Greetings and Welcome to Temple University!

As you embark on your journey as a freshman at Temple, you will have the opportunity to partake of a vast array of newly designed courses in the General Education Program (GenEd).

GenEd courses will push you to broaden your field of vision on many distinct levels. One such level has to do with honing a set of critical skills. Oral/written communication, research, and critical thinking are just a few of the basic skills which you will need to function as an informed citizen in the twenty-first century. They are also skills which GenEd will help you to further develop while here at Temple and ultimately to master and take with you on your life’s journey.

The content material of GenEd courses will also challenge you to reflect, react, and respond to the world around you. Whether it is a course that has a Philadelphia Experience component built into it or a course that deals with Sustainability and Global Cities, each will entreat you to move beyond conventional thinking. In these and many other GenEd courses you will gain new insights and experiences which will bring you closer to Philadelphia and the world.

To help you connect to Philadelphia and its incredible cultural diversity the GenEd Program will once again distribute “PEX Passports” for the academic year 2010-2011. The “Passport” is a booklet of coupons for free or reduced price tickets to sixty-two arts and cultural organizations throughout Philadelphia. From the world-class collection of French Impressionist art found in the Barnes Foundation to the InterAct Theatre Company you will have an opportunity of a lifetime to explore, to learn, and ultimately to grow in new ways.

To find out more about the many offerings and how to use the “Passport” go to the “PEX Passport” tab on the GenEd website and familiarize yourself with it, but also take the time to look there for GenEd course descriptions, video clips, and general information about the GenEd Program:

www.temple.edu/gened

Wishing you all the best for the fall semester and your freshman year at Temple,

Istvan L. Varkonyi, Ph.D.
Director, General Education
AN INTRODUCTION TO GENED

As the 21st century advances, the amount of information available to us and the speed with which we can access information continues to expand at a stunning pace. General Education (GenEd) is a response to this reality: in a world where no one can hope to know it all, the best way to prepare for the future is to learn how information is linked and how pieces of information are interrelated.

GenEd is about making connections. GenEd classes draw connections between academic knowledge and current controversies. From global terrorism to global climate change, from digital mapping to the future of television, GenEd classes will involve looking at cutting edge issues from multiple perspectives. GenEd draws connections too with the city of Philadelphia, as classroom study is integrated with Temple's dynamic urban environment.

GenEd facilitates linkages by stressing the development of eight skills and abilities rather than on content knowledge. The Program in General Education provides opportunities for students to engage in:

Critical Thinking
Think critically

Within GenEd, students who think critically recognize an object of investigation, frame questions about it, and interrogate assumptions—explicit or implicit. Critical thinking includes the evaluation of evidence, analysis and synthesis of multiple sources, and reflection on varied perspectives. Critical thinking generates a well-developed investigation that incorporates supporting and countering claims. A student engaged in critical thinking produces an informed account, a hypothesis for further study, or the solution to a problem.

Contextualized Learning
Understand historical and contemporary issues in context

Within GenEd, students who contextualize learning understand and integrate historical, contemporary, and cultural phenomena and their underlying principles in two broad applications. First, contextual learners recognize the interaction of complex forces that give rise to specific phenomena. Second, contextual learners understand and analyze related events, artifacts, practices and concepts across geographic, chronological and cultural boundaries.

Interdisciplinary Thinking
Understand and apply knowledge in and across disciplines

Within GenEd, students who use interdisciplinary thinking recognize the world presents problems, topics, or issues too complex to be satisfactorily addressed though a single lens. Thus, interdisciplinary thinkers apply multiple perspectives, paradigms, and frameworks to problems, topics, or issues.
**Communication Skills**  
*Communicate effectively orally and in writing*

Within GenEd, students who communicate effectively use spoken and written language to construct a message that demonstrates the communicator has established clear goals and has considered her or his audience. Effective messages are organized and presented in a style appropriate to the context.

**Scientific & Quantitative Reasoning**

Within GenEd, students who exercise quantitative and scientific reasoning use and apply these reasoning processes to explain phenomena in the context of everyday life. Quantitative reasoning includes statistical and/or logical problem-solving, the relationships between quantities, and the use and misuse of quantitative data. Scientific reasoning introduces students to the evolution and interdependence of science and technology and includes problem identification, hypothesis evaluation, experimentation, interpretation of results and the use and misuse of scientific data.

**Civic Engagement**  
*Function as an engaged citizen in a diverse and globalized world*

Within GenEd, students open to civic engagement view themselves as connected to local and global communities where they participate in activities that address issues of public concern. Critically engaged students define issues, pose, probe, and solve problems with an awareness of and an inclusion of the diverse values and interests.

**Information Literacy**  
*Identify, access and evaluate sources of information*

Within GenEd, information literacy encompasses a broad spectrum of abilities, including the ability to recognize and articulate information needs; to locate, critically evaluate, and organize information for a specific purpose; and to recognize and reflect on the ethical use of information.

**Lifelong Learning**  
*Promote a lasting curiosity*

GenEd cultivates these skills and abilities throughout the required undergraduate curriculum, and students will experience these ways of being though readings, discussions, activities, and classes throughout GenEd.
**GENED FRAMEWORK**

In GenEd students are required to take 11 courses in nine different areas as illustrated by the table on the following page.

**FOUNDATION COURSES**

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<thead>
<tr>
<th>RCI</th>
<th>Areas</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>GW</td>
<td>Analytical Reading &amp; Writing</td>
<td>1 course, 4 credit hours</td>
</tr>
<tr>
<td>GQ</td>
<td>Quantitative Literacy</td>
<td>1 course, 4 credit hours</td>
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<tr>
<td>GY</td>
<td>Mosaic I</td>
<td>1 course, 3 credit hours</td>
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<td>GZ</td>
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**BREADTH COURSES**

<table>
<thead>
<tr>
<th>RCI</th>
<th>Area</th>
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<tbody>
<tr>
<td>GA</td>
<td>Arts</td>
<td>1 course, 3 or 4 credit hours</td>
</tr>
<tr>
<td>GB</td>
<td>Human Behavior</td>
<td>1 course, 3 credit hours</td>
</tr>
<tr>
<td>GD</td>
<td>Race &amp; Diversity</td>
<td>1 course, 3 credit hours</td>
</tr>
<tr>
<td>GG</td>
<td>World Society</td>
<td>1 course, 3 credit hours</td>
</tr>
<tr>
<td>GS</td>
<td>Science &amp; Technology</td>
<td>2 courses, 3 credit hours each</td>
</tr>
<tr>
<td>GU</td>
<td>U.S. Society</td>
<td>1 course, 3 credit hours</td>
</tr>
</tbody>
</table>
FOUNDATION COURSES

Students are advised to take the three-semester sequence formed by Analytical Reading & Writing and Mosaic I & II as soon as possible after entering Temple in order and in successive semesters.

Students are advised to take the Gen Ed Quantitative Literacy course as soon as possible after entering Temple and before enrolling in Science & Technology courses.

BREADTH COURSES

In GenEd Breadth courses focus on different ways of knowing, as reflected in different academic fields of study. Adopting one or more of these disciplinary frameworks, you will explore themes, problems and current controversies.

FINDING GENED COURSES

Each GenEd area has a list of courses which satisfy the requirements for that area. Descriptions of the GenEd areas and their approved courses can be found in this booklet or by visiting the GenEd website www.temple.edu/gened.

To find GenEd courses offered in a given semester students can use the following tools:

OWLnet (http://owlnet.temple.edu): Click on the "Register/Roster" tab, then click on the "find a course" button and choose a department. The two-character GenEd code for a course appears in the "Course ID (RCI)" column.

The Course Schedule (TUcourses): Select a semester, then click on the "View General Education Courses Only" option. Alternatively, select a semester, then select a department and a GenEd area to display.

The Course Renumbering web site, (http://renumbering.temple.edu/courses.asp): Select an area in the "Required Course Identifier (RCI)" box and click "Search" to see a list of all courses offered in that GenEd area.

ANALYTICAL READING & WRITING (GW)

This course should be taken as soon as possible—ideally in the first semester, but certainly in the first year.

Analytical Reading & Writing is intended to teach students how to:

- Read and discuss for the purposes of careful analysis and critique;
- Use rhetorical strategies to take a position, marshal evidence and respond to opposing views;
- Retrieve, evaluate and synthesize evidence and commentary on a topic;
- Revise drafts for clarity and intellectual sophistication;
- Reflect on the writing and reading processes; and
Demonstrate both fluency and competence with Standard English in writing and editing personal work.

Course Descriptions for Analytical Reading & Writing

Analytical Reading & Writing
ENGLISH 0802, 0902

Students explore a single theme from the point of multiple disciplines. Early in the semester, they work on research and the evaluation of sources, moving through a sequence of papers that develop argumentation and the synthesis of materials. Library research is required, and sessions with librarians are part of the course. Individual instructor-to-student and small group conferences will be held several times during the semester. Evaluation is predicated on a passing final portfolio of at least four assignments that are developed through multiple revisions.

English as a Second language (ESL) Analytical Reading & Writing
ENGLISH 0812

Designed to accommodate the needs of the ESL learner, this course follows the guidelines for ARW, developing the skills of argumentation and synthesis in an interdisciplinary context, while embracing the cross-cultural implications both of what it means to do academic work and also what it means to share historical and cultural knowledge. Oral participation is encouraged as a way of developing fluency and enhancing comfort with participation in American academic settings. As with ARW, there are sessions with librarians as students work on research and evaluation of sources and multiple conferences with peers and with the instructor.

Quantitative Literacy (GQ)

GenEd Quantitative Literacy courses present mathematical thinking as a tool for solving everyday problems, and as a way of understanding how to represent aspects of a complex world. They are designed to prepare students as citizens and voters to have the ability to think critically about quantitative statements, to recognize when they are misleading or false, and to appreciate how they relate to significant social or political issues. While computation may be part a QL course, the primary focus is not computational skills.

Quantitative Literacy courses are intended to teach students how to:

- Understand quantitative models that describe real world phenomena and recognize limitations of those models;
- Perform simple mathematical computations associated with a quantitative model and make conclusions based on the results;
- Recognize, use, and appreciate mathematical thinking for solving problems that are part of everyday life;
- Understand the various sources of uncertainty and error in empirical data;
- Retrieve, organize, and analyze data associated with a quantitative model; and
- Communicate logical arguments and their conclusions.
Course Descriptions for Quantitative Literacy

Digital Maps: From Mercator to Mashups
COMMUNITY & REGIONAL PLANNING 0821, GEOGRAPHY & URBAN STUDIES 0821

From web-based applications like Google Maps, to automobile navigation systems, to satellite pictures of hurricanes, digital maps are widely used to display information about the Earth. This course unmasks the underlying technologies used for computer-based mapping, including Global Positioning Systems (GPS), satellite remote sensing, and Geographic Information Systems (GIS). We will investigate how computers store and analyze digital maps, and see how mapping technologies can be used to address a variety of societal problems, such as analyzing the environmental impacts of urban growth, tracking the spread of a deadly disease, and planning for earthquakes and other natural disasters.

Investing for the Future
ELECTRICAL ENGINEERING 0822, FINANCE 0822, 0922

Thinking about investing but don't know what to do or where to start? Mystified by a 401(k) versus a Roth IRA selection? Confused by the choice of mutual funds, index versus actively managed, load versus no load? And what about exchange traded funds (ETFs)? Want to prepare for your financial future, but not sure how? Learn what it really means to invest in your future, beginning with how to compute what you need for the future such as college or retirement. Then learn how to connect the dots between risk, return, and cost of investing. This class will teach you about seemingly complicated financial topics in a very comprehensible manner that will help you make informed financial decisions to ensure a secure financial future.

