackboard.

Students register for the ISURB activity after they have been granted approval. All approved applications from ISURB must be filed with the StAR Center for registration no later than September 16, 2004.

### **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.

### **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 section information.

**Babson College:** You can find their offerings at <http://newton.babson.edu/registrar/>. You do not need a log-in to access the information.

Choose "course listing" from the menu options on the left menu bar and then follow the prompts from that point. It is best to sort by course title and course number. If you find a course you are interested in, complete a cross-registration form (found at <http://star.olin.edu>) and send it to [star.center@olin.edu](mailto:star.center@olin.edu). The StAR Center will work with Babson to facilitate the registration.

**Brandeis University:** You can find Brandeis offerings at <http://www.brandeis.edu/registrar/reg-sched/sch.html>.

If you find a course you are interested in, complete a cross-registration form (found at <http://star.olin.edu>) and send it to [star.center@olin.edu](mailto:star.center@olin.edu). The StAR Center will work with Brandeis to facilitate the registration.

**Wellesley College:** You can find their offerings at <http://www.wellesley.edu/Registrar/menu.html>

Students interested in pursuing a course at Wellesley should complete a registration form (found at <http://star.olin.edu>) and send it to [star.center@olin.edu](mailto:star.center@olin.edu). The StAR Center will facilitate the registration for Olin students.

Requests for Cross Registration will be accepted up through May 7, 2004 and again during the fall add/drop period

### **How do I Cross-Register to Olin College?**

Olin welcomes students from Babson, Brandeis and Wellesley to register for Olin courses. All courses except for the first year Integrated Course Blocks (ICBs) 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 addressed during the add/drop period in September. If a student has 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>.

### **When Do I Register?**

Class of 2008: Registration will take place during Orientation.

Class of 2007: Registration will take place during the evening of May 5<sup>th</sup> and possibly May 6<sup>th</sup>. Information regarding the groups will be sent via email no later than April 30<sup>th</sup>.

Class of 2006: Registration will take place during the evening of May 4<sup>th</sup>. Information regarding the groups will be sent via email no later than April 30<sup>th</sup>.

(Registration will be open to cleared and eligible students only. A cleared student is one that 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/Drop Period?**

The add/drop period is the first 10 class days of the semester. Add/Drop will begin on September 2, 2004 and end on September 16, 2004. Add/Drop requests can be processed in person at the StAR Center from September 2 – 7<sup>th</sup> and on-line beginning September 8, 2004. Add/Drop forms can be found at <http://star.olin.edu>.

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 September 16, 2004. This will be done at the StAR Center once 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.

### **How do I Register?**

1. Log into the Web Registration system at <https://sis.olin.edu>.
2. Click the "For Students" Button on the bottom and enter the secure connection using your username and password.
3. Make sure your "Set Options" are selected for **FALL 2004**. This can be done from the **MAIN** page at the bottom of the screen.
4. Select the **Registration** option from the directory structure on the left frame of the web page.
5. You will only be able to enter registration if it is (1) during your assigned time block; (2) if you are cleared by your adviser; and (3) if you do not have a hold due to financial obligations.
6. Enter the course number and the section of your choice and click **Add**. (For course numbers and sections refer to the course listing in this booklet.)
7. Confirmation Messages appear above the schedule in the **blue bar**. If you are not successful with an add function (due to a conflict or a full course), try another course and/or section. If you make a mistake, you can **Drop** the confirmed course and **Swap** it for another by using the **Swap** option. To use the swap option, select a course to "drop" and then enter the course number and section that you want to swap for it. You can also drop courses by selecting the radial button next to the course and clicking the "drop" key. You can only drop one course at a time. When you are finished, close the browser.

Transition Plan to the Revised Curriculum for  
Class of 2006 and Class of 2007

Pages 5 – 10 Have Intentionally Been Omitted from this Booklet  
They can be viewed at <http://star.olin.edu>.

## Summary of Degree Requirements

Engineering Degree Subject Requirements

(credits in parentheses)

**Math and Science (30)**

Math Foundation (8)

- Calculus (2)
- Vector Calculus (2)
- Linear Algebra (2)
- Probability and Statistics (2)

Science Foundation (14)

- Foundations of Physics (6)
- Chemistry or Materials Foundation (Choose one)
  - Foundations of Materials Science (4)
  - Introduction to Chemistry (4)
  - Organic Chemistry (4)
- Foundations of Modern Biology (4)

Math Elective (2)

Math/Science Elective (6)

**Engineering (50)**

Engineering Foundation (10)

- Engineering of Lumped Systems (3)
- Engineering of Spatial Systems (3)
- Principles of Engineering (4)

Design Foundation (8)

- Introduction to Design (4)
- Collaborative User Based Design (4)

Design Depth (4)

Engineering Specialization Core (16)

Concentration Dependent

Engineering Depth (4)

Concentration Dependent

Capstone (8)

**AHS/E! (28)**

AHS Foundation (4)

Entrepreneurship Foundation (4)

Foundations of Business and Entrepreneurship

AHS/E! Electives and Depth (16)

At least 8 must be AHS

At least 8 must be AHS or E! depth

AHS/E! Capstone (4)

Capstone area (AHS or E!) must be the same as depth area

**Electives (12)**

Technical Elective (4)

Self-Study Technical Elective (4)

General Elective (4)



## **ECE Degree Subject Requirements**

(credits in parentheses)

### **Math and Science (30)**

#### Math Foundation (8)

- Calculus (2)
- Vector Calculus (2)
- Linear Algebra (2)
- Probability and Statistics (2)

#### Science Foundation (14)

- Foundations of Physics (6)
- Foundations of Materials Science (4)
- Foundations of Modern Biology (4)

#### Additional Math

- Differential Equations (2)
- Discrete Math (4)

#### Math/Science Elective (2)

### **Engineering (50)**

#### Engineering Foundation (10)

- Engineering of Lumped Systems (3)
- Engineering of Spatial Systems (3)
- Principles of Engineering (4)

#### Design Foundation (8)

- Introduction to Design (4)
- Collaborative User Based Design (4)

#### Design Depth (4)

#### Engineering Specialization Core (16)

- Signals and Systems (4)
- Software Design (4)
- Computer Architecture (4)
- Introduction to Analog and Digital Communications (4)

#### Engineering Depth (4)

- See catalog for approved courses

#### Capstone (8)

**AHS/E! (28) (see Engineering Requirements)**

**Electives (12) (see Engineering Requirements)**

## **ME Degree Subject Requirements**

(credits in parentheses)

### **Math and Science (30)**

#### **Math Foundation (8)**

- Calculus (2)
- Vector Calculus (2)
- Linear Algebra (2)
- Probability and Statistics (2)

#### **Science Foundation (14)**

- Foundations of Physics (6)
- Foundations of Materials Science (4)
- Foundations of Modern Biology (4)

#### **Additional Math**

- Differential Equations (2)
- One of
  - Partial Differential Equations (4)
  - Non-linear dynamics (4)
  - Approved mathematics course appropriate to plan of study (4)

