

Early College Scholars 2018 Summer Day Course Listings

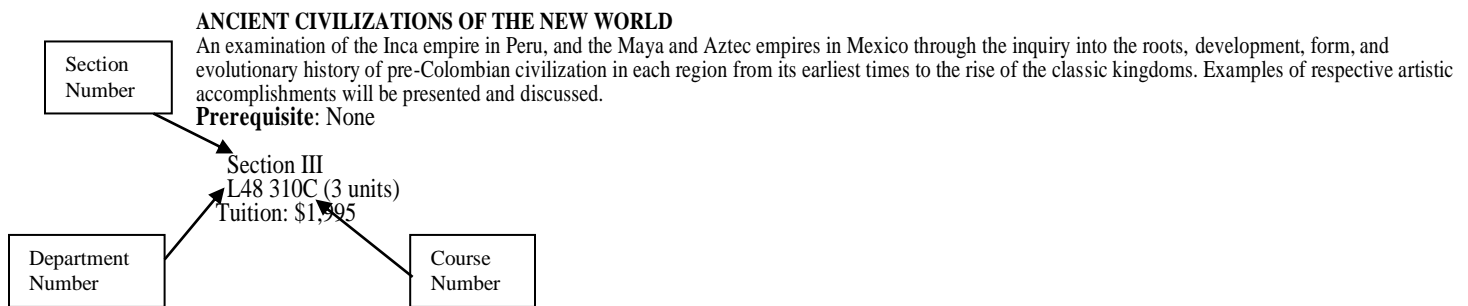
Please note the following:

1. These course listings are subject to change and cancellation without notice.
2. Students are permitted to enroll in a maximum of 7 units.
3. Students **must** meet all prerequisites listed in order to receive permission to enroll in a course.
4. If a course is full, it will be indicated in the course description.

2018 Section Dates:

- Section I: May 21-June 8
- Section II: June 11-July 13
- Section III: June 11-August 3
- Section IV: July 16-August 16
- Section V: June 18-August 3

Guide to Course Listings:



AFRICAN AND AFRICAN AMERICAN STUDIES

IMAGINING AND CREATING AFRICA: YOUTH, CULTURE, AND CHANGE

The goal of this course is to provide a glimpse into how youth reshape African society. Whether in North Africa with the Arab Spring, in West Africa with university strikes, or in East Africa through a linguistic full bloom, youth have been shaping social responses to societies for a long period. In this course, we will study social structures, including churches, NGOs, developmental agencies as well as learn about examples of Muslim youth movements, and the global civil society. The course will also explore how youth impact cultural movements in Africa and how they influence the world. In particular, we will examine Hip-Hop movements, sports, and global youth culture developments that center on fashion, dress, dance, and new technologies. By the end of the course, students will have enriched ideas about youth in Africa and ways to provide more realistic comparisons to their counterparts in the United States.

Prerequisite: None

Session II
L90 178 (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

AMERICAN CULTURE STUDIES

THE AMERICAN CITY

The American city has multiple forms: as a place to live and work, as a measure of economic vitality, as an architectural creation, as a political setting for both the promise and peril of democracy, and as a mythic backdrop for fictive struggles of identity formation and personal liberation. This course will begin a student's exploration of American culture and politics, with St. Louis serving as field laboratory for investigations that will also present the lives of New York, Chicago, New Orleans, Philadelphia and other cities. American cities carry material evidence of the economic and political reasons that they exist, the transportation networks that shape them, the street plans that give them form, the governments that provide the public good, the people who call them home, the role of public transportation systems, the geography of racial segregation, and the histories of immigrant communities. At the same time, the role of the American city has changed significantly in the 21st century when most Americans now live in suburbs surrounding older cities. Throughout the semester, this course will analyze the material and social culture of American cities through a series of lectures, films and field trips.

Prerequisite: None

Section IV
L98 276 (3 units)
MTuWThF 3:00p-4:45p
Tuition: \$1,995

ANTHROPOLOGY

INTRODUCTION TO HUMAN EVOLUTION

This course is a survey of the fossil evidence for human evolution. The course includes discussion of the genetics of human variation and evolution, the study of living nonhuman primates, and the fossil record and its interpretation. An evolutionary perspective is used in an attempt to understand modern humans from the naturalistic point of view. This course may include off-campus field trips.