Math for a Digital World
COMPUTER & INFORMATION SCIENCES 0823, 0923, MATH 0823, 0923

How can I tell if an Email message is really from my bank? If I do online banking, can other people see the information? Does playing the lottery make sense? Does it make sense to draw for an inside straight? How can polling results differ so much from the election --- or do they? Sometimes the winner of an election in the US gets much less than 50% of the vote. Would it make sense to have a run-off in such cases? How long will the world's oil last, assuming that we use more each year. How long will a million dollars last you, assuming it earns interest until you spend it? If you bought your text online, could someone tap into the Internet and get your credit card number when it's transmitted? Why does the VIN on your car have so many digits?

Mathematical Patterns
MATH 0824, 0924

News stories, everyday situations, and puzzling vignettes will be used to illuminate basic math concepts. Learn probability, for example, by discussing the gambler's fallacy and gambler's ruin, the drunkard's random walks, the Monty Hall problem, the St. Petersburg paradox, the hot hand, monkeys randomly typing on a typewriter, and many others. A similar approach involving estimation problems and puzzles will be taken in the units on basic numeracy and logic. Throughout the course, lectures and readings will examine the mathematical angles of stories in the news, suggesting fresh perspectives, questions, and ideas on current issues from Google searches to the randomness of the iPod shuffle.
Quantitative Methods in the Social Sciences

ANTHROPOLOGY 0825, POLITICAL SCIENCE 0825, PSYCHOLOGY 0825, SOCIOLOGY 0825, 0925

Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life.

Statistical Reasoning & Games of Chance

STATISTICS 0827

Learn about probability and statistics (combinatorial probability, conditional probability, Bayes’ theorem, independence, random variables, expectation, variance, binomial and Poisson distributions, random sampling, empirical probability, laws of large numbers, central limit theorem, pseudo random numbers, and Monte Carlo simulation) while looking at real-life applications such as blackjack and poker, sports betting, lotteries, pari-mutuels, and the stock market. You will better understand betting systems and their drawbacks, and investigate the social and ethical impact of legalized gambling.

Statistics in the News

STATISTICS O826

Through discussion of approximately 50 news articles, learn basic principles of statistics. This course focuses on the relevance, interpretation and usage of statistics in the news media. It has no quantitative prerequisites and involves more reading than math aptitude. Statistics deals with the study of variability, uncertainty, and decision-making, and has applicability to most other disciplines and everyday life.

MOSAIC I & II: SEMINAR IN THE HUMANITIES (GY & GZ)

In these small discussion-based classes, students will be guided though a thematic approach to primary texts from great world cultural and intellectual traditions. Themes such as “journeys,” or “faith” or “money” are the basis for reading and understanding a set of important texts from different time periods and different cultures. For example, as students explore the theme of “power,” they will start with Homer’s Iliad and the Declaration of Independence. Expanding on this theme, they will read 18th century political philosopher John Locke and 20th century American civil rights leader Martin Luther King Jr., while weaving in important texts from China and the Middle East. As students interrogate the theme of “power,” they will be making connections across different time periods, cultures, and types of writing.

The Mosaic sequence will be enhanced by the addition of “texts” from great world musical, artistic and architectural traditions, allowing students to grapple with important themes in a richer multidisciplinary and multicultural fashion.
Mosaic courses build upon the communication and critical thinking skills students developed in the Analytic Reading & Writing course, particularly the ability to make connections and arguments across different texts. That is why it is so important to take the ARW course before taking Mosaic.

Upon completion of the Mosaic sequence, students will be able to:

- Read in its entirety an unfamiliar and problematic written text (theoretically, historically, or culturally challenging);
- Recognize abstractions, large ideas, and implications associated with difficult written texts;
- Make connections across disciplines, history and cultural boundaries;
- Construct positions, arguments, and interpretations through textual analysis and evaluation; and
- Produce thoughtful writing that reflects persuasive position and the conventions of academic discourse.

Course Descriptions for Mosaic I & Mosaic II

Mosaic I (GY)  
INTELLECTUAL HERITAGE 0851, 0951

Students investigate the nature of the individual in human society as illuminated by philosophical, psychological, religious, and political texts in dialogue with examples from art and literature. Themes: journeys, self & others, community, faith.

Mosaic II  
INTELLECTUAL HERITAGE 0852, 0952

Students continue to work with texts across cultures, histories and disciplines, extending their investigation of human society to the cosmos, and moving from in-depth textual analysis to broader considerations of scientific discourse, philosophy and ethics. Themes: science, power, money, environment/city.

BREADTH AREAS

In GenEd Breadth courses focus on different ways of knowing, as reflected in different academic fields of study. Adopting one or more of these disciplinary frameworks, you will explore themes, problems and current controversies.

Courses in the Breadth areas introduce students to ways of knowing and understanding controversies and problems from one or more disciplinary frameworks, and thus, the same course can be by one or many departments. For example, the first course listed under the ARTS (GA) area is Arts in Cultural Context. Any of these departments may offer this course in any given semester, but you can only receive credit toward graduation for one Art in Cultural Context course even if different departments offered the class.

Departments change their course schedules every semester, particularly in the Breadth. Some departments will offer courses every semester while other departments may only offer a
course once a year or every three semesters. To find out the most up-to-date list of courses, visit TU Courses online at www.temple.edu/tucourses.

**ARTS (GA)**

GenEd Arts courses develop artistic literacy. Courses may be centered on one of the arts (e.g. dance, fine arts, music), may be interdisciplinary in nature (e.g. creative writing and theater, film and dance), or may address larger themes (e.g. creativity, the arts and political statement, technology and the arts), but all Arts courses make some connection to other perspectives, disciplines, or subject areas.

Gen Ed Arts courses are intended to teach students how to:

- Experience and respond to a work of art or creative process;
- Recognize and interpret a work of art or creative process in a societal, historical or cultural context;
- Describe or evaluate a work of art or creative process using appropriate terminology;
- Demonstrate "appreciation" for the value of art in our lives and society; and
- Function as a member of an audience.

**Course Descriptions for Arts**

**Art in Cultural Context**

*ARABIC 0871, HEBREW 0871, RUSSIAN 0871*

View the arts as an expression of cultural identity as it occurs across the globe. Each semester, we will focus on a particular world region or country, including but not limited to Russia, Japan, and Latin America. The exploration of cultural identity begins with an overview of the region or country’s historical and religious influences and then studies the culture’s arts, including the visual arts (painting, sculpture), musical traditions, literature (folktales, national mythology), the vernacular arts (crafts, storytelling), film and theater. You will take field trips or have experiences that will allow you to encounter the region’s arts firsthand, and to develop a blended understanding of a people’s cultural identity and the larger world.

**The Art of Acting**

*THEATER 0825, 0925*

Whether you have some or no experience in theater, this course will open new doors and provide a firm understanding of the actor’s craft. We will start with improvisatory exercises to explore basic principles of acting, which will help you expand their expressive capabilities, imagination and spontaneity, and give you greater confidence on stage and in front of people. At the same time, you will use your growing knowledge of the craft to analyze the work of actors on stage and film. Finally, you will work on assigned scenes from dramatic literature, giving you the basic tools of text analysis, the principal tool with which an actor figures out a text.
The Art of Listening  
*MUSIC STUDIES 0802, 0902*

Are you an active or passive listener? What kind of music do you enjoy? How do you compare different musical styles, and what qualities make one performance different from another? Be challenged to rethink your entire conception of music by focusing on how to listen to music to deepen your appreciation of what you are hearing, and to ponder the importance of music in your life and to society. You will not be required to become a performer yourself, but you will become a more discriminating consumer of music through attendance at live concerts in the local area, by observation of in-class performances, rehearsals, and music lessons, and through guided listening exercises in and outside of class. Repertoire selected from Classical, Jazz, Broadway, and World Music will engage your intellectual and emotional response as a concert-goer, listener, researcher, critic, and communicator.

Arts of the Western World: The Visual Experience  
*ART HISTORY 0808*

Philadelphia has extraordinary resources in the arts. This course will give you direct exposure to the visual arts, and help you understand their relationship with music, dance, theater, and the other artistic expressions that also form our heritage. Through visits to museums and performances, guest speakers, lectures, films and discussions, you will be introduced to the great monuments and the major movements that place the visual arts of the western world in a broad cultural framework. You will learn about the concepts that connect the progression of ideas in artistic communication and expression from the ancient world to modern times.

Creative Acts  
*ENGLISH 0826, 0926*

This course focuses on the art of writing, finding one’s voice, and writing for different genres. In a small classroom setting, you will work with the faculty member and other students to improve your writing through work-shopping. Other readings will allow you to develop your craft. By the end of the semester, you will produce a portfolio of your work.

The Creative Spirit: A Multidisciplinary View  
*THEATER 0807, 0907*

Human is the animal who creates, but why and how? Whether we are making art or making dinner, creativity ultimately makes a difference in our lives and the lives of others. In this course we will view creativity through the lens of the arts and explore the broader manifestations of the creative spirit in a variety of related fields and disciplines. Students will learn the fundamental concepts of creativity and engage with artists, performers and working professionals exploring the central role creativity plays in their work. Explore your creativity in weekly hands-on group sessions augmented by periodic field visits to see performances, concerts, galleries, etc. Be creative, follow your bliss and develop a passion for life-long learning!
The Dramatic Imagination: The Performing Arts in Society
THEATER 0805

Theatre, dance, and opera--our imaginations give us the natural ability to accept the make-believe worlds they create on stage. While it is the imagination that ultimately allows us to enjoy the performing arts, imagination also plays a role in creating these worlds. Take advantage of our rich local arts community as you experience live performances in Philadelphia! We will use our imaginative capacities to deepen our own experience, while learning about the value of the arts, the controversies surrounding them, and differences in people’s perceptions of the performing arts as compared to other forms of entertainment.

Exploring Music
MUSIC STUDIES 0812

Why do we enjoy listening to music? Besides our own enjoyment of it, what is the purpose of music---not only for us today, but also throughout history? What is so important to humans about music that it exists in every culture on earth, regardless of time or place? How has Western music developed over the centuries? What does music tell us about ourselves? What words should you use to describe the music you are hearing? Explore these and other questions while you are actively involved, participating in listening exercises, viewing video recordings of concerts, operas, ballets, films, and staged productions, and attending at least one live concert.

The Future of Your TV
BROADCAST TELECOM MASS MEDIA 0821

What is the future of your TV; what kind of programming will you see in the next two years? What role will blogs, vlogs, podcasts, YouTube and other social networks have in transforming television into a medium where consumers drive content? Television is not going away but how, where and when we interact with it is changing. In large lecture you will learn about these changes; in small labs, you will take the driver seat as creator of content. Your assignment: based on careful analysis of readings, lectures and interactions with professionals, determine how you will tell a story that will reach an audience you define.

Greek Theater & Society
GREEK & ROMAN CLASSICS 0811, 0911

Through close readings of surviving texts, through viewings of modern productions of ancient theatrical works, and through your own recreations of Greek performative media, we will examine and experience ancient Greek drama both as a product of its own historical period and as a living art form. We will ask fundamental questions about the nature and purpose of theater in the ancient world: is this art just entertainment or does it engage and comment on the problems of Athens? How and why did this society invent theater in the Western world? We will also investigate the relationship of Greek drama to the modern world: why do new versions of plays about Oedipus, Antigone and Dionysus keep popping up in places as diverse as New York, Utah, South Africa and China? How can ancient drama be staged now in a way that is both responsible to the surviving texts and stimulating to contemporary audiences?
**Jazz Century in America**  
*DANCE 0806*

What is jazz? Students will explore its roots and reinventions in Ragtime, Hot Jazz, Blues, Swing, Bebop, Free Jazz, Rhythm & Blues, and Hip Hop throughout the 20th century in America. We'll experience its manifestations across media, screening dance films, listening to music, viewing visual art works, and reading poetry. Then we'll move into the studio to experience first-hand its rhythms, moods, dynamics, creative expression and improvisation. A key theme will be how the individual and the collective nurture each other in jazz. Intellectually, we'll examine the historical and social backdrop and analyze the essential components of jazz.