#### **Math/Science Elective (2)**

### **Engineering (50)**

#### **Engineering Foundation (10)**

- Engineering of Lumped Systems (3)
- Engineering of Spatial Systems (3)
- Principles of Engineering (4)

#### **Design Foundation (8)**

- Introduction to Design (4)
- Collaborative User Based Design (4)

#### **Design Depth (4)**

#### **Engineering Specialization Core (16)**

- Mechanical systems (6)
  - Statics (2)
  - Mechanics of solids (2)
  - Dynamics (2)
- Thermal/Fluid Systems (6)
  - Transport Phenomena (2)
  - Thermodynamics (2)
  - Fluid Dynamics (2)
- Mechanical Design (4)

#### **Engineering Depth (4)**

- See catalog for approved courses

#### **Capstone (8)**

**AHS/E! (28) (see Engineering Requirements)**

**Electives (12) (see Engineering Requirements)**

# **Fall 2004 Course Descriptions**

## **Arts, Humanities, Social Science, and Entrepreneurship (AHSE):**

### **AHSE 1100 History of Technology: Environment, Culture and Government**

**Instructor: Martello**

**Credits: 4**

**Prerequisites: None**

**Satisfies Subject Requirements: AHS Foundation**

This course operates on three levels of inquiry and exploration. In the most detailed sense, we look at several major History of Technology themes, such as Technological Systems, Technology and Culture, and Technology and the Environment. We address larger historical questions, such as the interpretation of evidence and the combination of analysis and narrative. Finally, we conduct writing, presentation, creativity, and analysis exercises that contribute to competencies such as communication and contextual understanding.

### **AHSE 1101 History and Society: *Bodies in Motion: Meaning of Migration in the 20th Century United States***

**Credits: 4**

**Instructor: Bruyneel**

**Prerequisites: None**

**Satisfies Subject Requirements: AHS Foundation**

*(This course will have an additional component facilitated by the Olin AHS committee and Writing Consultant. Details will follow after registration.)*

That the United States is a "nation of immigrants" is a truism ingrained in American culture and public discourse. To it we might add another: Americans are people "on the move". If such characterizations are commonplace, however, unpacking them is anything but simple. This course endeavors to unpack these ideas, introducing students to college-level work in the Liberal Arts through an exploration of the construction of "American" identity in the 20th century.

### **AHSE 1102 Arts and Humanities: *Challenging Boundaries: The Self Explored in Art and Philosophy 1800-2000***

**Credits: 4**

**Professor: Levinson**

**Prerequisites: None**

**Satisfies Subject Requirements: AHS Foundation**

*(This course will have an additional component facilitated by the Olin AHS committee and Writing Consultant. Details will follow after registration.)*

In AHSE 1102 we will observe, explore, and analyze how art (literary and visual) and philosophy grapple with self-identity and the boundaries of the self in the last 200 years. More specifically, we will explore the following questions:

- How do artists and philosophers imagine both the possibilities and the boundaries available to the self?
- How do artists and philosophers interrogate sets of values associated with identities available to the self?
- How do the forms and voices that artists and philosophers take up or invent enable new ways of being?

In the first half of the course, we will focus on artists and philosophers from 19th century Europe and America grappling with powerful political, economic, social, and cultural forces. In the second half we will focus on contemporary artists and philosophers who explore these same powerful forces from postcolonial and postmodern perspectives.

## **AHSE 1122 The Wired Ensemble—Instruments, Voices, Players**

**Instructor: Diana Dabby**

**Credits: 4**

**Prerequisites: None**

**Satisfies Subject Requirements: AHS Foundation**

Two concurrent streams comprise The Wired Ensemble:

- composition and performance of original works for instruments and voices
- the exploration of composers through their letters.

As composers and performers, students concentrate on instruments, voices, and the symbolic language that brings them to life. They compose music for every family of instruments—woodwinds, brass, strings, percussion—and for voices—with semiweekly performances of these pieces by fellow musicians. Students also have the opportunity to hear their works performed in concert settings by professional and student musicians with whom they have worked. Seminar trips to Boston and New York enable the class to gather musical and inspirational material for their work, as well as to hear some of the finest orchestral and vocal ensembles in performance. The course combines understanding of acoustic instruments/voices with orchestral and vocal ensemble writing, performance, and recording—all geared to an end-of-term production.

While actively engaged in composition, students examine the worlds of earlier composers in order to provide context for their own lives and work. To read many of the denumerable biographies of a Mozart, Beethoven, Schubert, or Chopin presents these luminaries through the scholarly lens of a story teller. Yet, to peruse their letters ushers the reader into a rarefied world of personal thoughts, goals, desires, in conjunction with the prosaic affairs of everyday eighteenth and nineteenth century life. For anyone who has ever dreamed of charting a creative path through life—whether as engineer, artist, scientist, and/or entrepreneur—these musicians, with their triumphs, setbacks, and emotional highs and lows, provide mentors for a lifetime. Prerequisite: ability to read music.

## **AHSE 1130 Seeing and Hearing: Communicating with Photographs, Video and Sound**

**Instructor: Donis-Keller**

**Credits: 4**

**Prerequisites: None**

**Satisfies Subject Requirements: AHS Foundation**

Seeing and Hearing is about the communication of ideas developed by research, reflection, and evolving thought using, as a vehicle for expression, contemporary media tools. Students receive a hands-on introduction to audio recording and editing, digital photography and printing, and video recording and editing. Science and engineering content are integrated in order to provide a reasonably comprehensive understanding of the devices we use to gather sound and images and in order to understand more fully the properties of seeing and hearing. A major goal is to enlarge our awareness of the environment we inhabit and to respond to the perceived environment by producing original visual and sonic artwork. Students complete projects including self-portraiture, a documentary, and the construction and recording of sound-producing devices. Our process is to share work through discussion sessions as we follow projects from their initial stages to completion and final presentation. Additional context for Seeing and Hearing is provided by selected readings, visits by guest lecturers, additional faculty and staff participation, and by viewing work of other professional practitioners. This course does not require prior experience with image/sound gathering or editing.

## **AHSE 2110 The Stuff of History: Materials and Culture in Ancient, Revolutionary and Contemporary Times**

**Instructor: Martello**

**Credits: 4**

**Prerequisites: Co-enrollment in SCI 1410 Section 02**

**Satisfies Subject Requirements: AHS Elective**

The lion's share of our history of technology course features a series of readings, lectures, and discussions on the relationship between materials, science, society, and the environment in three historical periods. We start with the material practices and paradigms of Copper and Bronze Age societies, shift to Paul Revere's "Revolutionary" work with various metals and fabrication processes, and conclude with a look at the technologies and challenges of tomorrow. We will emphasize the development of three skills that are vital to our studies: contextual thinking, communication (both written and oral), and historical research methods pertaining to source evaluation and narrative construction.