Prerequisite: None

Section II
L48 150A (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

INTRODUCTION TO CULTURAL ANTHROPOLOGY

This course covers the basic concepts and theoretical principles of sociocultural anthropology. Course material is presented from Asia, Africa, Melanesia, Latin America, and North America. This course may include off-campus field trips.

Prerequisite: None

Section II
L48 160B (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

Section IV
L48 160B (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995

INTRODUCTION TO ARCHAEOLOGY

Archaeology plays a critical and unique role in understanding the human past. Through study of the methods and theories of archaeology, and a survey of important firsts in the human past, this course introduces students to the way archaeologists use material culture to reconstruct and understand human behavior. Chronologically-ordered case studies from around the globe are used to look at social, ecological, and cultural issues facing humans from the earliest times to the present. Students gain practice reconstructing the past through hands-on participation in two 1-hour labs focusing on lithics and animal bones. By the end of the course, students are expected to be able to think critically about how the past is presented, and why, and the importance of the past as it relates to the present and future. This course may include off-campus field trips.

Prerequisite: None

Section IV
L48 190B (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

ART HISTORY

INTRO TO MODERN ART, ARCHITECTURE AND DESIGN

An introduction to major developments in modern art, architecture and design in Europe, the Americas, and across the globe from the mid-nineteenth century to the present. Focus will be on the history and theories of modernism and its international legacies, and the relationship of the visual arts, architecture and visual culture more generally to the social, cultural and political contexts of the modern era. While the precise topics covered may vary from one instructor to another, foundational movements and trends to be discussed will typically include Beaux-Arts style, the Arts and Crafts Movement, Impressionism, Symbolism, Art Nouveau, Cubism, Dada, Surrealism, Purism, Art Deco, the Bauhaus, the International Style, Abstract Expressionism, Pop Art, Minimalism and Post-Modernism. Cross-currents in various media will be emphasized as we seek to understand the origins and complexity of modern visual forms in relation to political and cultural history and to critical theory. Students will engage a wide range of readings in historical sources, theories composed by artists, architects and designers, critical responses to the arts, and secondary critical literature.

Prerequisite: None

Section I
L01 215 (3 units)
MTuWThF 1:00p-4:00p
Tuition: \$1,995

INTRODUCTION TO ASIAN ART

Beginning with the birth of the Buddha and continuing through the present, this course introduces the most influential art and architecture from all across Asia.

Prerequisite: None

Section II
L01 113 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

HISTORY OF WESTERN ART, ARCHITECTURE AND DESIGN

A history of the visual arts, including architecture, sculpture, painting, and design, from the ancient world to the present with emphasis on the relationship of art to society and to political and cultural events..

Prerequisite: None

Section IV
L01 113 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

BIOLOGY

INTRODUCTION TO PROBLEM-BASED LEARNING IN BIOLOGY

Have you ever wondered how doctors and scientists diagnose and discover cures to modern human afflictions? In this course, students will be given a general topic and break up into small groups to research questions related to that topic. We will all report back to the group each week with what we've found, and provide each other with interesting facts about our topic, as well as hints for conducting inquiry-based research. The instructor will guide students on how to conduct in-depth research on problems of current biological importance using a variety of web-based search engines and library tools, with a strong emphasis on learning how to read and interpret primary research articles. Weekly topics from previous years have included psychological disorders, genetics of sleep regulation, reproductive therapies, alternative medicine, and human evolution. Students should have broad interests and background in general biology and chemistry and should be curious, exploratory, interactive, and willing to try an active, nontraditional educational experience. There are no exams, so grades will be based on class participation, weekly group presentations, written outlines, and a final iSearch paper on a topic of their choice.