**The Meaning of the Arts**  
*PHILOSOPHY 0847, 0947*

As we blend philosophical inquiry into the nature of several of the arts and the roles they play in society with analyses of particular artistic practices, we shall critically examine questions like these: Is the main goal of art to imitate or represent the world? If so, do painting, sculpture, architecture, photography, movies, music, dance, theater, performance art, literature, handicrafts, fashion, bodily ornamentation and the like, provide knowledge about ourselves and the world around us? What is—or should be—the relationship between art and some of the other great domains of human thought, action, and concerns such as religion or the realm of social and political relations, especially matters concerning gender, sexuality, class, race, morality, and community? Do the arts or artistic institutions have specific social functions? For example, is there a connection between museums, imperialism, and nationalism? Are films embedded in networks of commodity production? Are there specifically urban or global dimension to these questions?

**Philadelphia Arts & Culture: Public Places, Private Spaces**  
*AMERICAN STUDIES 0801*

What and where is the real Philadelphia? How can we get past the clichés to better understand and experience the city's historic and legendary sense of itself? For more than three centuries, Philadelphia's unique identity has been defined and redefined by a prodigious and prolific creative community: painters, sculptors, writers, performers, architects, planners, thinkers, and more. We'll explore Philadelphia's evolving sense of itself through a broad range of examples of creative works from the 17th through the 20th centuries. And through this prism of expression, and the institutions that present and protect it, we'll develop a deep understanding of Philadelphia as one of the nation's most creative cities.

**Shakespeare at the Movies**  
*ENGLISH 0822, 0922*

Love and political ambition and violence and evil and laughter and wit and racial antagonism and the battle between the sexes and the joy and misery of being human--Shakespeare's plays are about all of that. Discover how they work in film and video. Learn to read films and understand what actors, directors, composers, set designers; cinematographers, etc. do to bring the bard's plays to life. We will view *Merchant of Venice, Richard III, Othello, Much Ado about Nothing,* and *Romeo and Juliet* and study how these plays got from the page to the screen. We will look at actors of the present day – Pacino, McKellen, Hopkins, Hoskins, Fishburne, Branagh, Thompson, DiCaprio, Danes, etc. and also at giants of the past, like
Laurence Olivier, to see how actors create their roles. This course includes group work in reviewing film techniques, innovative writing instruction, and an introduction to research. You will have access to whole plays and to selected clips streamed to your computer.

Shakespeare and Music
*MUSIC STUDIES 0804*

What is it about the Bard of Stratford-on-Avon? From the concert hall to the stage and silver screen, no other author’s works have inspired more adaptations than those of William Shakespeare. In this new century, as the “cult of originality” continues to grow at an exponential rate and celebrity is sought as an end in itself (see Hilton, Paris), why have the works of a man whose very identity is shrouded in mystery remained so popular? This course will explore *Macbeth*, *A Midsummer Night’s Dream* and *Romeo and Juliet*, and their adaptation by composers and choreographers. Students will then get a chance to “bend the Bard” on their own!

Sacred Space
*ART HISTORY 0803, GREEK & ROMAN CLASSICS 0803, 0903, RELIGION 0803*

Where do people go to communicate with the divine? Explore with us where and how people of the many different cultures of the Greco-Roman world communicated with their gods. Why are graves and groves considered sacred space? When is a painting or sculpture considered sacred? Whom do the gods allow to enter a sacred building? Can a song be a prayer or a curse? How can dance sway the gods? Why do gods love processions and the smell of burning animals? The journey through sacred space in Greco-Roman antiquity will engage your senses and your intellect, and will reveal a mindset both ancient and new.

Shall We Dance: Dance as Narrative in American Film
*DANCE 0831, 0931*

Investigate the role dance plays and has played in informing and acknowledging social trends in the twentieth and early twenty-first centuries. Connections are made between dance and immigration, industry, politics, fashion, social change, class and gender, nationalism, education and popular culture. Dance both perpetuates and challenges social and cultural issues of power, class, gender, sexual orientation, and age, and acts as a mirror of our society. We will study popular perceptions of dance, dance in Hollywood, and dance as a reflection of social change, dance as social ritual, dance and contemporary notions of the “Impossible Body.” Students will learn through movement exercises, dance classes, lecture, discussion and film/video tape viewing.

Transnational Cinema
*ENGLISH 0975*

As he recently commented on the sad state of globalized affairs in which “the cosmopolitanism of international filmmaking is matched by the parochialism of American film culture,” New York Times film critic A.O. Scott asked, “The whole world is watching, why aren’t Americans?” This course will use Scott’s question as a point of departure to investigate the ostensible reasons why Americans, or in our case, Philadelphians, aren’t watching “transnational cinema” -- international films that gain distribution outside of their country of production, and that depict transnational movements of people, capital, and social values. Are transnational films playing at a theatre near you? Perhaps they are, but if not, why not? Which “foreign films” are allowed
to cross the border into our country? How, when, and where do we get to “see the world” and why does that matter in today’s globalized, interconnected world? Learn “how to see the world” -- not as a one-dimensional quaint or exotic representation of the “other” -- but instead through the ways in which these films engage critical contemporary issues of nation, transnation, and globalization in an increasingly interconnected transnational public sphere.

**World Musics & Cultures**  
*MUSIC STUDIES 0809, 0909*

Have you ever wondered why musical compositions from different parts of the world sound so dissimilar? Why does Japanese music employ silence as a structural element and Chinese melodies use only five notes? Discover how an artist’s creative imagination is molded by the cultural values of the society at large. Listen to guest musicians demonstrate different styles of playing and attend a live concert. Examine folk, art and popular music from around the world and discuss the wonderful and strange sounds that are produced.

**HUMAN BEHAVIOR (GB)**

GenEd Human Behavior courses address the relationships between individuals and communities. Courses may focus on the relationship between individuals and communities in general or may engage those relationships from specific perspectives (such as art, music, education, religion, economics, politics or education), or look at them within specific themes (such as food & eating, crime, crisis, sexuality, adolescence).

Human Behavior courses are intended to teach students how to:

- Understand relationships between individuals and communities;
- Understand theories or explanations of human behavior used to describe social phenomena;
- Examine the development of individuals' beliefs, behaviors, and assumptions and how these affect individuals and communities;
- Apply one disciplinary method to understand human behavior or explain social phenomena;
- Access and analyze materials related to individuals, communities or social phenomena; and
- Compare and contrast similar social phenomena across individuals or communities.

**Course Descriptions for Human Behavior**

**Asian Behavior and Thought**  
*ASIAN STUDIES 0811, CHINESE 0811, CRITICAL LANGUAGES 0811, JAPANESE 0811, PHILOSOPHY 0811, RELIGION 0811, 0911*

We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born. Self-identity, which is socially and culturally constructed by our experiences
and Interactions with others, carries a personal as well as an interpersonal meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them.

**Bilingual Communities**  
*SPANISH & PORTUGUESE 0826*

What is the relationship between language and identity? How do bilinguals sort between their two languages and cultures to form their identity? In bilingual cultures, is one language always dominant? What happens when a language or dialect is distinct from the dominant language or dialect of the greater society? Why did language resurgence efforts fail in Ireland but succeed in Catalonia, Spain? Why does Guarani enjoy greater protection in Paraguay than Mayan dialects in Guatemala? Is it possible to legislate language behavior? Explore issues of power and solidarity where two languages or dialects are in contact: How are these cultural identities expressed through choice of language? We look at a broad geographical range which might include the US, Canada, Latin America, Europe and Africa.

**Criminal Behavior**  
*CRIMINAL JUSTICE 0812, 0912*

Although we like to think differently, committing crime is an extremely common human behavior. From the extremes of armed robbery or serial murder to the ordinary failure to declare income on tax returns or the tendency to speed on the highway, nearly everyone has broken the law and committed a crime at some point. Considering physiological, psychological and pharmacological factors, we explore the influences of family, peers and the effects of alcohol and drugs on the incidence of criminal behavior. And we examine how the urban and social environment encourages (or inhibits) opportunities to commit crime.

**Disability Identity**  
*GEOGRAPHY & URBAN STUDIES 0813, THERAPEUTIC RECREATION 0813*

Odds are that each of us will encounter disability at some point in our lives, either directly or indirectly through family, friends, neighbors and colleagues. What is it like to live with a disability, and how does disability intersect with other aspects of personal identity, like gender, race and culture? Is disability socially and culturally defined? Join us as we examine historical perspectives of disability marked by fear and discrimination and fueled by media portrayals. We will then explore most recent indicators of personal, social, and environmental change that support disability identity and result in a more accommodating environment for us all.

**Eating Cultures**  
*ENGLISH 0837*

You are what you eat, they say, but what, precisely, determines our eating habits and what, exactly, do they say about us? How do these habits influence our relations with others in our communities and beyond? Eating is an activity common to all human beings, but how do the particularities and meanings attributed to this activity vary across different times and places? Using literature, visual media, cookbooks, food-based art, and advertisements as our starting point, we will examine how food perception, production, preparation, consumption, exchange, and representation structure individual and communal identities, as well as relations among individuals and communities around the globe. Our focus on this most basic of needs will allow us to analyze how food conveys and limits self-expression and creates relationships as well as delimits boundaries between individuals and groups. Materials will be drawn from a wide range
of disciplines including, but not limited to, literary and gender studies, psychology, anthropology, history, sociology, and economics

**Emotional Intelligence and Leadership**  
*STRATEGIC & ORGANIZATIONAL COMMUNICATION 0821*

Using an interdisciplinary approach that looks at the theory of emotional intelligence and the leadership process in diverse personal, cultural, political, and business contexts, you will enhance your own leadership capacity. Develop conceptual thinking, self-awareness, self-management, personal motivation, social skills, and your capacity for empathy within a globalized and interconnected world. Engage in personal reflections, class discussions, small group experiential activities, and collaborate on a case study project as you observe and interview Philadelphia community leaders.

**Guerrilla Altruism**  
*ARCHITECTURE 0835*

According to the UN, more than one billion people do not have adequate shelter and more than 100 million people live in conditions classified as homeless. More than two billion people do not have access to safe drinking water or sanitation, including 400 million children. Almost four thousand of these children will die every day as a result. This course invites you to change these statistics. We will look to renowned thinkers and makers, strategists and guerrillas who have used grassroots strategies to help underrepresented populations affect change, including: Adbusters (Kalle Lasn), Architecture for Humanity (Cameron Sinclair), Pierre Bourdieu, Design Corp, Che Guevara, Michel Foucault, Heavy Trash, Jersey Devils, Kick Start International, Light (Jae Cha), Mad Housers, Carlos Marighella, and Rural Studios (Samuel Mockbee). You will use this research to realize a small-scale project, movement or intervention to aid a disadvantaged person or community group around Temple University, creatively offering your distinct talents to those who need them most.

**Human Ecology**  
*ANTHROPOLOGY 0814, GEOGRAPHY & URBAN STUDIES 0814*

Human hunters may have contributed to animal extinctions as early as 10,000 years ago; civilizations in the ancient Near East developed complex irrigation networks that led to some of the area’s permanent deserts. Since pre-history, humans had an impact on the environment, but changes in technology have magnified the scale of human influence. Today, attempts at sustainable land use are often at odds with struggles for indigenous population rights, with population migration and increases in population size, or with desires to preserve areas for national parks or tourism, let alone attempts to exploit natural resources. Study the ecological principles underlying the relationship of humans with the environment and the explosion of conflicts surrounding modern environmental use.

**Human Sexuality**  
*PSYCHOLOGY 0818, SOCIOLOGY 0818, 0918*

Our sexuality is a core part of being human. We often think about sexuality in terms of the physical and reproductive aspects of sex. But our sexuality is complex and dynamic. We will address this dynamic complexity as we explore the physical, psychological, relational, and cultural aspects of sexuality. The goal of this course is to broaden your perspective of human
sexuality, and deepen your understanding and awareness of your own sexuality and the many influences on this essential part of yourself.