## **AHSE 2130 The Intersection of Art and Science**

**Instructor: Donis-Keller**

**Credits: 4**

**Prerequisites: None**

**Satisfies Subject Requirements: AHS Elective**

Science and Art are often considered entirely different worlds inhabited by practitioners who have nothing in common. In this course we will debunk this myth by closely examining the discovery process in both disciplines and by comparing the culture of science to that of art, historically and in the present. We will consider the influence of scientific discoveries, from optics to "new media", on the production of art and discuss the corollary question, "Has art influenced the progress of science?" We will also consider ways in which science allows us to understand artists and the work they create. In contemporary society artists have begun to comment on science, sometimes with disastrous results, which leads us to ask, "What is needed in order to establish a meaningful dialogue between scientists and artists, and, does it matter?"

## **AHSE 2199 Special Topics in Arts Humanities and Social Sciences**

**Subtitle: Topics in Anthropology – Culture, Knowledge and Creativity**

**Instructor: Lynch**

**Credits: 4**

**Prerequisites: Foundation level AHS**

**Satisfies Subject Requirements: AHS Elective**

Anthropological theories and methods help us understand human behavior and values. Broadly speaking, anthropologists ask, "Why do people do what they do and believe what they believe?" Today anthropologists study a wide range of contemporary social issues, such as international development, garment manufacturing, ICQ Instant Messenger, female "circumcision," and intellectual property. In this course, we will read about, debate, and discuss these and other issues in order to probe into the meanings of culture, knowledge, and creativity. After we learn how anthropologists deal with these concepts at a range of research sites, we will end the course with our own anthropological studies that utilize what we have learned earlier in the course. Students will conduct short research projects that examine social issues pertaining to the use of the Internet in the United States. By ending with a study of ourselves, students will see how creative we really are; that we, too, have culture; and that what we consider legitimate knowledge is culturally situated.

The professor will assume no prior knowledge of anthropology. Skills to be developed include critical reading, critical thinking, writing and analysis, presenting arguments in oral and visual form, and working on projects in small groups.

**Subtitle: Human System Dynamics**  
**Instructor: G. Pratt; J. Rising**  
**Credits: 2**  
**Prerequisites: Basic Calculus and Matlab**  
**Satisfies Subject Requirements: AHS Elective**

In this class we explore the principles and intuitions of system dynamics as applied to human systems, such as societies, subcultures, working groups, relationships, and individuals in social contexts. Human System Dynamics is an emerging field constantly trying to synthesize an endless collection of subtle and counterintuitive observations. This class emphasizes the methods of thinking behind system dynamics by discussing and modeling some of those important observations.

As an exploration, this class will be driven by readings and discussion, and by all participants contributing what they learn from their models. The course will progress from a high-level discussion of society-wide mechanisms to the dynamics occurring around and within individuals, each discussion informed by and informing the others. Along the way, we will discuss the recurrence of certain variables and behaviors at multiple levels of society, including the effects of power and diverse needs, feedback, over-determinacy, homeostasis, and crisis.

**AHSE 1500 Foundations of Business and Entrepreneurship**  
**Instructors: Schiffman and Bourne**  
**Credits: 4**  
**Prerequisites: None**  
**Satisfies Subject Requirements: E! Foundation**

The course is designed to provide Olin students with experience in planning and growing a business venture. The learning experience is centered on “doing” (e.g., engaging in a business simulation) while building a student’s competence in the functional areas of business including accounting, finance, marketing, and strategy.

**AHSE 3500 Entrepreneurship: Real-Time Case Study**  
**Instructors: Bourne and Schiffman**  
**Credits: 4**  
**Prerequisites: AHSE 1500 or FND2610**  
**Satisfies Subject Requirements: E! Elective**

As you read this, the managers of a new high-tech company, (to be announced), are striving to achieve the entrepreneurial dream. On a special website you will follow that company, and see their progress week by week. But you will do more than just watch. You will be actively engaged with the company, analyzing its problems, and making input. You will be participating in an in-depth, real-time case study. Unlike traditional case studies, this real-time case will dig deeply into one company during an entire semester. At this moment, a case writer is stationed full-time at the case company. Each week the writer will provide us with the information we need to analyze a particular problem or question about the company. But our goal is not analysis for its own sake. Instead, we want to go beyond critiquing, and make valuable recommendations to the company. The company is counting on us to perform, and we want to deliver.

## **Integrated Course Block (ICB) 1:**

### **MTH 1110 Calculus**

**Instructors: Geddes and Tilley**

**Credits: 2**

**Prerequisites: SCI 1110 and ENGR 1110 must be taken concurrently**

**Satisfies Subject Requirements: Calculus**

The theory and applications of sequences, series, limits, parametric equations, and integrals, as applied to lumped systems. Also introduced are linear differential equations and complex notation.

### **SCI 1110 Physics: Mechanics**

**Instructors: Somerville and Zastavker**

**Credits: 3**

**Prerequisites: MTH 1110 and ENGR 1110 must be taken concurrently**

**Satisfies Subject Requirements: Foundations of Physics (3 of 6)**

Classical Mechanics applied to lumped systems, including Force, Acceleration, Velocity, Newton's Laws, Energy, Rotational Motion, Temperature, Heat, Specific Heat, and Resonance.

### **ENGR 1110 Engineering of Compartment Systems**

**Instructors: G. Pratt and Storey**

**Credits: 3**

**Prerequisites: MTH 1110 and SCI 1110 must be taken concurrently**

**Satisfies Subject Requirements: Introduction to Lumped Systems**

A hands-on class in the modeling and control of lumped systems, including First and Second Order Thermal, Mechanical, and Electrical Systems, the nature of effort and flow (across and through state variables) as universal concepts, Power and Energy, Lumped Impedance, Damping, Passivity, Qualitative Feedback Stability, and Hysteretic, P, PI, and PID control. Students will also learn to use Matlab, Simulink, and to write basic real-time control and simulation software.



## **Engineering (ENGR):**

### **ENGR 1200 Design Nature**

**Instructors: Linder, Anderson**

**Credits: 4**

**Prerequisites: None**

**Satisfies Subject Requirements: Introduction to Design**

This project-based course introduces basic design processes in the context of mechanical design. Students go through the process of brainstorming, refinement, prototyping, review, and debugging as they work in teams to design and construct a number of different approaches to solve a mechanical problem. This course also introduces basic machine shop operations and machine shop safety. Students receive hands-on instruction on a variety of manual and CNC tools. The course also introduces CAD (computer aided design) software.

### **ENGR 2210 Principles of Engineering**

**Instructors: Minch and Stolk**

**Credits: 4**

**Prerequisites: Engineering, Math, and Physics Foundation**

**Satisfies Subject Requirements: Principles of Engineering**

Through a significant project experience, this course teaches students to integrate analysis, qualitative design, quantitative optimization, experiments, and simulations to improve their abilities to engineer real systems. This course will be given in two sections, each focusing on a particular type of engineering system. Section 01 will focus on electrical systems and components. Section 02 will focus on mechanical systems and material properties. Students need not enroll in a section corresponding to their intended major.