Prerequisite: high school honors or AP biology

Section II
L41 112 (3 units)
MWF 9:00a-12:00p
Tuition: \$1,995

Section IV
L41 112 (3 units)
MWF 9:00a-12:00p
Tuition: \$1,995

BIOLOGY OF THE BRAIN

This course is for students who wish to learn about the biology of the nervous system, and the scientific process of understanding how it works. Biology of the Brain will include lecture, discussion, and analysis of cutting edge research, so active participation will be important. We will discuss the gross anatomy and cellular composition of the brain. We will discuss how the brain is organized to process sensory information such as vision and to generate motor activity. We will analyze how the brain develops, changes with experience to create memories, and recovers from injury. Along the way, we will discuss nervous system dysfunction on a range of contexts such as Addiction, Alzheimer's Disease, and Parkinson's Disease. This course counts as a Natural Science and Mathematics (NSM) distribution requirement.

Prerequisite: high school honors or AP biology

Session II
L43 120 (3 units)
MTuWThF 3:00p-4:45p
Tuition: \$1,995

INTRODUCTION TO ANATOMY AND PHYSIOLOGY I (Lecture only)

This is the first of a two-semester sequence that examines all major organ systems in the human/mammalian body. The emphasis is on understanding normal function and processes at the gross, cellular, and molecular levels. The course also addresses pathology and disease. Course covers histology, bone, muscle, and nervous systems, including sensory function and the special senses.

Prerequisite: None

Section II
U29 3221 (3 units)
TuWTh 9:00a-12:00p
Tuition: \$1,995

INTRODUCTION TO ANATOMY AND PHYSIOLOGY I (Lecture and lab)

This is the first of a two-semester sequence that examines all major organ systems in the human/mammalian body. The emphasis is on understanding normal function and processes at the gross, cellular, and molecular levels. The course also addresses pathology and disease. Course covers histology, bone, muscle, and nervous systems, including sensory function and the special senses.

Prerequisite: None

Section II
U29 322 (5 units)
TuWTh 9:00a-12:00p and TuWTh 5:30p-9:20p
Tuition: \$3,325; Lab fee: \$300

NEUROSCIENCE FUTURES 1: HOW DO WE LEARN ABOUT THE BRAIN?

In this seminar course for first-year students, students learn about how neurobiologists conduct and communicate research. We focus our discussion on primary research papers written by WUSTL neurobiologists, who visit the class to present their work. Discussion then focuses on the formulation of scientific questions, evaluation of evidence and interpreting data within the context of a broader field.

Prerequisite: None

Special Section: Meets July 16-August 3

L41 171 (1 unit)
MTuWThF 1:00-2:00pm
Tuition: \$665

CHEMISTRY

TOPICS IN GENERAL CHEMISTRY

This course is designed to help students successfully transition from high school AP chemistry to the college level. It provides a general introduction to topics that entering freshmen typically find among the most difficult to master in a first-semester general chemistry course, including the nature and structure of the atom, quantum chemistry, and the nature of bonding. Students gain familiarity with the way in which a rigorous college chemistry course is taught and receive a realistic exposure to the nature of quizzes and exams. Problem sets, selected readings, and group problem-solving strengthen skills and facilitate learning.

Prerequisite: high school honors or AP chemistry and high school algebra

Section IV
L07 102 (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995

GENERAL CHEMISTRY I

Fundamental chemical principles and their applications. Atomic and molecular theories. Law of chemical combination. Periodic classification of the elements. Properties of gases, liquids, solids, and solutions.

Prerequisite: AP chemistry, honors or AP physics, and two years of high school mathematics (AP Calculus AB preferred)

Section II
L07 111A (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

GENERAL CHEMISTRY LABORATORY I

This course provides an introduction to basic laboratory techniques, the experimental method, and the presentation of scientific data, as well as direct experience with chemical principles and the properties and reactions of substances. The topics and experiments in this course complement the material covered in the Chem 111A lecture course.

Prerequisite: AP chemistry, honors or AP physics, and two years of high school mathematics (AP Calculus AB preferred)

Section II
L07 151 (2 units)
TuTh 1:00-2:45p and MWF 1:00-5:00p
Tuition: \$1,330

CHINESE

BEGINNING CHINESE: ALLEX PROGRAM

This course is an introduction to spoken Mandarin, the language with the largest number of native speakers in the world. Course objectives are to master Mandarin pronunciation, including the recognition and writing of Pinyin romanization, and to develop the ability to participate in simple, practical conversations on everyday topics. The relationship between Chinese language and culture and the sociolinguistically appropriate use of language will be stressed throughout. Typical class format will include performance of memorized basic conversations, drills, questions and discussion, and various types of communicative exercises. At the end of the course you will be expected to perform all four skills-speaking, listening, reading, and writing-at a basic level of proficiency.