**Identity and Crisis**  
*HUMAN RESOURCES MANAGEMENT 0838*

As we go through life there will be natural changes that we must deal with. For college students this involves for many being on your own for the first time, picking a major, trying to figure a possible work career, dealing with a roommate. There will also be unplanned changes or crises that each of us will face at different times, such as the sickness/death of loved ones; broken relationships; work problems, as well as our own mortality. One goal is to face each crisis in as healthy a way as possible, without physically or emotionally hurting others or ourselves. The Northern Illinois University and Virginia Tech tragedies are an extreme example of how someone can lash out violently. The more prepared we are to deal with a crisis and conflict, the better we can come through it, helping ourselves and perhaps others too. Part of this preparation can involve examining our belief systems—including religious/spiritual—and the ways we perceive and think.

**Interpersonal Communication**  
*ADULT & ORGANIZATIONAL DEVELOPMENT 0836*

In a reflective, supportive environment, enhance your ability to develop successful interpersonal communication with your family, friends and work colleagues. Assess your own communication skills, develop and set personal goals and an action plan to create the change you wish to see. Investigate how interpersonal communication needs and effectiveness change throughout life, from early childhood, to adolescence, through young adulthood, middle age, and old age. There will be frequent small group discussions, and opportunities to learn through direct observation of real-life situations.

**Kids, Community and Controversy**  
*EDUCATION 0823*

Why does Philadelphia have a dropout rate of roughly 50%? Why have students brought weapons to school and plotted to kill their classmates? Why, despite decades of progress in race relations, do schools remain largely segregated institutions? These questions are derived from three pressing social problems in American society that play out in our schools; high school dropouts, school violence, and segregation. Using these questions and the larger issues to which they are related, explore the multiple and often competing explanations for these and other social problems in American society. Learn about the search for creative solutions at the individual level as well as within our social structure. Guest speakers, observations within the Philadelphia school system, and analysis of films depicting these issues will enrich the course experience.

**Language in Society**  
*ANTHROPOLOGY 0815, ASIAN STUDIES 0815, CHINESE 0815, COMMUNICATION SCIENCES 0815, EDUCATION 0815, ENGLISH 0815, ITALIAN 0815, PSYCHOLOGY 0815, RUSSIAN 0815, SPANISH 0815*

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should
English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members.

**Philosophy of the Human**  
*PHILOSOPHY 0839, 0939*

What is a human being? How do we become fully human, and how might that humanity be diminished or compromised? This course examines a range of answers to these questions from ancient, romantic, modern, postmodern, and postcolonial sources. Including the thought of Plato on the meaning of love, Emerson on our genius, Freud on our neuroses, and Fanon on our liberation, discussion turns to some of the most influential literary, historical, and cinematic treatments of the human condition as it appears in our own time.

**The Photographic Image**  
*GRAPHIC ARTS AND DESIGN 0822, SOCIAL WORK 0822*

Is there more to photography than that single "decisive moment" in the hunt and capture of an image? How do photographers comment on issues that are important to them? How can photographs tell a story? Is there a way one can use the art of photography to elicit change? We will look at photography in its historical context—at the advent of documentary photography and photojournalism, and at narrative photography in its more contemporary form, as photographers use it to chronicle their own lives. Through looking at and making—with your digital camera—photographic images, you will learn several core concepts of social work and human behavior theory. You will learn about the place photography holds in our culture, and about our culture itself, and your place in that culture. We will critically analyze published photographs, as well as photographs you and other students have made. The semester will culminate in a class exhibition.

**Quest for Utopia**  
*ENGLISH 0824*

The extreme version of "the grass always been greener on the other side" has been a vision of a mythical place where all is peace, balance, perfection and happiness. The concept of utopia—somewhere better than this—has been with us for centuries, but what drives it? And why, when the quest is for betterment and maximum benefit for all, do utopias so often go bad? This course will examine what visions of utopia and dystopia have existed in literature from around the world. We will look at it alongside writing from a variety of disciplines to try to understand why utopia resists our reach, and the kind of behavior, for better and for worse, that the quest for utopia brings about.

**Teens & Tweens**  
*EDUCATION 0819, 0919*

Exuberance, risk-taking, experimentation, breaking away, testing limits. Anxiety, peer pressure, competition, parental pressure, work and school, drugs and alcohol, test scores. These are some of the challenges that make adolescence one of the most intriguing and disturbing stages of life. Although adolescence is only one stage on the continuum of human development, in contemporary society the extended period between childhood and adulthood
seems to capture all the attention. Why? This class takes a close look at one of the most confusing, exciting, and critical phases of development, the pre-teen and teen years. Using literature, TV and film, as well as articles and books from the field of human development, the course will explore how children grow into teenagers, how they survive the challenges of adolescence, and how they become productive adults.

**Workings of the Mind: The Devil Made Me Do It**  
*PSYCHOLOGY 0816, 0916*

A Caucasian is heckled during his night-club act and goes into a rant against African-Americans. A celebrity is pulled over for DUI and goes into a rant against Jews. Both then claim that those behaviors are “not the real me.” They claim that they are not racist or bigoted. If they do indeed believe their denials, then we are left with a question: Why did they behave as they did? Perhaps we are not always in conscious control over what we do. Drawing on disciplines within psychology, including neuroscience and cognitive science, as well as clinical, developmental, evolutionary, and cultural psychology, we explore the possibility that we can process information and behave in response to information in ways that are out of our conscious control.

**Youth Cultures**  
*ANTHROPOLOGY 0817, EDUCATION 0817, 0917, SOCIOLOGY 0817*

Do you listen to hip hop, spend all your time in Second Life, dress up like a cartoon character and go to anime fairs, or go skateboarding every day with your friends? Then you’re part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to try on identities as they work their way to a clearer sense of self. Empowered by new technology tools and with the luxury of infinite virtual space, young people today can explore identities in ways not available to previous generations. Students in this class will investigate several youth cultures, looking closely at what it means to belong. They will also come to appreciate how the media and marketing construct youth identities and define youth cultures around the world.

**RACE AND DIVERSITY (GD)**

Race & Diversity courses develop a sophisticated understanding of race and racism as dynamic concepts, pointing to the ways in which race intersects with other group identifications such as gender, class, ethnicity, religion, age, sexual orientation or disability.

Race & Diversity courses are intended to teach students how to:

- Recognize the ways in which race intersects with other group identifications or ascriptions: gender, class, ethnicity, sexual orientation, religion, disability, age;
- Understand the relationships among diversity, justice and power;
- Explore what it means for individuals and institutions to exist in a multi-racial, multi-cultural world;
- Investigate the various forms race and racism has taken in different places and times; and
- Discuss race matters with diverse others in relation to personal experience.
Course Descriptions for Race & Diversity

African Americans and Law: Weapon or Tool?
LEGAL STUDIES 0803, 0903

Learn about the experience of African Americans through the lens of the US legal system. US law, which first defined African Americans as less than human, eventually declared discrimination illegal, and remains both an expression and an instrument of change at the intersection of race and equality. As you study this evolution, you will reflect on relevant current events, and explore your own responses to the kind of everyday encounters that continually arise in our pluralistic society. Can race be used as a factor in hiring, in college admissions? Is race a factor for you in dating, marriage, adoption? We explore issues like these on both broad social and personal dimensions.

Classics of African American Theater
THEATER 0841

In part because of its development, initially, as a consequence of enslavement, African American theater is both entertaining and potentially volatile. We will look at some of the most important African American plays from the late 1700’s through to the present, and explore the problems, contestations and the nature of race, class, and gender as exemplified in these dramatic texts. From Ira Aldridge’s *The Black Doctor* in 1847, through to August Wilson’s *Radio Golf* (2007), we will investigate the historical emergence and institutionalization of race thinking and practice on the American stage. As we consider this span of performance literature, we will analyze debates about race and social justice, investigate the collaborative nature of theater and develop oratory skills in provocative discussions.

Dimensions of Diversity: What’s Brewing in the Melting Pot?
TOURISM & HOSPITALITY MANAGEMENT 0827

Are we really living in a melting pot? How important are the differences and similarities among individuals? The purpose of this course will be to focus on a variety of issues related to the nature of personal and cultural identify within a diverse American society. Specifically, this course will explore critical factors that shape one’s place or standing in society (e.g., race, disability, age, gender, and sexuality). The meaning and significance of these dimensions will be explored as they relate to the societal and technological complexities of the 21st Century. The best practice and research in racism, inequality, and social injustice in industries such as sport, leisure, tourism and healthcare will be explored.

Embodying Pluralism
DANCE 0828

Dance and the arts are vehicles of societal change. As you challenge and extend your perceptions of “self” and “other” in a pluralistic society, you will explore aspects of identity, difference, and diversity from aesthetic and ethical perspectives. Race, ethnicity, gender, class, and other social phenomena will be studied as elements that form the fabric of American society. Theory from lectures on historical and philosophical perspectives will be thoroughly integrated in immersive, active studio practices. The purpose of this course is to illuminate personal, social and cultural dynamics of race and diversity in the United States.
Ethnicity and the Immigrant Experience in the U.S.
SOCIOLOGY 0835, 0935

How do immigrants learn to become American? How does living an ethnic identity vary for different groups? When does ethnicity become a chosen identity or an unwanted label? How do we learn to value some aspects of ethnicity but not others? What are markers of ethnicity? How do language, food, music, family and community work to provide authenticity to the American immigrant experience? What happens to ethnicity with assimilation to the American way of life? Can ethnicity combat the tidal social expectations to conform to the dominant culture? Using a variety of written materials including novels that explore the ethnic identity of different groups, this course raises questions about how ethnicity and American identity are connected.

History & Significance of Race in America
AFRICAN AMERICAN STUDIES 0829, ANTHROPOLOGY 0829, GEOGRAPHY & URBAN STUDIES 0829, HISTORY 0829, POLITICAL SCIENCE 0829, SOCIOLOGY 0829, 0929

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that “all men are created equal”? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate “races”? What were the causes and consequences of Japanese Americans’ internment in military camps during World War II? Are today’s Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences.

Immigration and the American Dream: Hearing the Immigrant Voice
ANTHROPOLOGY 0831, CRITICAL LANGUAGES 0831, HISTORY 0831, ITALIAN 0831, 0931, RUSSIAN 0831, SOCIOLOGY 0831

As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants’ own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping.

Politics of Identity in America
HISTORY 0832, POLITICAL SCIENCE 0832, SOCIOLOGY 0832, WOMEN’S STUDIES 0832, 0932

Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives.
Race & Ethnicity in American Cinema
FILM & MEDIA ARTS 0843, 0943

Movies have played a central role in how we understand race, racial categories, and ethnic cultural identities. We will study Hollywood’s, evolving portrayal of African-Americans, Asian-Americans and ethnic groups like Latinos and Italian-Americans. From Edison’s early films, through “Birth of Nation,” and to the present, commercial cinema has denigrated Americans of color and stereotyped its ethnic groups. How are stereotypes built up on century-old cinematic traditions and how do they function today? What self-images have minority filmmakers presented as an alternative to mainstream views? In addition to looking at the critiques, we look at more positive aspects of ethnic and racial images and examine the ways that these images speak to the history of the nation as a whole.

Race & Identity in Judaism
JEWISH STUDIES 0802, 0902, RELIGION 0802, 0902

Investigate the relationship between race and Judaism from Judaism’s early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews’ racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better.

Race & Poverty in the Americas
ANTHROPOLOGY 0833, LATIN AMERICAN STUDIES 0833, 0933, RELIGION 0833, 0933

SOCIOLOGY 0833

The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the “structural racism,” “symbolic violence” (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of “The New World,” placing the US (and Philadelphia in particular) experience in this historical context.