### **ENGR 1510 Introductory Programming**

**Instructor: Downey**

**Credits: 2**

**Prerequisites: None**

**Satisfies Subject Requirements: Technical Elective**

[Special Registration Note to New Students: To register for this course, please attend the first class meeting or register in person with Linda Canavan at the StAR Center.]

This class is an introduction to basic programming intended for students with little or no programming experience. It develops basic programming and debugging skills, and covers concepts including variables and values; procedures, parameters and arguments; lists, dictionaries and other collections; and basic algorithms including map, filter and reduce. Many examples and exercises include graphics.

In Fall 2004, we will be using the Python programming language, which is particularly well-suited for beginners, but also similar to MATLAB and many languages used in other classes. Students completing this class successfully will be well-prepared for Software Design.

**ENGR 2510 Software Design****Instructor: Downey****Credits: 4****Prerequisites: None****Satisfies Subject Requirements: ECE Software Design Core**

This course is an introduction to programming and software design. This course focuses on a model of computation as a set of simultaneous ongoing entities embedded in and interacting with a dynamic environment, for example: computation as it occurs in spreadsheets, video games, web applications, and robots. A major component of the class is a weekly three hour in-class laboratory. Much of this laboratory is spent in collaborative work on program development, with an emphasis on student-student interaction and student-student teaching, facilitated and enriched by the course staff. In addition, design and implementation work is supplemented with observational laboratory assignments, inviting students to consider not only how to build a program, but how to anticipate its behavior and how to modify that behavior. Students with no prior background and students with background comparable to the CS AP should both find this course interesting and worthwhile.

**ENGR 3310 Transport Phenomena****Instructor: Townsend****Credits: 4****Prerequisites: Engineering, Math, and Physics Foundation****Satisfies Subject Requirements: ME Fluid Dynamics Core AND ME Transport Core**

This course introduces the basic physics and applications of the transport of heat, mass, and momentum. Topics in fluid dynamics include kinematics, conservation laws, dynamic similarity, and laminar flow solutions. Topics in heat and mass transfer include: internal and external convection, free convection, boiling and condensation, and the analogy between heat and mass transport. Applications in the course will cover phenomena such as surface waves, instability and transition to turbulence, turbulent flows, geophysical applications, compressible flows, and heat exchangers.

**ENGR 3320 Mechanics of Solids and Structures****Instructors: Storey and Miller****Credits: 4****Prerequisites: Engineering, Math, and Physics Foundation****Satisfies Subject Requirements: ME Statics Core AND ME Mechanics Core**

This course covers the principles of statics of structures and mechanics of materials. Topics include tension, compression, shear, torsion, bending, stresses, deflection, and strain in loaded members. Students will use a combination of analysis, simulation, and experimentation to understand the principles of mechanics. The course includes applications in structural engineering and machine elements. Students are introduced to the use of finite element methods as a tool for design and analysis.

**ENGR 3330 Mechanical Design****Instructor: Staff****Credits: 4****Prerequisites: ENGR 3320 (may be taken concurrently)****Satisfies Subject Requirements: ME Mechanical Design Core**

This design course introduces new topics in machine design and applies and integrates the basic mechanical and thermal engineering sciences. Topics in machine element design include stress, strain, deflection, stiffness, and failure of mechanical components, steady and variable loading, mechanical fastening and joining, and the design of mechanical components, including springs, bearings, gears, shafts, and axles. The course includes a major design component that involves the fabrication and physical testing of mechanical components.

**ENGR 3410 Computer Architecture****Instructor: Chang****Credits: 4****Prerequisites: Engineering, Math, and Physics Foundation****Satisfies Subject Requirements: ECE Computer Architecture Core**

This course introduces a broad range of computation structures used in computation, from logic gates to Specialized (e.g. DSP, cellular automata) as well as general purpose architectures. Design techniques for quantitatively optimizing performance are also taught. Students build a computer from the ground up.

**ENGR 3520 Foundations of Computer Science****Instructor: Stein****Credits: 4****Prerequisites: ENGR 2510****Satisfies Subject Requirements: C Concentration Core**

This course combines elements of automata theory, data structures and algorithms, programming languages, artificial intelligence, information management, internet programming.

**ENGR 3520a Foundations of Computer Science Project****Instructor: Stein****Credits: 2****Prerequisites: Co-enrollment in ENGR 3520****Satisfies Subject Requirements: C Concentration Core**

This course uses a project, based on intelligent software agents, as a vehicle for exploring the formal analytic toolkit of the computer scientist as well as aspects of algorithmic computing and intelligent software design.

**ENGR 3600 Topics in BioEngineering****Instructor: DiMilla****Credits: 4****Prerequisites:****Satisfies Subject Requirements: BE Concentration Core**

This interdisciplinary course will introduce students to concepts and problems encountered when applying fundamental concepts and quantitative methods in engineering and science to problems in biology and medicine. The breadth of bioengineering will be surveyed, focusing on tools and techniques used by practicing bioengineers, current scientific and technical status, and emerging trends and directions. Topics to be explored include: What is “bioengineering?,” biosignals and bioprocesses as the basis for human physiology and other biological systems; biological & medical imaging; biomaterials; biomechanics; bioinstrumentation; drug development, delivery, and pharmacokinetics; biotechnology; medical devices; emerging technologies such as gene therapy and tissue engineering, and commercializing life science products. The application of experimental, mathematical, and computational tools from biology, chemistry, physics, and math to describe, analyze, and predict the behavior of living systems and solve open-ended design-oriented problems will be practiced. Examples from the instructor’s experience in academic research and industrial R&D will be used to motivate problem solving and discussion. This course will provide students with the background for subsequent study (e.g., advanced courses and/or independent research) in bioengineering and quantitative biology.

**ENGR 3810 Structural Biomaterials****Instructor: Chachra****Credits: 4****Prerequisites: SCI 1410 ; SCI 1210 recommended (as pre- or co-requisite)****Satisfies Subject Requirements: Materials Concentration Core**

How is a blood vessel like a garden hose? Why are seashells strong (and beautiful) even though they are made of chalk? How can your pink and squishy tendons be made of the same material as your transparent corneas? This course focuses on the materials science of natural tissues, primarily ones that fill structural roles, including bone, teeth, tendon, nacre, and wood, with an emphasis on how they are similar and different to 'engineering' materials. Additional material may include scaffolds for tissue engineering, biomimetic materials and mechanical properties of individual cells.

**Mathematics (MTH):****MTH 2150 Applied Mathematical Methods****Instructor: Moody****Credits: 4****Prerequisites: Mathematical Foundations of Engineering II****Satisfies Subject Requirements: Probability and Statistics AND Differential Equations**

The first half of this course is an introduction to probability and statistics, with applications to science, engineering, and social science. Topics include discrete and continuous probability distributions; moments; conditional probability; Bayes' Rule; point and interval estimation; hypothesis testing. The second half of the course will focus on special topics in differential equations, with linear algebra.