Prerequisite: This course is appropriate for students with no Chinese background. Students who speak Chinese at home will find this course too easy.

Section V
U38 199 (4 units)
MTuWThF 9:00a-10:00a and 11:00a-12:00p
Tuition: \$2,660

DRAMA

IMPROVISATION FOR THE ACTOR

This course introduces students to the fundamentals of improvisation. Students are provided with the tools and techniques to develop their artistic voice, both individually and within an ensemble, through various theatre games, exercises, and techniques. Students will build self confidence, develop creativity, hone presentation skills, and have fun through working collaboratively in an ensemble. Both actors and non-actors are encouraged to take this class.

Prerequisite: None

Section IV
L15 233 (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

EARTH AND PLANETARY SCIENCES

GEOLOGY OF NATIONAL PARKS

Survey of geologic processes occurring at the Earth's surface and its interior using national parks and monuments as the prime venue for presentation. Volcanism and mountain-building; the work of streams, glaciers, and wind; lake and coastline development; stratigraphy and sedimentation; and Earth history. Material presented in a geographic context, with emphasis on landforms and landscape evolution, relating geology to the development and settlement of the U.S.

Prerequisite: None

Section II
L19 118A (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

INTRODUCTION TO GLOBAL CLIMATE CHANGE IN THE 21ST CENTURY

Global climate and global climate change and their impacts on life and civilization. Integrated view of global climate and the diverse forces that can alter global climate. Historical and potential future consequences of global climate change on human life, our industrial civilization, and its sustainability.

Prerequisite: None

Section IV
L19 111 (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995

ECONOMICS

INTRODUCTION TO MICROECONOMICS

Determination of prices; distribution of national income; theory of production. For a thorough introduction to economics L11 1021 should also be taken, but is not required.

Prerequisite: None

Section I
L11 1011 (3 units)
MTuWThF 1:00p-4:00p
Tuition: \$1,995

Section II
L11 1011 (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

Section IV
L11 1011 (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

INTRODUCTION TO MACROECONOMICS

Business fluctuations: inflation, recession; monetary and fiscal policy; economic development. For a thorough introduction to economics L11 1011 should also be taken, but is not required.

Prerequisite: None

Section I
L11 1021 (3 units)
MTuWThF 9:00a-12:00p
Tuition: \$1,995

Section II
L11 1021 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

Section IV
L11 1021 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

ENGLISH COMPOSITION

PRINCIPLES OF WRITING

This course is about reading well and writing deliberately and sees those two acts as intimately related. Students will read as writers, studying the strategies that writers use to write persuasively, and practicing those strategies in their own writing. The course offers a method for close reading (based on finding

meaningful patterns); it offers practice linking claims with evidence for those claims and it offers practice organizing papers using such skills as well-written summaries, theses, transitions, topic sentences, and paragraphs.

Prerequisite: None

Section IV
U11 101 (3 units)
MTuWThF 3:00p-4:45p
Tuition: \$1,995

ENGLISH LITERATURE

INTRODUCTION TO READING AND WRITING ABOUT LITERATURE

Intro to Reading and Writing about Literature is a discussion based, writing-intensive course. It focuses on analytical reading skills and on the principles of effective writing. Through weekly writing assignments and revision, students learn the importance of critical thinking and questioning that are required for the development of ideas and good, clear writing.