Race, Identity and Experience in American Art
PAINTING, DRAWING, SCULPTURE 0805

Paintings of the New Frontier and 19th century folk art, the Harlem Renaissance and New Deal photography, Chicano murals and the art activism of the Civil Rights Movement, the digital spaces occupied by activist groups on the Internet—in the struggle to understand the relation between self and other, artists have critically engaged with the images that define our common sense of belonging—images that saturate the public sphere via mass media, advertising, textbooks, museums, and shopping malls. While taking a close look at individual artists and movements, we will locate them within their respective contexts, with the ultimate goal of finding ways of adequately imagine and image an American identity today.
**Race in the Ancient Mediterranean**  
*GREEK & ROMAN CLASSICS 0804, 0904*

Learn about ancient thinking about race and ethnicity and how ancient thinking remains current and influential today. Investigate how categories of race and ethnicity are presented in the literature and artistic works of Greece and Rome. Our case studies will pay particular attention to such concepts as: notions of racial formation and racial origins; ancient theories of ethnic superiority; and linguistic, religious and cultural differentiation as a basis for ethnic differentiation. We will also examine ancient racism through the prism of a variety of social processes in antiquity: slavery, trade and colonization, migrations, imperialism, assimilation, native revolts, and genocide.

**Race on the Stage: Social Construction of Identity through Drama and the Arts**  
*THEATER 0842*

A unique taste of artistic diversity, this course combines traditional and interdisciplinary content with the rich experience of “live art.” Learn how conventions of the past contribute to arts production and the dramatic presentation of race, gender, sexuality, class and disability today, and how those presentations continue to inform notions of identity. As you read classic and contemporary dramatic texts and critically analyze actual performances, you will be looking at diversity from multiple perspectives and acquiring the kind of understanding of “difference” and “tolerance” that will prepare you to live and work in a global world.

**Representing Race**  
*AFRICAN AMERICAN STUDIES 0834, ANTHROPOLOGY 0834, ENGLISH 0834, 0934, HISTORY 0834*

From classical Greece and Rome, who saw themselves under siege by the “barbarian hoards,” to contemporary America and its war on “Islamic extremism,” from The Birth of a Nation to Alien Nation, Western societies have repeatedly represented a particular group of people as a threat to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture, and artistic expression. What is behind this impulse to divide the world into “us” and “them”? How is it bound up with our understanding of race and racial difference? And what happens when the “barbarian hoards” talk back?

**WORLD SOCIETY (GG)**

GenEd World Society courses explore societies and cultures outside of the United States. These courses take one of two approaches. Some concentrate on a single nation or region, examining in depth its political, social, historical, cultural, artistic, literary, geographic, and/or economic landscape. Others investigate globalization and its effects across nations and regions.

World Society courses are intended to teach students how to:

- Understand the influences (e.g. political, social, historical, cultural, artistic, literary, geographic, economic) on world societies or processes (e.g. globalization) linking world societies;
- Access and analyze materials related to world societies and cultures;
• Develop observations and conclusions about selected themes in world societies and cultures;
• Construct interpretations using evidence and critical analysis; and
• Communicate and defend interpretations.

Course Descriptions for World Society

Advertising & Globalization
ADVERTISING 0853, 0953

Explore the current global scope and reach of advertising in our connected, digital age. Study major interdisciplinary themes related to the spread of consumerism, self and social identity, global consciousness, and cross-cultural effects as a result of the worldwide spread of advertising as part of the free market system. Particular attention is given to cross-cultural issues related to cultural imperialism, legal and societal constraints, ethical questions, universal values and green marketing. Course work includes comprehensive survey of print and broadcast advertising found in other countries.

Border Crossings: Gendered Dimensions of Globalization
WOMEN'S STUDIES 0801

Explore the ways in which gender “works” in different cultural and national contexts, and the impact globalization has on gender relations. “Gender” indicates the ways in which our social lives are organized around categories of male and female – in relation to work, family, sexuality, culture, and nation. “Globalization” describes the transfer of economic and cultural goods between nations and peoples. Questions we will ask include: What is globalization and how do women and men experience it differently? Do women and men work the same jobs in the global labor market, and do they get paid the same wages? How does immigration affect families? Does a growing connectedness between cultures and nations change traditional gender roles? How different are experiences of women in the “Third World” from those of women in the “First World,” and why? Investigate these issues together by reading critical writings as well as Internet blogs, watching films/documentaries, and analyzing popular media.

Development and Globalization
GEOGRAPHY & URBAN STUDIES 0862, HISTORY 0862, POLITICAL SCIENCE 0862, 0962, SOCIOLOGY 0862, 0962

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance.
**Education for Liberation**  
**URBAN EDUCATION 0855**

What are the relationships between globalism, economic development, sustainability, poverty, and social justice in Western and non-Western societies? How can non-Western educational traditions inform or improve urban education? The concept of sustainable development serves as a bridge to examining the link between education and poverty. We focus on the connections between education and politics, cultural diversity, economics, and the existence and persistence of poverty for oppressed and marginalized groups in post-colonial countries as well as in the US. Exposure to a variety of readings and an array of oral, written, interactive and experiential exercises will help expand your understanding and appreciation of the powerful role and culturally distinct purposes of education here and abroad.

**Gender in World Societies**  
**HISTORY 0824, WOMEN’S STUDIES 0824**

Learn about the history of feminine and masculine gender roles from comparative and international perspectives. Using case studies from Ancient Greece, Medieval Europe, West Africa, Victorian Britain, Modern Europe, the Middle East, South Asia, East Asia, and/or Latin America, we will explore certain a themes—The State, The Sacred, Work, The Family, The Body and Sexuality, Modern Revolutionary Movements—to investigate how gender and gender roles have changed over time, and their significance today. Readings include primary sources written both by men and by women, secondary sources, novels, and films.

**Global Cities**  
**GEOGRAPHY & URBAN STUDIES 0831**

As globalization accelerates, the world becomes smaller, and is transformed to an extended urban network. Even though there are places and people off the global grid in both rich and poor countries, we live in a single, interdependent urban world. This course seeks to understand this urban world. We ask questions like: How do changes in the global economy affect the lives of people from Cairo to Chicago? As 50 million people per year move into cities around the world how do those cities change? How will the massive rural to urban migration in China and India affect resources and the global environment? What is life like in cities for the majority of the world’s poor? What types of plans and policies could improve cities in this century? Are wages in Philadelphia being influenced by what happens in Beijing and Bangalore? The answers will come from a wide range of perspectives, from geographers, urban planners, sociologists, and economists.

**The Global Crisis: Power, Politics and the Making of our Times**  
**HISTORY 0865**

Are we living in a time of global crisis? This course will provide you with the tools you need to find out. This class focuses on world politics over the past century, up to today. In this class, we will examine a number of key global problems as they have changed over time. We will adopt an historical approach, which means we will read texts and documents about the past as a way to understand the present. Together we will explore debates like: is America an empire? What is ideology and is it a factor in world politics today? What role do diplomacy, strategy, and military power play in world affairs? How have non-western peoples and states challenged the power of the West, and with what results? What are the roots of ethnic and religious conflict? And what can we as citizens do to address truly global problems? Drawing on
examples from 20th Century world history, this course introduces you to world politics and the
great debates of our time.

**Global Slavery**  
*HISTORY 0861*

Investigate global slavery as an historic phenomenon and a current reality. How is it that after
the great emancipation movements of the 19th century and the International Geneva
Convention (1926) outlawing slavery there are still 27 million slaves and counting? This course
argues that any critique of globalization requires an understanding of why it has taken several
millennia for anti-slavery law to emerge and why such legislation continues to have limited
reach and effectiveness. It argues that there is no modernity and no globalization without
slavery. Explore this problem by asking a basic question: By what techniques, abstract and
concrete, do masters make themselves as visible by constructing slaves as invisible? With film
viewings, carefully selected readings, debates and group projects, you will be led to make your
own connections to these themes, and to consider global slavery as part of the past and the
present.

**Imaginary Cities**  
*FILM & MEDIA ARTS 0869, 0969*

Filmmaking is an overwhelmingly urban phenomenon. This class will take you to cities around
the world, examining how international cinema has richly depicted and interpreted urban life
during the last hundred years. As you respond to film clips, readings, lectures and lively
discussions about the increasingly urbanized face of world societies, you will study films texts,
and research the contexts in which they were produced and consumed. In a semester-long
project you will research and interpret how urban experience is depicted and explored in a
specific film or film series.

**Latin American Media**  
*BROADCAST TELECOM MASS MEDIA 0823*

From the music of J-Lo and Skakira to the style of the TV show Ugly Betty to Bart Simpson's
bad Spanish (no problemo!), Latin American influences are increasingly evident in U.S. media
and culture. The influence goes both ways: U.S. media and culture have had great impact in
Latin America. This class focuses on Latin American media as key institutions within the region
and also as they interact with the United States. Media systems are so intertwined with society
that understanding them requires understanding where they come from, so we will look at Latin
America itself first--where is it? what are its characteristics? The class will then examine Latin
American media and the ways that Latin American people have reacted to U.S. influence. We
will also explore the growing presence of Latino media in the U.S. and in Philadelphia.

**Philadelphia Dance Experience**  
*DANCE 0827*

Open your eyes to the wealth of culture right at your doorstep. Deepen your appreciation of
dance and become an educated audience member about the various styles and layers of
meaning present in any one dance. We will attend several live performances, looking at dance
from a cultural studies perspective, focusing specifically on European, African, Asian, and Latin
influences in the city of Philadelphia. We will be interacting with guest artists and lecturers,
observing performances on video, and engaging in guided viewing exercises. Dance concerts
are selected from a variety of styles, including classical and contemporary forms from around the world.

**Religion in the World**  
*ASIAN STUDIES 0863, CRITICAL LANGUAGES 0863, PHILOSOPHY 0863, RELIGION 0863. 0963*

Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip.

**Turning Points: Ancient World**  
*HISTORY 0871*

**Turning Points: Modern World**  
*HISTORY 0872*

Explore ten of the most significant transformations in human life, from the time we evolved into Homo sapiens to the 21st century. Take either one or both of this two-course sequence. The first course looks at the period from 4 million BCE to about 1500 CE; the second from about 1200 CE to the present. Taking a whole world perspective, each asks how we have become who we are, through our global history. We compare among societies to foster analysis; we look at interaction among societies to foster synthesis. We will analyze primary documents to understand the people of each time period and their issues; and at secondary documents to understand how later commentators and scholars understood and interpreted them. You will write five essays in each of these courses to demonstrate the knowledge you have gained and the skills you have mastered.

**War & Peace**  
*HISTORY 0864, 0964, POLITICAL SCIENCE 0864*

Total war, weapons of mass destruction, genocide. These were not solely inventions of the twentieth century nor are they the natural consequences of a violent human nature. Leaders, armies, and the strategies they pursue are rooted in their social and political context. Weapons are the products of not merely technological but also historical and cultural development. Battles occur on a political and historical terrain. Learn how ancient ideology, medieval technology, modern propaganda, and more have changed how humans wage war and make peace.

**War in Hazelton**  
*LATIN AMERICAN STUDIES 0854*

The United States border with Mexico is 2,000 miles long, stretching from San Diego, CA to Brownsville, TX. Every year between 200,000 and 400,000 immigrants attempt to cross this border illegally. An estimated 12 million undocumented aliens live in the United States already. Does this influx of Mexicans, Central Americans and South Americans amount to a serious threat? Though close study of how one small, quiet Pennsylvania town reacted to a sudden
influx of 10,000 Spanish-speaking laborers, and with the aid of film, field-trips, guest speakers, fiction and poetry, we will explore global immigration issues.

**Women in Modern Bengali Film**  
*ENGLISH 0973*

We will discuss the work of contemporary Bengali film directors, as also that of a few non-Bengali directors of parallel and diasporic cinema, with a particular focus on culturally constructed roles for women in the Indian social context. The several films that we view in class, to analyze women’s movements out of such prescribed spaces into more liberating ones, will focus on assault; incest as taboo; the predicaments of the subaltern, the prostitute, and the widow; and the more recent issue of immigration. How do questions we raise in our course intersect with current international discussions of the treatment of women and class in film? Is the work done by women’s activist groups changing entrenched perceptions of gender worldwide and, thus, representations of women in film? What is the impact of significant events in Indian colonial and postcolonial history on women? How do key concepts addressed by major Western thinkers such as Karl Marx and Sigmund Freud affect depictions of women in cinema? You will look up websites on cinema and do group oral presentations to engage directly with these questions.