**MTH 2199 Special Topics in Mathematics****Subtitle: Topics and Favorite Theorems: Random Adventures in Mathematics****Instructors: Geddes, Moody, Spence, Tilley****Credits: 2****Prerequisites:****Satisfies Subject Requirements: Mathematics Elective**

This course will explore the favorite topics and theorems of the Olin mathematics faculty. Examples of special topics and theorems might include symmetry groups in art and nature, various methods of proof, constructing the Real numbers, the Riemann hypothesis, the Shannon coding theorem.

**MTH 2310 Discrete Mathematics****Instructor: Spence****Credits: 4****Prerequisites: None (Linear Algebra recommended)****Satisfies Subject Requirements: Discrete Mathematics**

Topics for this course include combinatorics, number theory, graph theory, an emphasis on creative problem solving, and the ability to read and write rigorous proofs.

**MTH 3120 Partial Differential Equations****Instructor: Tilley****Credits: 4****Prerequisites: Applied Mathematical Methods****Satisfies Subject Requirements: Partial Differential Equations**

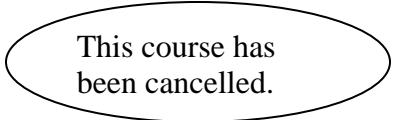
An introduction to the solution methods of partial differential equations that arise in describing a wide variety of problems in engineering, such as fluid dynamics, electromagnetic wave propagation, and transport phenomena. The course begins with the solution of boundary-value problems in ordinary differential equations (Sturm-Liouville theory) and then develops the solutions of the heat, wave, and Laplace equations on finite domains. Similarity solutions of equations on infinite spatial domains are also investigated, as is a brief introduction to numerical solutions.

**MTH 3130 Mathematical Analysis****Instructor: Moody****Credits: 2****Prerequisites: Mathematical Foundations of Engineering II****Satisfies Subject Requirements: Math/Science Elective**

An introduction to real analysis; construction of the real number system; metric spaces and metric topology; compactness; connectedness; functions. Emphasis on mathematical rigor, logic and proof.

**Science (SCD):****SCI 1210 Foundations of Modern Biology (with laboratory)****Instructor: J. Pratt****Credits: 4****Prerequisites: None****Satisfies Subject Requirements: Foundations of Modern Biology**

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

**SCI 1310 Introduction to Chemistry****Instructor: TBA****Credits: 4****Prerequisites: None****Satisfies Subject Requirements: Introduction to Chemistry****NOTE: This is a tentative offering subject to the availability of staff.**

This course has  
been cancelled.

This course introduces students to the fundamental aspects of aqueous chemistry. Topics include stoichiometry, gas laws, bonding, atomic theory, quantum theory, thermochemistry, condensed phases and solutions, reaction equilibria, acids and bases.

**SCI 1410 Materials Science and Solid State Chemistry (with laboratory)****Instructors: Chachra and Stolk****Credits: 4****Prerequisites: None****Satisfies Subject Requirements: Foundations of Materials Science**

This laboratory-based course introduces students to the relationships among structure, processing, properties, and performance of engineering materials including metals, ceramics, polymers, composites, and semiconductors. Students apply materials science principles in laboratory projects that focus on analysis of material microstructure, measurement and modification of material properties, and selection of materials for engineering designs.

**SCI 2210 Immunology****Instructor: J. Pratt****Credits: 4****Prerequisites: SCI 1210 or equivalent****Satisfies Subject Requirements: Science Elective**

Immunology is a relatively new science, and our understanding of our immune system is evolving at a rapid pace. When the immune system functions properly, infectious pathogens and potential cancer cells are destroyed. When our immune system malfunctions, normally harmless microorganisms can cause serious infections, autoimmune diseases or allergies can develop and cancer cells can evade immune surveillance and grow unchecked. In this lecture and discussion-based class, we will investigate the molecular and cellular mechanisms that control our immune responses. Current research in immunology will be emphasized through analysis of primary literature and media articles.

**SCI 3110 Modern Physics****Instructor: Holt****Credits: 4****Prerequisites: PFE II****Satisfies Subject Requirements: Science Elective**

Modern Physics is based upon a few fundamental ideas that allow the explanation of phenomena that seem to defy consistency with traditional (Newtonian) physics. The most important of these (in the context of engineering applications) are the Special Theory of Relativity, Quantum Mechanics and Statistical Mechanics. This course will introduce the basic concepts of Modern Physics, with particular application to atoms, molecules, and the materials utilized in modern electronics.

FALL	2004	Olin College Course Offerings	Updated	27Aug04				
Course #	Sect.	Course Title	Instructors	Credits	Time	Location	Enroll Limits	Note
AHSE 1100	01	History of Technology: Environment, Culture and Government	Martello	4	TR 10:00-11:50a	AC417	15	AHS Foundation
AHSE 1101	01	History and Society: Bodies in Motion: Meaning of Migration in the 20th Century United States	Bruyneel	4*	TR 9:45-11:00a	AC326	13	AHS Foundation
AHSE 1101	02	History and Society: Bodies in Motion: Meaning of Migration in the 20th Century United States	Bruyneel	4*	TR 11:30-12:45p	AC326	12	AHS Foundation
AHSE 1102	01	Arts and Humanities: Challenging Boundaries: The Self Explored in Art and Philosophy 1800-2000	Levinson	4*	TR 9:45-11:00a	@ Babson Fo'c'sle	13	AHS Foundation
AHSE 1102	02	Arts and Humanities: Challenging Boundaries: The Self Explored in Art and Philosophy 1800-2000	Levinson	4*	TR 11:30-12:45p	@ Babson Fo'c'sle	12	AHS Foundation
AHSE 1122	01	The Wired Ensemble - Instruments, Voices, Players	Dabby	4	TR 10:00-11:50a	AC305	15	AHS Foundation
AHSE 1130	01	Seeing and Hearing: Communicating with Photographs, Video and Sound	Donis-Keller	4	TR 10:00-11:50a	AC313	15	AHS Foundation
AHSE 1500	01	Foundations of Business and Entrepreneurship	Bourne; Schiffman	4	MR 10-11:50a	AC109	25	
AHSE 2110	01	The Stuff of History: Materials and Culture in Ancient, Revolutionary and Contemporary Times	Martello	4	TF 1-2:50p	AC417	18	Co-Requisite of SCI 1410, sec 02; Waitlist Available
AHSE 2130	01	The Intersection of Art and Science	Donis-Keller	4	MR 1:00-2:50p	AC313	12	
AHSE 2199	01	Special Topics in Arts, Humanities, Social Science: Anthropology - Cult Know Creatvty	Lynch	4	TF 1:00-2:50	AC213	17	
AHSE 2199	02	Special Topics in Arts, Humanities, Social Science: Human System Dynamics	Pratt, G; Rising, J	2	W 4:00-5:50p	AC302	10	
AHSE 3500	01	Entrepreneurship: Real Time Case Study	Bourne; Schiffman	4	W 3:25-6:40p	AC213	10+10	pre-req of Foundation of Bus and E!