Prerequisite: None

Session II
L14 141S (3 units)
MTuWThF 3:00p-4:45p
Tuition: \$1,995

TOPICS IN ENGLISH AND AMERICAN LITERATURE: BANNED BOOKS: FROM THE GIVER TO THE LORD OF THE FLIES

In this course we will read a number of Young Adult novels that have been banned and examine what leads to the banning of a book. Why are YA novels particular targets of censorship, and why does society attempt to sanitize narratives about adolescence? The novels we will cover, by Toni Morrison, Stephen Chbosky, William Golding, and Lois Lowry, among others, have been banned in the United States on political, religious, sexual, or social grounds. We will gain insight into the controversies these novels started and also consider the themes and questions raised by the texts and their moral implications. In written assignments and class discussion, we will explore what, if anything, these novels have in common and what they may contribute to the study of literature. Students will be asked to engage critically with the texts they encounter and to hone their close reading skills while also considering historical and cultural contexts of the novels. Readings: "The Lord of the Flies," William Golding; "The Perks of Being a Wallflower," Stephen Chbosky; "The Bluest Eye," Toni Morrison; "The Giver," Lois Lowry; "The House on Mango Street," Sandra Cisneros.

Prerequisite: None

Section II
L14 245 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

TOPICS IN ENGLISH AND AMERICAN LITERATURE: FUNNY PAGES: FROM COMICS TO GRAPHIC NOVELS

Over the last twenty years graphic narrative has begun to be theorized as its own literary medium that combines sequential images with words to tell compelling stories, both fictional and nonfictional. In this course we will study the evolution of sequential art as it developed from comic strips into comic books, and, most recently, into graphic novels. Once reviled as pulp fiction, comics have received serious critical attention since the late 1980s and are finally recognized as both literature and a new medium. In our class discussions we will approach new ways of reading for this new medium. In order to grasp the range of graphic narrative, our readings will cover a variety of genres, including but not limited to autobiography, mystery, science fiction, and fantasy, including texts and creators such as: Krazy Kat, The Spirit by Will Eisner, selected works of R. Crumb, the Hernandez Brothers, Watchmen by Alan Moore and Dave Gibbons, The Dark Knight Returns by Frank Miller, Understanding Comics by Scott McCloud, Maus by Art Spiegelman, Palestine by Joe Sacco, Ghost World by Daniel Clowes, Fun Home by Alison Bechdel, Persepolis by Marjane Satrapi, and Jimmy Corrigan: The Smartest Kid on Earth by Chris Ware. Through class discussions, close readings, and attention to the medium's shifting aesthetic sensibilities, this course offers students an understanding of the genesis of this nascent art form.

Prerequisite: None

Section IV
L14 246 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

ENTREPRENEURSHIP

ENTREPRENEURSHIP AND THE LIBERAL ARTS

It is a little known truth that more entrepreneurs come out of the Arts & Sciences than any other college. This course will begin by exploring why this is so, examining in particular the creative and innovative qualities developed in liberal arts that are crucial to the success of the entrepreneur. We will then move on to examine entrepreneurs in action, hearing from those in the field and reading of others, learning how the liberal arts proved instrumental in various ways to their development and ultimate success as entrepreneurs.

Prerequisite: None

Section IV
L62 286 (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

HISTORY

INTRODUCTION TO WORLD HISTORY: THE SECOND WORLD WAR IN WORLD HISTORY

This course is an introduction to World History that uses World War II as a lens to examine the methodologies, approaches and sources historians employ to understand and analyze historical periods. The class will explore the global connections and interactions which characterize World History. The emphasis of this course will be on digging into topics traditionally neglected: the impact of the war on race, gender, family and children; daily life; and daily ethical decision making

Prerequisite: None

Section IV
L22 164 (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

INNOVATION

DESIGN THINKING: HUMAN-CENTERED APPROACHES TO MAKING THE WORLD

This course provides an overview of approaches to design thinking: a process of identifying, creating, and implementing solutions. Through an experiential approach, students learn methods for understanding users' needs, synthesizing complex information, identifying directives for design, generating ideas, prototyping, and communicating solutions. Methodologies will reflect multiple areas, including design, engineering, business, and anthropology. The class operates collaboratively tackling a locally relevant problem, such as active transportation or waste management. Students also explore the role of this process in business, organizations promoting social change, and education through readings, case studies, lectures, guest speakers, discussion, and written exercises. No previous experience in design is required.