**World Affairs**  
*GEOGRAPHY & URBAN STUDIES 0866, HISTORY 0866, POLITICAL SCIENCE 0866, 0966*

We live in a global age when events beyond our borders significantly affect our lives. Sharpen your understanding of international developments, including wars, economic globalization, wealth and poverty, the spread of democracy, environmental degradation, and global pandemics. This course offers an introduction to the study of world affairs that gives you the conceptual tools to deepen your understanding of how major historical and current trends in the world affect your life and that of others around the globe. Readings include historical documents, classic texts in the study of international relations, and current perspectives on the state of the world from multiple disciplinary perspectives.

**World Performances**  
*THEATER 0852, 0952*

Dance, puppetry, theater, opera; these are performance forms that are part of the cultures of the world. From the earliest religious rituals to modern interpretations of ancient traditions, performances are as varied and diverse as the cultures from which they arise. You are probably familiar with performances arising from western cultures, but the Noh Drama of Japan, the Water Puppetry of Viet Nam, the Koothu Patari folk performances of India, the Beijing Opera in China, the Caoperia Martial Arts performances of Brazil--these might be new to you. Explore world performances through live class presentations, lectures, video and attendance at international performances in Philadelphia. You might also have the chance to perform yourself!

**World Regions and Cultures: Diversity & Interconnections**  
*ANTHROPOLOGY 0867, GEOGRAPHY & URBAN STUDIES 0867, SOCIOLOGY 0867*

How does the process of globalization impact people in different culture regions? Explore this central question through readings, discussions, mapping exercises, field trips to Philadelphia sites and special events that celebrate the international flavor of the city. Focusing on four
regions, we will learn how people cope with environmental problems like desertification, population growth, rapid migration to cities, and ethnic and religious clashes. We will investigate why some areas are mired in poverty and violence while others experience a growing economy and peaceful politics. For each region we will read case studies illustrating both cultural continuity and change.

World Society in Literature & Film
ARABIC 0868, 0968, ASIAN STUDIES 0868, CHINESE 0868, 0968, ENGLISH 0868, 0968 FRENCH 0868, 0968, GERMAN 0868, 0968, HEBREW 0868, ITALIAN 0868, 0968, JAPANESE 0868, 0968, JEWISH STUDIES 0868, LATIN AMERICAN STUDIES 0868, 0968, RUSSIAN 0868, 0968, SPANISH 0868, 0968

Learn about a particular national culture—Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course—by taking a guided tour of its literature and film. You don’t need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity.

SCIENCE & TECHNOLOGY (GS)

GenEd Science & Technology courses present scientific process in context, helping students understand how scientific phenomena and/or technological change affects human life and the planet.

Science & Technology courses are intended to teach students how to:

- Understand and describe the scientific process;
- Understand the sequential nature of science and technology;
- Recognize, use and appreciate scientific or technological thinking for solving problems that are part of everyday life;
- Understand and communicate how technology encourages the process of discovery in science and related disciplines; and
- Retrieve, organize, and analyze data associated with a scientific or technological model.

Course Descriptions for Science & Technology

The Bionic Human
MECHANICAL ENGINEERING 0844

Can we replace our “worn-out” body parts with space-age materials? Will the day come when an injured athlete buys a tendon for the next big game? Why are your parents spending so much time at the doctor? We are on the verge of building “the bionic human” by repairing many of our body parts indefinitely. Become familiar with bio-engineered technologies for age-, disease-, sports-, and accident-related injuries. Learn why weight bearing exercise strengthens bones, the difference between MRI, CAT scan, and X-Ray, and what the folks at the Food and
Drug Administration do. By the time you finish this course, you’ll know how a pig heart could save your life, how stem cell research could affect your future, the purpose of animal testing, and why walking through airport security could be a problem if you have had your hip replaced.

**Brain Matters**  
*PSYCHOLOGY 0817, NEUROSCIENCE 0817*

One of the last frontiers in science is the brain. We know a great deal about the structure and function of the brain and nervous system, but it is challenging to comprehend fully the complexity of a system made up of 100 billion components that are interacting with one another using tens of trillions of connections that can change and rewire during development and aging. Neuroscience is the multidisciplinary field in which brain research falls. Neuroscience is one of the fastest growing domains in all of science – and good bet for a future career path. Neuroscientists investigate brain function from the level of molecular genetics, to cellular dynamics, to brain anatomy and physiology, to relations between brain, behavior, and cognition, to brain development and aging, to diseases of the brain. In this course, we will touch on knowledge about the brain at all these levels, and more. We will also discuss case studies of brain impairment.

**Chemistry of Wine**  
*CHEMISTRY 0821*

Wine has occupied a central role in human culture since the beginning of recorded history. In our exploration of the science of wine we will learn why wine was the beverage of choice through the ages, why a bottle of wine can range from $2 to $2,000, how wine is made, what makes a good/bad wine, how is white different from red, and how do we know what is in a bottle of wine. The course begins with a large scale fermentation of red and white wine and will continue with team based analysis of the two month process of turning grape juice into wine.

**Cyberspace and Society**  
*COMPUTER & INFORMATION SCIENCES 0835, 0935*

Cyberspace technology empowers us to do more, but it also has a societal impact. It raises new questions regarding the use and misuse of information obtained from the Internet. For example, what is the impact of the Internet on intellectual property? How far can computer surveillance go to detect criminal behavior without reducing our civil liberties? How can vulnerable groups be protected from predators, scam artists, and identity theft? Does privacy even exist anymore? You will develop an understanding of the technologies behind the Internet, the web and your computer, and then use this knowledge to evaluate the social and ethical implications of this technology.

**Disasters: Geology vs. Hollywood**  
*EARTH & ENVIRONMENTAL SCIENCES 0836*

Clips from Hollywood disaster movies will drive our inquiry into geologic phenomena. Can you really drive over a lava flow in a jeep? (*Dante’s Peak*) Are we foolish not to prepare for a major earthquake in New York City? (*Aftershock*) Could global warming melt the polar ice caps turning “dry land” into a myth? (*Waterworld*) Would the impact of an asteroid the “size of Texas” kill half the Earth by heat and freeze the remainder in a nuclear winter? (*Armageddon*) Learn the fundamentals of plate tectonics, how petrologic properties control volcanic
explosivity, how to calculate earthquake locations from seismic data, and prepare a disaster readiness plan for a major U.S. city.

**DNA: Friend or Foe?**

*BIOLOGY 0848, 0948*

Through the study of basic biological concepts, expand your scientific knowledge and think critically about questions like: Are there potential discriminatory implications that might result from the human genome project? What are the future implications of genetic testing as behavioral genes become identified? What are the social and legal implications involving the gathering and analysis of DNA samples for forensic analysis and DNA fingerprinting? What implications might arise from genetic testing that may impact other members of that family? What are embryonic stem cells, and why has this topic become an important social and political issue? Will advances in medicine allow humans to live considerably longer, and how will a longer human life span affect life on earth?

**The Environment**

*CIVIL ENGINEERING 0845, 0945 ENVIRONMENTAL ENGR TECHNOLOGY 0845, 0945*

You can extend your longevity and improve your health by identifying and avoiding the top 10 environmental toxins that enter and persistently stay in your body. Develop connections between the environment and everyday life. Enhance your awareness of current environmental issues by taking part in discussion and debate: Is Global Warming for real? Should the US sign the Kyoto protocol? Are we running out of oil? Learn as you go on campus field trips, try hands-on experiments and hear presentations from experts on the energy crisis, global climate change, acid rain, ozone depletion, resource sustainability, biodiversity and the environmental impact of natural phenomenon. Sharpen your strategies and leave a better environment for future generations.

**Evolution and Extinctions**

*EARTH & ENVIRONMENTAL SCIENCES 0837*

Did an asteroid impact wipe out the dinosaurs? Can “natural” Earth-based processes also cause mass extinctions? Long before the dinosaurs, another mass extinction destroyed 90 percent of life on Earth, without an impact. Should we be less worried about rocks from space, and more about “down to Earth’ phenomena such as climate change, volcanism, or disease? Basic geologic principles and the fundamentals of evolutionary thought combine to bring to life the 4.6 billion year story of our planet and its creatures. Through hands-on experience with fossils and rocks, students investigate changes in life through time, and discover how to decipher past environments from the geologic record.

**Gender Issues in Science & Technology**

*COMPUTER & INFORMATION SCIENCES 0853*

Learn about science and technology through the lens of gender studies. As you are introduced to basic scientific principles and study the contributions of women to advances in science and technology, we will reflect on the many ways in which gender relations affect and have been affected by these advances. What contributions have women made to key aspects of science and technology? How do social spaces, such as Facebook and MySpace, facilitate changing gender identities and interactions? What are the gender implications of the digital divide?
Through discussion, reading and with the guidance of guest speakers, we will gain insight into the gendered nature of science and technology and the effects on us all—men and women.

**Green vs. Gray: Improving & Sustaining Urban Ecosystems**  
*LANDSCAPE ARCHITECTURE 0852*

Explore urban ecology, urban ecological data gathering methods, and methods of improving and sustaining urban environments using Philadelphia as a living laboratory. With the Pennsylvania Horticultural Society’s Tree Tender training and tree planting program you will have active involvement and deepened understanding of the funding, planning, installation and maintenance of trees and other living green systems within the city landscape. You will meet with Philadelphia Zoo administrators and Mill Creek Urban Farm directors, and learn about park infrastructure, vacant lot revitalization and community gardens.

**How Things Work: The Physics of Everyday Life**  
*PHYSICS 0847*

As you observe films, demonstrations and photographic techniques both real and computer-simulated, and as you perform several simple in-home experiments you will gain a basic understanding the laws of nature as they play out in everyday life. In a special project you will compare the science in different science fiction films.

**Nature Has No Reverse**  
*CHEMISTRY 0838*

Rapid advances in modern science often tend to "conceal the forest in the trees," but we all need enough familiarity with the "scientific method" to make informed judgments as citizens and voters. This course will take you on a journey through the history of science, with stops at the Second Law of Thermodynamics, the "revolution" of fire, the rational basis of life, energy as the universal currency and changes in the universe around us. We will end with that most disturbing of paradoxes: the certainty of uncertainty. Each week includes both lecture and hands-on demonstration/practicum.

**Powering the Future**  
*PHYSICS 0839*

How can we provide inexpensive, safe, environmentally clean energy supplies for the United States and the world as a whole despite rising population and increasing affluence? Study problems of our conventional fossil and nuclear fuel use, and how they might be relieved; explore the physical and technological possibilities for using energy much more efficiently; investigate various renewable-energy sources (such as solar, hydrogen cells, hydropower, and biofuels) that significantly reduce effects on the environment. In the course lab projects, you will research and develop a sustainable energy proposal for your own home, campus, or community.

**The Science of Sound**  
*PHYSICS 0872*

For living things the ability to hear sounds is an essential tool for survival, and sound is central to speech and languages. In the arts sound also plays a fundamental role, above all in music. The close connection between music, mathematics, and physics has fascinated
some of the greatest minds in mathematics and science. Advances in electronics and computing are revolutionizing the composition, production, recording, and transmission of sound. In this interdisciplinary course, you will study elements of physics, physiology, psychology, music, and engineering. The course begins with a four-week introduction to the fundamental physics of sound waves. With this as a basis, we then consider human hearing, the human voice, and speech sounds; scales, harmony, and sound production by musical instruments; architectural acoustics; and the electronic reproduction of sound. The course includes many in-class demonstrations and experiments and occasional short musical performances.