Course #	Sect.	Course Title	Instructors	Credits	Time	Location	Enroll Limits	Note
ENGR 1200	01	Design Nature	Linder	4	MWF 9-10:50a	AC204	25	Some Monday sessions will meet in the Auditorium at 9am.
ENGR 1200	02	Design Nature	Anderson	4	MW 9-10:50a; R 4-5:50p	AC206	25	
ENGR 1200	03	Design Nature	Linder	4	MWR 4-5:50p	AC209	25	
ENGR 2210	01	Principles of Engineering Design	Minch	4	MR 10-11:50a	AC306	28	Electrical Flavor; Waitlist Available
ENGR 2210	02	Principles of Engineering Design	Stolk	4	TF 10-11:50a	AC306	28	Mechanical Flavor; Waitlist Available
ENGR 1510	01	Introductory Programming	Downey	2	TR 8:30-9:20a	AC304	25+5	
ENGR 2510	01	Software Design	Downey	4	MTR 12-12:50p; F 8:00-9:50a	AC304	12+3	
ENGR 2510	02	Software Design	Downey	4	MTR 12-12:50p; F 11:00-12:50p	AC304	13+2	
ENGR 3310	01	Transport Phenomena	Townsend	4	MR 10-10:50a; W 1-2:50p	AC309	25	
ENGR 3320	01	Mechanics of Solids and Structures	Storey; Miller	4	MR 9-9:50; W 8-9:50a	AC309	25	Co-Requisite of ENGR 3330
ENGR 3330	01	Mechanical Design	Barrett	4	TF 10-11:50a	AC309	25	Co-Requisite of ENGR 3320
ENGR 3410	01	Computer Architecture	Chang	4	MR 10-10:50a; W 1-2:50p	AC304	25	
ENGR 3520	01	Foundations of Computer Science	Stein	4	TF 10-11:50a	AC318	25	
ENGR 3520a	01	Foundations of Computer Science Project - Optional	Stein	2	T 12:00-12:50p	AC318	25	
ENGR 3600	01	Topics in Bioengineering	Dimilla	4	TF 8:00-9:50a	AC417 / AC406	20	
ENGR 3810	01	Structural Biomaterials	Chachra	4	MR 1-2:50p	AC302	25	



Course #	Sect.	Course Title	Instructors	Credits	Time	Location	Enroll Limits	Note
ICB1 / ENGR 1110	01	Engineering of Compartment Systems	Storey; Pratt, G	3	M 11-12:50p; R 1-1:50p	AC126	25	Note: Some of the Thursday ( R ) meetings will be combined for all sections in the Olin Center Auditorium at 2pm.
ICB1 / ENGR 1110	02	Engineering of Compartment Systems	Storey; Pratt, G	3	M 2-3:50p; R 2-2:50p	AC126	25	
ICB1 / ENGR 1110	03	Engineering of Compartment Systems	Storey; Pratt, G	3	T 3-4:50p; R 3-3:50p	AC126	25	
ICB1 / MTH 1110	01	Calculus	Tilley	2	M 3-3:50p; W 1-1:50p	AC113	25	
ICB1 / MTH 1110	02	Calculus	Geddes	2	T 1-1:50p; F 1-1:50p	AC318 / OC120 Fri	25	
ICB1 / MTH 1110	03	Calculus	Geddes	2	W 1-1:50p; F 1-1:50p	AC318 / OC120 Fri	25	
ICB1 / SCI 1110	01	Physics: Mechanics	Zastavker	3	M 4-4:50p; W 2-3:50p	AC113	25	
ICB1 / SCI 1110	02	Physics: Mechanics	Somerville	3	T 2-3:50p; F 2-2:50p	AC318 / OC120 Fri	25	
ICB1 / SCI 1110	03	Physics: Mechanics	Somerville	3	W 2-3:50p; F 2-2:50p	AC318 / OC120 Fri	25	
MTH 2110	01	Discrete Math	Spence	4	TF 1-2:50p	AC109	20	
MTH 2150	01	Applied Mathematical Methods (4cr option for Class of 2007)	Moody	4	MR 8-9:50a	AC109	38	
MTH 2199	01	Special Topics in Mathematics: Random Adventures in Mathematics	Geddes; Moody; Spence; Tilley	2	M 6:00-7:50p	AC112	10	
MTH 3120	01	Partial Differential Equations	Tilley	4	MR 1-2:50p	AC213	20	
MTH 3130	01	Mathematical Analysis	Moody	2	M 9:30-11:30p	AC113	15	
SCI 1210	01	Principles of Modern Biology with Lab	Pratt, J	4	MR 1-2:50p; R 3-5:50p	AC417 / AC406	25	
SCI 1310	01	Introduction to Chemistry	Staff	4	TF 1-2:50p; T 3-5:50p	AC409	18	Tentative Offering; subject to change or be cancelled

Course #	Sect.	Course Title	Instructors	Credits	Time	Location	Enroll Limits	Note
SCI 1410	01	Materials Science and Solid State Chemistry with Lab	Chachra	4	M 3-5:50p; W 8-10:50a	AC413	15	
SCI 1410	02	Materials Science and Solid State Chemistry with Lab	Stolk	4	T 3-5:50p; W 1-3:50p	AC413	15	Co-requisite with AHSE 2110; Waitlist Available
SCI 1410	03	Materials Science and Solid State Chemistry with Lab	Stolk	4	W 4-6:50p; R 3-5:50p	AC413	15	
SCI 2210	01	Immunology	Pratt, J	4	MR 10-11:50a	OC273	15	
SCI 3110	01	Modern Physics	Holt	4	MR 8-9:50a	AC113	15	
AWAY 1000	01	Study Away Program		12				Registration Required for those in APPROVED Study Away Programs

\*Course will have an additional component facilitated by the Olin AHS Committee and Writing Consultant. Details will follow after Registration.