Prerequisite: None

Section II
U44 290 (3 units)
MTuWThF 3:00p-4:45p
Tuition: \$1,995

Section IV
U44 290 (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995

INTERNATIONAL AND AREA STUDIES

INTERNATIONAL PUBLIC AFFAIRS

We live in a complex, fast-paced world. Technological advances and economic interdependence bring us closer together, even as globalization creates new challenges that cannot be solved by one country alone. In this class you will examine the forces that affect competition and cooperation in a globalized world. Students will engage with influential social science theories to understand how public policy can help address these challenges. You will explore these theories through reading, discussion, and classroom simulations that allow you to put the theories into practice. In addition, students will work on a policy project to develop the leadership skills that are crucial for effective analysis, planning, team building, and communication in public affairs.

Prerequisite: None

Section IV
L97 103B (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

JAPANESE

BEGINNING JAPANESE: ALEX PROGRAM

This course is an intensive, introductory course in Japanese language, designed for students with no previous background in Japanese. This course builds a solid foundation in Japanese with a focus on oral interaction. We will also work on the Japanese writing system and learn to read simple texts written in Japanese. The majority of the class time will be spent on students' performance in Japanese in cultural contexts. Students are expected to spend at least 90 minutes preparing for in-class performance. At the end of the course you will be expected to perform all four skills—speaking, listening, reading, and writing—at a basic level of proficiency.

Prerequisite: This course is appropriate for students with no Japanese background. Students who speak Japanese at home will find this course too easy.

Section V
U36 199 (4 units)
MTuWThF 9:00a-10:00a and 11:00a-12:00p
Tuition: \$2,660

LATIN

INTENSIVE INTRODUCTORY LATIN: FROM GRAMMAR BASICS TO TRANSLATION

An intensive introduction to Latin, especially suitable for graduate students in the humanities, social, and natural sciences, but open to undergraduates who seek permission from the Department of Classics. Thorough introduction to grammar, vocabulary, and syntax will be supplemented by translation practice. The last part of the course will focus on translation of substantial selections from Latin authors including Vergil and Ovid. Students who complete the summer

course should subsequently be able to enroll in a 300-level Latin course.

Prerequisite: None

Section III
L10 208 (6 units)
MTuWThF 9:00a-12:00p
Tuition: \$3,990

LINGUISTICS

INTRODUCTION TO LINGUISTICS

Language is one of the fundamental capacities of the human species, and there are many interesting and meaningful ways in which it can be studied. This course explores the core components of linguistic theory: speech sounds (phonetics and phonology), word formation (morphology), sentence structure (syntax), and meaning (semantics). It also provides an overview of interdisciplinary ideas and research on how language is acquired and processed, its relation to the mind-brain and to society, and the question of whether the essential properties of language can be replicated outside the human mind (specifically, in chimpanzees or computer programs).

Prerequisite: None

Section II
L44 170D (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

Section IV
L44 170D (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

MATHEMATICS

INTRODUCTION TO STATISTICS

Data collection: sampling and designing experiments. Data organization: data, tables, graphs, frequency distributions, numerical summarization of data, and consumer price index. Inference: elementary probability and hypothesis testing.

Prerequisite: None

Section II
L24 1011 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

Section IV
L24 1011 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

CALCULUS I

The first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions.

Prerequisite: high school algebra and trigonometry

Section III
L24 131 (3 units)
MTuWTh 9:00a-10:30a
Tuition: \$1,995

CALCULUS II

The second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, Taylor's theorem, and infinite series.

Prerequisite: AP Calculus AB with a grade of B or better

Section III
L24 132 (3 units)
MTuWTh 9:00a-10:30a
Tuition: \$1,995

CALCULUS III

Multivariable calculus. Topics include differential and integral calculus of functions of two or three variables, and a brief introduction to differential equations.

Prerequisite: AP Calculus BC with a B or better and score of 4 or 5 on AP exam

Section III
L24 233 (3 units)
MTuWTh 3:00p-4:30p
Tuition: \$1,995

FINITE MATHEMATICS: NUMBER THEORY, COMBINATORICS, AND GRAPHS

Intro to number theory, combinatorics, graph theory, and their applications. Methods of proof and practical applications: calendars, scheduling, communications, encryption, etc. No knowledge of calculus, trigonometry, or geometry is required.