**Sustainable Design**

*LANDSCAPE ARCHITECTURE 0841*

What’s the big deal about global warming and how should we respond to it? Explore the issues and underlying causes. See how contemporary designers from Germany, Netherlands, UK and Japan are responding to scientific knowledge with sustainable designs for buildings, cars, towns and parks. Develop your own creative project to reduce the greenhouse effect. Have you ever wondered about what happens to local abandoned factories and degraded streams and rivers? Philadelphia is a national hotbed for sustainable design. Visit local restoration sites, modern “green” buildings, parks that reclaim waste water and transformed industrial parks to see firsthand what is happening in our area. Learn how design is transforming to propel us toward a low waste, energy conserving society in the 21st century.

**Sustainable Environments**

*GEOGRAPHY & URBAN STUDIES 0842, EARTH & ENVIRONMENTAL SCIENCES 0842, ENVIRONMENTAL STUDIES 0842*

Americans account for over a quarter of all fossil fuel consumption, own more cars than there are licensed drivers, and build new homes 40 percent larger than they did in 1975, despite shrinking household size. We feel for the pandas and polar bears, while contributing mightily to global climate change, resource inequity, and ecosystem destruction. How do we reckon with environmental crises at multiple scales, from the neighborhood to the atmosphere and oceans? “Think globally, act locally” environmentalists admonish us! Direct our vast human ingenuity and collective spirit toward technologies and behaviors that bring peace with the planet. Course mission: enhance your capability to make informed choices, based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability.

**Tech Transformations**

*MECHANICAL ENGINEERING 0843*

Expand your knowledge by looking at how various technologies such as electricity, automobiles, airplanes, telephones, bridges, highways, electronics, computers, and information technology have transformed the world around us. What would we do without them? Where do they come from? How do they work? Technology is developed by people who have the ideas, design the machines and processes, and suffer the costs and benefits of technological changes in our society. Learn about science and technology through history of discovery, invention and innovation through lectures and labs. We will also study several promising fields, which may lead us to the future of technology.
Universe As We Know It  
*PHYSICS 0846*

Scientific thinking in the context of the study of astronomy. This course includes the intersection of ethics and science, for example: heroic individual resistance to repressive authority (Galileo), the changing role of women in science (from Pickering’s Harem to Sally Ride), and the use of science to further political agendas (Kennedy’s moon landing program). Extensive use of web resources, the planetarium theater, and self-guided observing assignments.

**U.S. SOCIETY (GU)**

GenEd U.S. Society courses strengthen students’ understanding of the history, society, culture and political systems of the United States.

They are intended to teach students how to:

- Access and analyze historical, analytical, and cultural materials;
- Develop observations and conclusions about selected themes in US society and culture;
- Construct interpretations using evidence and critical analysis;
- Communicate and defend interpretations; and
- Analyze the ways difference and heterogeneity have shaped the culture and society of the U.S.

**Course Descriptions for U.S. Society**

**The American Economy**  
*ECONOMICS 0858, SOCIOLOGY 0858*

Should the federal government more forcefully engage health care issues, or are its current obligations a hidden time bomb facing the federal budget? Should we be concerned about the outsourcing of U.S. jobs? Is the minimum wage too low, or will increases in the minimum simply lead to greater unemployment? Students will engage these and other pressing issues, write position papers advocating specific actions that governments or firms should take, and debating these recommendations. While economic theory is not the centerpiece of this course, students will learn enough economic theory to be able to discuss policy in an informed manner. They will also be introduced to important sources of “economic” information, from government web sites to major publications.

**American Military Culture**  
*AMERICAN STUDIES 0847, HISTORY 0847*

You live in a country that possesses the world’s strongest military forces. Up through the Vietnam War, Americans viewed military service in wartime as a basic obligation for all adult male citizens – the ultimate test of their patriotism and manhood – but a temporary sacrifice that ceased for most on the return of peace. Today, the American people have outsourced their awesome war-making power to a restricted number of men and women –many of whom consider military service their career. We will explore the distinctive culture that shapes the
composition and behavior of America’s armed forces and probe how it reflects the strengths and weaknesses of American society.

**American Revolutions**

**AMERICAN STUDIES 0848, ANTHROPOLOGY 0848, GEOGRAPHY & URBAN STUDIES 0848, HISTORY 0848, SOCIOLOGY 0848**

From the first encounters with Native Americans to the present, a series of pivotal moments have had an enduring influence on American society, culture, and politics. In each class, three modules, will focus on three pivotal moments, such as King Philip’s War, Nat Turner’s Rebellion, the Scopes trial, the Civil Rights movement, the women’s movement, the emergence of Elvis Presley, the sexual revolution, the rise of environmentalism, the Reagan Revolution, and 9-11. In each module, students will first place the main subject of the module in context, and then seek to understand how it changed American society. The last week of each module will be devoted to a consideration of how the subject of that module has become part of American collective memory.

**Contemporary American Social Movements**

**STRATEGIC & ORGANIZATIONAL COMMUNICATION 0801, 0901**

Social movements range from identity-based movements (such as the civil rights movement and the gay and lesbian rights movement) to issue-based movements (such anti-globalization and animal rights) to ideological movements (such as the free software movement and the green movement). The course introduces students to contemporary American social movements and their counter-movements, dominant strategies and tactics movements use to communicate with a larger public, and individual campaigns within the larger framework of social movement from both theoretical and applied perspectives.

**Dissent in America**

**ENGLISH 0849, 0949, HISTORY 0849, 0949, SOCIOLOGY 0849**

Throughout American history individuals and groups of people, have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today.

**Doing Justice**

**CRIMINAL JUSTICE 0853, 0953**

Justice agencies – the juvenile justice system, police, judges and juries in courts, and prisons – are expected to create justice in response to lawbreakers. These agencies, however, often operate under enormous political, cultural, social, organizational and economic pressures. Further, what citizens or local leaders sometimes want from these agencies may create challenges and temptations. Thus, just outcomes are sometimes elusive. Focusing on the period 1925-2025 and largely on Philadelphia data, students will explore conceptual frameworks in the sociology of law, research articles, movies, maps, Census data, historical documents and newspaper archives to help understand these outcomes.
Education in the Global City
*URBAN EDUCATION 0854*

We are in the midst of vast global change. How does it impact cities like Philadelphia and the people who live here? In this course we focus mainly on education in the city, but this doesn't mean we look only at schools. Globalization is creating new possibilities for learning: we have instant access to vast networks of information, migration is bringing rich cultural diversity to our doorsteps, and we learn in many different types of schools and communities. But globalization is also creating new problems that education must address: new kinds of poverty, increasingly separate lives, mounting intolerance, a digital divide. This course explores what education in all its form can do to support the American dream for people in the city, nation, and the world. Our exploration goes beyond the classroom, linking academic and community-based learning. The course has a common core of knowledge and each small section also features a different theme related to this core. Section themes may include (1) school choice, (2) immigrants and diversity, (3) technology and the digital divide, (4) advocacy for excluded groups, and (5) violence and conflict resolution.

First Person America
*AMERICAN STUDIES 0862, 0962*

Examine the private and public lives of a diverse cast of Americans over a long sweep of the nation’s history. Along the way, look at how fundamental conflicts—between the local and the national, freedom and equality, inclusion and exclusion, community and the individual—have driven U.S. history from its very beginnings, how they have shaped these individual lives and how these individuals have molded the debates. Learn to use a range of sources—including autobiographies, biographies, memoirs, personal narratives, profiles, bio-pics, self-portraits, visual and performance pieces—as you investigate these American stories and American tensions.

Founding Philadelphia
*HISTORY 0867*

Explore the rich colonial and early American history of Philadelphia through lectures and readings as well as trips and tours of cultural and historical sites. As we discover the social, cultural, and political events that shaped a city and a nation, and evaluate how these historical events and figures are viewed today, we will ask: Is there a great discrepancy between myth and reality? What does our view of the past say about the present? In what ways can Philadelphia be viewed as a microcosm of the United States and in what ways does the development of Philadelphia, through political turmoil, industrial growth, and the creation of ethnic neighborhoods by a constant flood of immigrants, tie in with global developments?

Gender in America
*SOCIOLOGY 0851, WOMEN’S STUDIES 0851*

Being a man or a woman means feeling like a man or a woman. People display gender by learning the routines and expectations associated with being male or female. How do people learn gender? How does living in a gendered society lead to differences in power and opportunities between men and women? How do race, ethnicity and sexuality affect the way gender is experienced for these different groups? How does gender acquire such important meaning in terms of identity and behavior? Using a variety of written materials including
novels that explore gender identity construction, this course looks at how gender has become such a prominent feature of life in America.

**Higher Education and American Life: Mirror to a Nation**  
*AMERICAN STUDIES 0855, EDUCATIONAL ADMINISTRATION 0855, ENGLISH 0855*

You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.), and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years.

**Justice in America**  
*CRIMINAL JUSTICE 0852, 0952*

Engage in an interdisciplinary examination of one of U.S. society’s most enduring conflicts—the struggle to achieve an acceptable balance between state power to prevent and control crime, and the rights of individuals to be free from undue government coercion. Focusing primarily upon the structures and processes of the criminal justice system investigate a variety of criminal justice problems, and ponder questions about the legitimacy of the criminal law method of social control. Key questions include: How well is society doing in its efforts to prevent/control crime? How do those efforts rate in terms of securing a just balance between the rights of individuals and the coercive powers of the government? Are we doing things right? Are we doing the right things? What improvements should be made? How can we know/decide?

**Landscape of American Thought**  
*PHILOSOPHY 0824, 0924*

America once was envisioned by its colonizers as a new world, as a city upon a hill beckoning to humanity. After centuries of conquest, enslavement, immigration, and political struggle, conditions for sustaining this early vision continue to evolve. Explore the emergence of some of the most distinctive and influential American voices to inform our national debate about freedom, the individual, race, democracy, and oppression, as it has unfolded over the past two centuries. Through consideration of selected works of some of the most renowned figures to shape the landscape of American public discourse, we return to face the question of the promise of America, as it plays out today in the thought of some of the leading public intellectuals of our time.

**Law and American Society**  
*LAW S.B.M, 0856, 0956*

An intruder rushes into class, hits the professor in the face with a pie, and runs out. You are asked to provide a description of the assailant—and now you realize this was a demonstration of the faultiness of human memory in making eyewitness identification. Develop your understanding of the historical, socio-political and ethical context of the U.S. legal system as you follow the misadventures of a fictional family that gets caught up in various legal problems.
Current events inform every assignment; you might analyze, for example, the case against MacDonalds brought on behalf of obese children, and then research legislation known as the “Cheeseburger Bill,” prohibiting such lawsuits. An exciting, multimedia environment makes learning vivid.

**Living for Change**

**WOMEN’S STUDIES 0863**

Autobiography is one of the lenses through which you will broaden your awareness of women’s involvement in, and influences on, U.S. political culture. Historically, women’s role has been mainly defined by their assigned gender roles as mothers and educators, tasked with imparting the values of their communities to the next generation of citizens. Broader social change, on the other hand, is generally thought of as taking place through political activism, and the most visible activists are traditionally thought of as being men. Only in the past forty years, research has revealed women’s engagement with a diverse range of political issues, including economic concerns, sexual and reproductive rights, and anti-racism. Learn how women were radical agents of change--by reading their own life stories.

**Making of American Society: Melting Pot or Culture Wars?**

**AMERICAN STUDIES 0859, HISTORY 0859, PHILOSOPHY 0859, POLITICAL SCIENCE 0859, SOCIOLOGY 0859**

Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st Century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society.

**People, Places and The Environment**

**COMMUNITY & REGIONAL PLANNING 0807**

Have you ever thought about the relationship people have to their place—home, neighborhood, town, or city? How about to the environment? Have you ever thought about how people have shaped the places of our everyday lives—suburban housing developments, shopping malls, and small towns? And, have you ever thought about what will happen in the future to the earth’s natural resources—the air, water, and land—as we continue to build and expand? Explore these kinds of questions that through readings, lectures, video presentations, and group discussions. Challenge your mind—and imagination—and open up new avenues of discovery.