**Spring 2005 List of Tentative Offerings (subject to change)**

Course #	# of Sections	Course Title	Tentative Instructors	Credits
AHSE 2120	1	Heroes for the Renaissance Engineer	Dabby	4
AHSE 1150	1	What is I?	Stein	4
AHSE 1500	2	Foundations of Business and Entrepreneurship	Bourne; Schiffman	4
AHSE xxxx	2	AHS Elective or Foundation	Martello; Lynch	4
ENGR 2210	1	Principles of Engineering Design	tba	4
ENGR 2200	3	User Oriented Collaborative Design	Linder	4
ENGR 2410	1	Signals and Systems	Dabby	4
ENGR 2510	1	Software Design	Stein	4
ENGR 3310	1	Transport Phenomena	Townsend	4
ENGR 3320	1	Mechanics of Solids and Structures	Storey; Miller	4
ENGR 3330	1	Mechanical Design	Barrett	4
ENGR 3340	1	Dynamics & Controls (tentative)	tba	4
ENGR 3350	1	Thermal Systems	Storey; Townsend	4
ENGR 3420	1	Introduction to Analog and Digital Communications	Minch	4
ENGR 3430	1	Digital VLSI	Chang	4
ENGR 3525	1	Software Systems	Downey	4
ENGR 3530	1	Synchronization	Downey	2
ENGR 3610	1	Core BE		4
ENGR 3820	1	MSAC Elective	Stolk	4
ICB2 / ENGR 1120	3	Engineering of Spatially Distributed Systems		3
ICB2 / MTH 1120	3	Vector Calculus		2
ICB2 / SCI 1120	3	Physics: Electromagnetism and Waves		3
MTH 2150	1	Applied Math Methods (4 cr option for Class of 2007)	Spence, Tilley	4
MTH 3140	1	Coding Theory	Spence	2
MTH 3150	1	Numerical Methods and Scientific Computing	Tilley	4
SCI 1210	2	Principles of Modern Biology with Lab	Pratt, J; Donis-Keller	4
SCI 1410	1	Materials Science and Solid State Chemistry with Lab	Chachra	4
SCI 2320	1	Organic Chemistry with Lab	Staff	4
SCI xxxx	2	Physics Elective	Holt; New Engr Physics	4
SCI xxxx	1	Bio Physics Elective	Zastavker	4
SCI xxxx	1	Solid State Physics	New Engr Phys	4

## **Fall 2004 Scheduling Grids**

**CORE Requirements**  
**General / Foundation-like Requirements**  
**First Year Requirements**

Key:	CORE Req'mt		Other		Academic Schedule										
	Mon			Tues		Wed		Thurs			Fri				
8:00		Modern Physics SCI3110 HOLT		Topics in Bioengineering ENGR3600		Mechanics of Solids and Structures ENGR3320; STOREY MR 9:00-9:50a w 8:00-9:50a		Modern Physics SCI3110 HOLT MR 8:00-9:50a			Topics in Bioengineering ENGR3600 DiMilla TF 8:00-9:50a		Software Design ENGR2510 section 01 DOWNEY MTR 12:00-12:50p; F 8:00-9:50a		
8:50															
9:00	Mech of Solids and Structures ENGR3320; STOREY; MR 9:00-9:50AM; W 8:00-9:50a		MR 8:00-9:50a		DiMilla TF 8:00-9:50a				Mech of Solids and Structures ENGR3320; STOREY; MR 9:00-9:50AM; W 8:00-9:50a						
9:50															
10:00	Comp Arch ENGR3410; CHANG MR 10:00-10:50a; W 1-2:50	TransPhen ENGR3310; TOWNSEND MR 10:00-10:50a; W 1-2:50p	Immunology SCI2210 PRATT, J MR 10-11:50a		Foundations of Computer Science ENGR3520 STEIN TF 10:00-11:50a		Mechanical Design ENGR3330 BARRETT TF 10:00-11:50a		Comp Arch ENGR3410; CHANG MR 10:00-10:50a; W 1-2:50p			TransPhen ENGR3310; TOWNSEND MR 10:00-10:50a; W 1-2:50p	Immunology SCI2210 PRATT, J MR 10-11:50a	Foundations of Computer Science STEIN ENGR3520 10:00-11:50p	Mech'nical Design ENGR3330 BARRETT TF 10:00-11:50a
10:50															
11:00							Open Meeting Time					Software Design ENGR2510 section 02 DOWNEY MTR 12:00-12:50p; F 11:00-12:50p			
11:50															
12:00	Software Design ENGR2510, sec 01 and 02; DOWNEY M,T,R 12:00-12:50p; plus lab				FOCS Proj- Optional ENGR3520a STEIN T 12-12:50p		Software Design ENGR2510, sec 01 and 02; DOWNEY M,T,R 12:00-12:50p; plus lab		Software Design ENGR2510, sec 01 and 02; DOWNEY M,T,R 12:00-12:50p; plus lab						
12:50															
1:00	Structural Biomaterials ENGR3810	Intersection of Art and Sci AHSE2130; Donis-Keller MR 1:00-2:50p	Partial Differential Equations MTH3120 TILLEY MR 1:00-2:50p	Discrete Math MTH2110 SPENCE TF 1:00-2:50p	Special Topics in AHS: Anthropology AHSE2199-01 LYNCH TF 1:00-2:50p	Transport Phenomena ENGR3310 TOWNSEND MR 10:00-10:50a W 1-2:50p	Computer Architecture ENGR3410 CHANG MR 10:00-10:50a W 1-2:50p	Structural Biomaterials ENGR3810 CHACHRA MR 1:00-2:50p	Intersection of Art and Sci AHSE2130; Donis-Keller MR 1:00-2:50p	Partial Differential Equations MTH3120 TILLEY MR 1:00-2:50p	Discrete Math MTH2110 SPENCE TF 1:00-2:50p	Special Topics in AHS: Anthropology AHSE2199-01 LYNCH TF 1:00-2:50p			
1:50	CHACHRA														
2:00	MR 1:00-2:50p														
2:50															
3:00															
3:50						Entrepreneurship: Real Time Case Study AHSE 3500 BOURNE; SCHIFFMAN W 3:25-6:40p									
4:00							Special Topics in AHS: Human System Dynamics AHSE2199-02 2 cr G. PRATT; J. RISING W 4-5:50p								
4:50															
5:00															
5:50															
6:00	Special Topics in Mathematics MTH2199-01 2 cr W 6-7:50p														
6:50															