Prerequisite: high school algebra

Section IV
L24 220 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

ELEMENTARY PROBABILITY AND STATISTICS

An introduction to probability and statistics. Discrete and continuous random variables, mean and variance, hypothesis testing and confidence limits, nonparametric methods, Student's t, analysis of variance, regression, and contingency tables. Graphing calculator with statistical distribution functions (such as the TI-83) may be required.

Prerequisite: AP Calculus AB with a grade of B or better

Section IV
L24 2200 (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995

MATRIX ALGEBRA

Theory of matrices and vector spaces from a concrete, computational point of view. Topics: row reduction (pivot method), rank and dimension, determinants, eigenvalues and eigenvectors, and diagonalization of symmetrical matrices.

Prerequisite: AP Calculus BC with a B or better

Section II
L24 309 (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

MUSIC

THE WORLD THAT MADE HAMILTON: SOURCES AND CONTEXTS FOR LIN MANUEL MIRANDA'S MUSICAL

Rarely has a Broadway musical captured the national and international imagination as fervently as Lin-Manuel Miranda's *Hamilton* (2015). Inspired by a variety of musical and non-musical sources, Miranda dramatizes the life of immigrant founding father Alexander Hamilton. This course seeks to identify, explore, and analyze these sources, which include Ron Chernow's 2005 biography of Hamilton, early hip-hop, the Broadway musical, and Miranda's previous works. Rather than focusing on one interpretation of the show, we will hear and read *Hamilton* from numerous vantage points, discussing the theatrical, historical, musical, and political relevancy of the show. No prior knowledge of music, the musical, or Hamilton is required.

Prerequisite: None

Section IV
L27 1093 (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

PHILOSOPHY

BIOMEDICAL ETHICS

A critical examination, in light of contemporary moral disagreements and traditional ethical theories, of some of the moral issues arising out of medical practice and experimentation in our society. May include euthanasia, genetic engineering, abortion, medical malpractice, the allocation of medical resources, and the rights of the patient.

Prerequisite: None

Section II
L30 233F (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

Section IV
L30 233F (3 units)
MTuWThF 3:00p-4:45p
Tuition: \$1,995

LOGIC AND CRITICAL ANALYSIS

This course is an introduction to first-order logic. Logic is the study of the formal properties of arguments. In this course we learn how to make arguments precise by formalizing sentences and applying methods of deductive reasoning to prove conclusions. We also discuss the relations between logical reasoning and informal reasoning, and logic and rationality. Why study logic? Logic gives you principles and techniques to distinguish good forms of reasoning, helps you to construct correct arguments, and (to some extent) think orderly. Additionally, logic is essential in other fields that you might also be interested in studying (e.g., mathematics, computer science, linguistics, and analytic philosophy). And of course, logic is a fun and interesting subject in its own right. The course presumes no background in philosophy or logic.

Prerequisite: None

Section I
L30 100G (3 units)
MTuWThF 9:00a-12:00p
Tuition: \$1,995

Section IV
L30 100G (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995

GREAT PHILOSOPHERS

In this course we focus on some of the most important texts in the history of Western philosophy in order to discuss a wide range of central philosophical problems. We typically consider, for example, the existence of God, the justification of claims to knowledge, and the requirements of a good human life, including the demands of morality. Among the philosophers most likely to be studied are Plato, Aristotle, Descartes, Hume, Kant, Marx, Nietzsche, and Wittgenstein. Our goal is not just to appreciate the genius of some great philosophers but also to grapple with the current philosophical problems they have bequeathed to us.

Prerequisite: None

Section IV
L30 125C (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

PHYSICS

GENERAL PHYSICS I

First semester of a two-semester, calculus-based introductory physics sequence designed to expose students to the concepts, laws, and structure of physics. Topics include kinematics, Newton's laws, energy, linear momentum, angular momentum, conservation laws, gravitational force, harmonic motion, wave motion and interference, sound, and special relativity. Five 2.75-hour lectures and two 3-hour lab Sections each week (all mandatory).