**Religion in Philadelphia**

**HISTORY 0876, 0976, RELIGION 0876, 0976**

The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that
are less possible in smaller populations. Learn how ideas of toleration and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia’s history and cultural life including politics, art, education, journalism and popular culture. You will be visit and write about various religious sites and institutions.

**Sounds of a Revolution**  
*AMERICAN STUDIES 0864*

Explore the history of the Uptown Theater and the North Philadelphia neighborhood just north of Temple University that surrounded the music hall. This is not a simple or nostalgic journey down memory lane. It will dig deep into the history of the Uptown Theater to help you better understand the complex processes and interactions of urban change and the shifting geographies and meanings of race and popular culture in postwar America. You will learn about the close connections between music and society, art and commerce. At the same time, you will explore the processes and politics of recovering of the past and reconstructing living histories out of the rumble and silences of yesterday. That is because, in addition, to being an interdisciplinary study of the city and popular culture, this course will serve as an introduction to public history—preserving the past to enhance understanding of the present.

**Sport & Leisure in American Society**  
*SOCIOLOGY 0857, TOURISM & HOSPITALITY MGMT 0857*

Explore the complexity and diversity of American society through the study of sport and leisure. To what extent does the way we play or spectate sports, the way we plan or experience leisure time, reflect American values? As we trace a brief history of the United States through the lens of sport and leisure, we will observe how concepts of freedom, democracy and equality are tested through time. Issues of race, ethnicity, gender, age, disability, and socio-economic class will be prominent, as we observe American ideals both upheld and contradicted in the context of the way Americans recreate.

**Urban Dynamics: Global, Regional, and Local Connections**  
*COMMUNITY & REGIONAL PLANNING 0861, GEOGRAPHY & URBAN STUDIES 0861, SOCIOLOGY 0861*

U.S. cities in the twenty-first century face enormous challenges as globalization shapes flows of people, capital, information, resources, and ideas/culture in an increasingly interconnected, yet geographically dispersed world. The course asks: What is globalization? How are different people’s lives in cities shaped by these flows? How do gender, age, race/ethnicity, class, and citizenship status affect people’s experiences in different urban contexts? How do urban interventions—from public policy to social movements—advance social justice across groups, places, and spaces? Topics include economic and political restructuring, the globalization of ethnic/racial relations, citizenship and public space, the spatial dynamics of uneven development, and urban inequalities.
POLICIES & REQUIREMENTS

All new freshman students starting in academic year 2008-2009 and later are required to complete Temple University's new General Education (GenEd) curriculum.

- Students under the Gen Ed curriculum must complete a minimum of 11 courses in 9 areas (see table on page 5).
- A GenEd course counts in one GenEd area only.
- All Gen Ed course numbers begin with “08XX. Gen Ed Honors courses begin with “09XX.”
- Students must earn a C- or better to successfully complete Gen Ed requirements.
- Gen Ed students may take Core courses for credit in their major or as electives. Core courses will not satisfy Gen Ed credit for incoming first-year students in Fall Y2008 or beyond.

Course Sequencing

Students are advised to take the three-semester sequence formed by Analytical Reading & Writing, Mosaic I and Mosaic II as soon as possible after entering Temple in order and in successive semesters.

In addition, GenEd considers Quantitative Literacy a foundational course, and thus, students are advised to take a GenEd Quantitative Literacy course as soon as possible after entering Temple and before enrolling in Science & Technology courses.

Departments, Majors and GenEd

GenEd courses may not be required introductions to a specific major. A GenEd course may be accepted by a major to fulfill elective requirements.

Departments and colleges may not single out a specific GenEd course as a requirement.

A curriculum or degree program may identify a GenEd course as part of an array for its majors. (An array is defined as a set of options from which the student may choose. The array must present at least three options for any one course chosen.)

A student may use no more than two courses from a single department to satisfy GenEd requirements. Foundation courses are excluded.

Grade Change and Repeat Policy

Students may wish to repeat a course in order to earn a higher grade, either to raise their grade point average or to receive a grade required by their major or to meet another requirement, such as achieving the minimum C- required for successful completion of the GenEd curriculum. A repeated course must be graded using the same grading system (pass/fail, credit/no credit, or letter grade) as when originally taken. If an undergraduate student takes a course more than once, (a) all occurrences of the course will appear on the student's transcript, but (b) all grades other than the lowest grade received will be used in
calculating the student's grade point average. Credit for a given course will count toward graduation once.

_Early Progress Reports_

All GenEd course instructors will submit Academic Progress Reports.

_Credit/No Credit_

Students may not take GenEd courses for credit/no credit.

_Widrawal Policy_

During the first two weeks of the fall or spring semester or summer sessions, students may drop a course with no record of the class appearing on the transcript. In weeks three through nine of the fall or spring semester, or during weeks three and four of summer sessions, the student may withdraw with the advisor’s permission. The course will be recorded on the transcript with the instructor’s notation of "W," indicating that the student withdrew. After week nine of the fall or spring semester, or week four of summer sessions, students may not withdraw from courses.

No student may withdraw from more than five courses during the duration of his/her studies to earn a bachelor’s degree.

A student may not withdraw from the same course more than once.

In GenEd, courses may be offered in multiple departments. These courses, regardless of the sponsoring department, are the same course and will have the same number.

_General Education Waivers_

_Quantitative Literacy (GQ)_

Students considering undergraduate degrees with advanced mathematical or statistical requirements may satisfy the GenEd Quantitative Literacy requirement through alternative coursework.

This requirement may be satisfied by successfully completing one of the following:

- A General Education GQ course
- Mathematics 1031, Math 1041, Math 1042, Math 1941, Math 1942, or Math 2043.
- Statistics 2101, 2910 or 2103, 2903 or an equivalent transfer course (primarily for FSBM and STHM majors and FSBM minors).
- Completion of a three-course sequence to include Math 1015, Math 1021, and Early Childhood Education (ECE) 3107 (primarily for Early Childhood majors). _All courses must be completed to receive the waiver._
- Completion of a four-course sequence to include Math 1015, Math 1021, Math 1022 and Math Ed 3145. All courses must be completed to receive the waiver (primarily for Middle School majors concentrating in Science and Language Arts). All courses must be completed to receive waiver.

- Completion of a four-course sequence to include Math 1021, Psychology 1167 (or Sociology 1167 or Sociology 3201), Nursing 3261, and Nursing 3262 (primarily for Nursing majors). All courses must be completed to receive waiver.

- A transfer course or courses equivalent to the waivers described in the bullets above.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements. Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for details.

**Arts (GA)**

Students pursuing undergraduate degrees in the Boyer College of Music and Dance and the Tyler School of Art may be exempted from the GenEd Arts requirement upon completion of collegiate requirements.

**Boyer College of Music:**
- Students may satisfy the GA requirement by successfully completing one of the following four-course sequences:
  - Dance 1811, Dance 2813, Dance 2814, and Dance 3815. All courses must be completed to receive waiver.
  - Music Studies 1711, Music Studies 1712, Music Studies 2711, and Music Studies 2712. All courses must be completed to receive waiver.
  - A transfer course or courses equivalent to the waivers described in the bullets above.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

**Tyler School of Art:**
- Students may satisfy the GA requirement by successfully completing one of the following four-course sequences:
  - Art 1101, Art 1201, Art 1401 (or 1496 or 1996), and Art 1501. All courses must be completed to receive waiver.
  - Foundation 1512, Foundations 1522, Foundations 1532, and Foundations 1542. All courses must be completed to receive waiver.
  - A transfer course or courses equivalent to the waivers described in the bullets above.
Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for details.

**Human Behavior (GB)**

Students pursuing undergraduate degrees in the College of Education may be exempted from the GenEd Human Behavior requirement upon completion of collegiate requirements.

Secondary Education and Middle School (Grades 4 – 8)
Beginning Fall 2009, students in these majors may satisfy the GB requirement by successfully completing the following three course sequence:

- EDU 2109, Adolescent Development for Educators, SP ED 2231, Introduction to Inclusive Education, and EN ED 3338, Foundations of Language Teaching: Teaching English Language Learners in Middle and Secondary Grades. **All courses must be completed to receive waiver.**

- A transfer course or courses equivalent to those listed above.

Students are required to complete courses with a C- or better to satisfy waiver requirements. Departments/schools/colleges may stipulate that students earn a higher grade to satisfy degree requirements. Consult an academic advisor for details.

**Science & Technology (GS)**

Many majors and programs of study require substantive studies of science to develop the expertise necessary in their fields. The sciences include studies of anatomy and physiology in human health, chemistry as the basis of human health, matter and motion, and natural phenomena. General Education would like to accommodate those students interested in pursuing such studies and have developed, in conjunction with the College of Science & Technology, a number of two-semester course sequences that would exempt students from the GenEd Science & Technology requirement.

Students considering undergraduate degrees with scientific, engineering or technical components may satisfy the GenEd Science & Technology requirement through alternative coursework.

Students may satisfy the GenEd GS requirement in the following ways:

- Any two Science & Technology General Education courses.

- Any two-course sequences approved for GS waiver
Many majors and programs of study require substantive studies of science to develop the expertise necessary in their fields. The sciences include studies of anatomy and physiology in
human health, chemistry as the basis of human health, matter and motion, and natural phenomena.

To accommodate students interested in pursuing such studies, the Gen Ed Exec Committee has developed, in conjunction with the schools and colleges, a number of two-semester course sequences (see the table below for the complete list) that would exempt students from the GenEd Science/Technology requirement.

| Botany 1111 – Horticulture 2114 | EES 2001 – EES 2011 |
| Biology 1011 – Biology 1012 | EES 2001 – EES 2015 |
| Biology 1111 – Biology 2112 | EES 2001 – EES 2021 |
| Biology 1911 – Biology 2912 (honors) | EES 2001 – EES 2022 |
| Chem 1021/1023 – Chem 1022/1024 | EES 2001 – EES 2061 |
| Chem 1031/1033 – Chem 1032/1034 | Kinesiology 1223 – Kinesiology 1224 |
| Chem 1041/1043 – Chem 1042/1044 | Physics 1001 – Physics 1002 |
| EES 1001 – EES 2011 | Physics 1011 – Physics 1012 |
| EES 1001 – EES 2015 | Physics 1021 – Physics 1022 |
| EES 1001 – EES 2021 | Physics 1061 – Physics 1062 |
| EES 1001 – EES 2022 | Physics 2021 – Physics 2022 |
| EES 1001 – EES 2061 | Physics 2921 – Physics 2922 |
|                          | Physics 0121 – Physics 0122 |
- **Combinations**

Students who change their course of study prior to completing the second course of any of the specified two-course sequence, may complete their GenEd Science/Technology requirement in two ways:

1. One GenEd GS course and one course from either List I or List II
2. One course from **List I** and one course from **List II**

<table>
<thead>
<tr>
<th>List I</th>
<th>List II</th>
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<tbody>
<tr>
<td>Botany 1111</td>
<td>Horticulture 2114</td>
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<tr>
<td>Biology 1011</td>
<td>Biology 1012</td>
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<tr>
<td>Biology 1111</td>
<td>Biology 2112</td>
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<tr>
<td>Biology 1911 (honors)</td>
<td>Biology 2912 (honors)</td>
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<tr>
<td>Chem 1021/1023</td>
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<td>Chem 1031/1033</td>
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<td>Physics 2922</td>
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</table>

- **Any two science courses in transfer**

Students are required to complete courses with a C- or better to satisfy waiver requirements. Departments/schools/colleges may stipulate that students earn a higher grade to satisfy degree requirements. Consult an academic advisor for details.

**World Society (GG)**

An approved summer or semester study abroad program will satisfy the World Society requirement. Consult an academic advisor for detail.