Key:	Foundation "like" / General Req'mt	Other	Academic Schedule																	
	Mon			Tues			Wed			Thurs			Fri							
8:00	Applied Math Methods MTH2150 MR 8:00-9:50a		Modern Physics SCI3110 MR 8:00-9:50a				Materials Science and Solid State Chemistry SCI1410, sec 01 CHACHRA M 3-5:50p W 8-10:50a				Applied Math Methods MTH2150 MR 8:00-9:50a		Modern Physics SCI3110 MR 8:00-9:50a	Software Design ENGR2510; section 01 DOWNEY M,T,R 12:00-12:50p; F 8:00-9:50a						
8:50																				
9:00	MOODY		HOLT								MOODY		HOLT							
9:50																				
10:00	Prin of Engr'ing Design ENGR2210s ec 01;	Fnd of Bus & E! AHSE1500 BOURNE;SC HIFF. MR 10:00-11:50a	Immunology SCI2210 PRATT, J MR 10-11:50a	Prin of Engineering Design; STOLK ENGR2210, sec 02 TF 10:00 - 11:50a			Open Meeting Time			Prin of Engr'ing Design ENGR2210 sec 01;	Fnd of Bus & E! AHSE1500 BOURNE;SC HIFF. MR 10:00-11:50a	Immunology SCI2210 PRATT, J MR 10-11:50a	Prin of Engineering Design; STOLK ENGR2210, sec 02 TF 10:00 - 11:50a							
10:50													Software Design ENGR2510; section 02							
11:00	MINCH MR 10:00-11:50a												MINCH MR 10:00-11:50a							
11:50																DOWNEY M,T,R 12:00-12:50p; F 11:00-12:50p				
12:00	Software Design ENGR2510, sec 01 and 02; DOWNEY M,T,R 12:00-12:50p; plus lab			Software Design ENGR2510, sec 01 and 02; DOWNEY M,T,R 12:00-12:50p; plus lab						Software Design ENGR2510, sec 01 and 02; DOWNEY M,T,R 12:00-12:50p; plus lab				Software Design ENGR2510; section 02 DOWNEY M,T,R 12:00-12:50p; F 11:00-12:50p						
12:50																				
1:00	Prin of Mod Biology SCI1210 PRATT, J MR 1-2:50p; R 3-5:50p lab	Intersection of Art and Sci AHSE2130; Donis-Keller MR 1:00-2:50p	Partial Differential Equations MTH3120 TILLEY MR 1:00-2:50p	Discrete Math MTH2110 SPENCE TF 1:00-2:50p	Stuff of History AHSE2110 (CoReq SCI1410, sec 02); MARTELLO TF 1:00-2:50P	Special Topics in AHS: Anthropology AHSE2199-01 LYNCH TF 1:00-2:50p	Materials Science and Solid State Chemistry SCI1410, sec 02 (CoReq AHSE2110) STOLK T 3-5:50p W 1-3:50p				Prin of Mod Biology SCI1210 PRATT, J MR 1-2:50p; R 3-5:50p lab	Intersection of Art and Sci AHSE2130; Donis-Keller MR 1:00-2:50p	Partial Differential Equations MTH3120 TILLEY MR 1:00-2:50p	Discrete Math MTH2110 SPENCE TF 1:00-2:50p	Stuff of History AHSE2110 (CoReq SCI1410, sec 02); MARTELLO TF 1:00-2:50P	Special Topics in AHS: Anthropology AHSE2199-01 LYNCH TF 1:00-2:50p				
1:50																				
2:00																				
2:50																				
3:00	Materials Science and Solid State Chemistry SCI1410, sec 01 CHACHRA M 3-5:50p W 8-10:50a			Materials Science and Solid State Chemistry SCI1410, sec 02 (CoReq AHSE2110) STOLK T 3-5:50p W 1-3:50p							Prin of Mod Biology LAB SCI1210 PRATT, J R 3-5:50p	Materials Science and Solid State Chemistry SCI1410, sec 03 STOLK W 4:00p-6:50p; R 3:00-5:50p	Community Service							
3:50																				
4:00									Special Topics in AHS: Human System Dynamics AHSE2199-02 2 cr G. PRATT; J. RISING W 4-5:50p											
4:50																				
5:00																				
5:50																				
6:00	Special Topics in Mathematics MTH2199-01 2 cr W 6-7:50p																			
6:50																				

Key:	Foundation "like"	Other	Integrated Course Blocks	Academic Schedule								
	Mon		Tues			Wed		Thurs			Fri	
8:00												Software Design ENGR2510; section 01
8:50			Introductory Programming ENGR1510; DOWNEY TR 8:30-9:20a					Introductory Programming ENGR1510; DOWNEY TR 8:30-9:20a				DOWNEY M,T,R 12:00- 12:50p; F 8:00- 9:50a
9:00	Design Nature	Design Nature				Design Nature	Design Nature				Design Nature	
9:50	ENGR1200, section 01	ENGR1200 section 02		TR 9:45-11:00		ENGR1200, section 01	ENGR1200 section 02		TR 9:45-11:00		ENGR1200, section 01	
10:00	MWF 9- 10:50a Linder	MW 9-10:50; R 4-5:50p Anderson		AHSE1102, sec 01 Arts and Humanities	AHSE1101, sec 01 History and Society				AHSE1102, sec 01 Arts and Humanities	AHSE1101, sec 01 History and Society		MWF 9- 10:50a Linder
10:50				TR 10:00-11:50					TR 10:00-11:50			
11:00		ENGR1110-01 Eng of CompartmentSyst ems		AHSE1100 History of Technology	Wired Ensemble AHSE1122				AHSE1100 History of Technology	Wired Ensemble AHSE1122		Software Design ENGR2510 Section 02; DOWNEY
11:50				TR 11:30-12:45					TR 11:30-12:45			
12:00	Software Design ENGR2510, sec 01 and 02; DOWNEY M,T,R 12:00-12:50p; plus lab	M 11:00-12:50p R 1:00-1:50p Storey & G. Pratt		AHSE1102, sec 02 Arts and Humanities	AHSE1101, sec 02 History and Society		Open Meeting Time		AHSE1102, sec 02 Arts and Humanities	AHSE1101, sec 02 History and Society		M,T,R 12:00- 12:50p; F 11:00- 12:50p
12:50												
1:00					MTH1110-02 & SCI1110-02 ICB, sec 02 Math & Phys	MTH1110-01 & SCI1110-01 ICB, sec 01 Math & Phys	MTH1110-03 & SCI1110-03 ICB, sec 03 Math & Phys		ENGR1110-01 Eng of Compartment Systems M 11:00-12:50p R 1:00-1:50p		MTH1110-02 & SCI1110-02 ICB, sec 02 Math & Phys	MTH1110-03 & SCI1110-03 ICB, sec 03 Math & Phys
1:50					T 1:00-3:50p F 1:00-2:50p Geddes & Somerville	M 3:00-4:50p W 1:00-3:50p Tilley & Zastavker	W 1:00-3:50p F 1:00-2:50p Geddes & Somerville		ENGR1110-02 Eng of Compartment Systems M 2:00-3:50p R 2:00-2:50p		T 1:00-3:50p F 1:00-2:50p Geddes & Somerville	W 1:00-3:50p F 1:00-2:50p Geddes & Somerville
2:00	ENGR1110-02 Eng of CompartmentSyst ems											
2:50	M 2:00-3:50p R 2:00-2:50p Storey & G. Pratt											
3:00		MTH1110-01 & SCI1110-01 ICB, sec 01 Math & Phys		ENGR1110-03 Eng of CompartmentSyst ems					ENGR1110-03 Eng of Compartment Systems T 3:00-4:50p R 3:00-3:50p			
3:50												
4:00	Design Nature	M 3:00-4:50p W 1:00-3:50p Tilley & Zastavker		T 3:00-4:50p R 3:00-3:50p Storey; G Pratt		Design Nature			Design Nature	Design Nature		Community Service
4:50	ENGR1200 section 03					ENGR1200 section 03			ENGR1200 section 02	ENGR1200 section 03		
5:00	MWR 4-5:50p Linder					MWR 4-5:50p Linder			MW 9-10:50; R 4-5:50p Anderson	MWR 4-5:50p Linder		
5:50												
6:00												
6:50												