Prerequisite: AP Calculus AB with a grade of B or better

Section II
L31 117A (4 units)
MTuWThF 9:15a-12:00p and MWF 1:30p-4:30p
Tuition: \$1,995

POLITICAL SCIENCE

AMERICAN POLITICS

This course is meant to introduce students to the study of American Politics. We will analyze the origins, developments, actors, institutions, and processes of the American political system. In addition to the three branches of government, we will also cover topics such as public opinion, the media, campaigns and elections, political parties, civil right and liberties, and more. By the end of the class, students should become more careful and insightful consumers of political knowledge.

Prerequisite: None

Section IV
L32 101B (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

PSYCHOLOGY

INTRODUCTION TO PSYCHOLOGY

Survey and analysis of concepts, research, and theory covering the areas of learning, memory, motivation, personality, social, abnormal, clinical, and biological psychology. Introduces the diversity of questions, areas, approaches, research, and theories that compose the study of mind and behavior.

Prerequisite: None

Section I
L33 100B (3 units)
MTuWThF 9:00a-12:00p

Section II
L33 100B (3 units)
MTuWThF 1:00p-2:45p
Tuition: \$1,995

Section IV
L33 100B (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995

RELIGIOUS STUDIES

HINDUISM IN PERFORMANCE

The performing arts frame actions, stories, people, experiences, and behaviors, and as such are inherently set apart from quotidian routines; similarly, religious life is guided by distinctions between the sacred and the profane, itself a type of performance. Together we will explore the intersection of performativity and Hindu religiosity, guided by the analytic categories of classical Indian aesthetic theory. We will delve into the poetic visions of the renowned Kalidasa; the communal nature of the theatrical Ramlila; the expressions of Kuchipudi and Kathakali dance; the social cohesion of bhajan and kirtan; the divine conduit of Baul gan and Syama Songit; and the modern critique of Hindu traditions in the films of Satyajit Ray, Deepa Mehta, and Aparna Sen. In developing an enriched experiential knowledge of South Asian performance as a rich facet of Hindu religious life, we will enhance our own aesthetic appreciation and expressivity

Prerequisite: None

Section IV
L23 140 (3 units)
MTuWThF 9:00a-10:45a
Tuition: \$1,995

SOCIOLOGY

Social Problems and Social Issues

Through a sociological lens, this course examines the causes and consequences of pressing contemporary social problems in the United States, including increasing poverty and inequality, "modern" racism and sexism, the crisis in health care (with a unique focus on the lack of adequate mental-health services), crime, incarceration and criminal justice, changing patterns of drug abuse, fragile family structures, globalization and assaults on human rights, and environmental degradation. We will also examine the empirical underpinnings on the basis of inequality focusing on the intersection of disadvantaged statuses related to race, social class, gender, ethnicity, and sexuality that heighten the risk for social problems and how these risks play out in American society. Through a research project, students will learn how innovative sociological paradigms (some of which have been created outside of the United States) can offer guidelines for successful intervention strategies. Briefings from a few agencies dealing directly with these problems will share perspectives on theoretical and applied work related to advocacy, justice, and interventions. This course is especially relevant for those interested in graduate work and career goals in health and medicine, social service, law, and public policy.

Prerequisite: None

Session II
L40 206A (3 units)
MTuWThF 3:00p-4:45p
Tuition: \$1,995

SPANISH

ELEMENTARY SPANISH LEVEL II

This Spanish course is a language program stressing rapid acquisition of spoken ability with immersion teaching method covering more sophisticated grammatical skills.

Prerequisite: three years of high school Spanish

Section IV
L38 109 (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995

WOMEN, GENDER, AND SEXUALITY STUDIES

Introduction to Women, Gender, and Sexuality Studies

This course will provide an introduction to the major and concepts in the interdisciplinary field of women, gender and sexuality. We will examine the meanings attached to terms such as "man," "woman," "gay," and "sex." Topics discussed may include the history of feminist movements, masculinity, biological frameworks for understanding gender, intimate violence, sexual identities, and intersectionality.

Prerequisite: None

Session II
L77 100B (3 units)
MTuWThF 11:00a-12:45p
Tuition: \$1,995