Fall 2024 General Education Courses

NATURAL SCIENCE

Courses designed for non-science majors are noted with a double asterisk (**)

BIOLOGY GE

**ANTH 2. Human Origins (4)

An introduction to human evolution from the perspective of physical anthropology, including evolutionary theory and the evolution of the primates, hominids, and modern humans. Emphasis is placed on evidence from fossil remains and behavioral studies of living primates.

BILD 1. The Cell (4)

An introduction to cellular structure and function, to biological molecules, bioenergetics, to the genetics of both prokaryotic and eukaryotic organisms, and to the elements of molecular biology. Recommended preparation: prior completion of high school- or college-level chemistry course.

BILD 2. Multicellular Life (4)

An introduction to the development and the physiological processes of plants and animals. Included are treatments of reproduction, nutrition, respiration, transport systems, regulation of the internal environment, the nervous system, and behavior. Prerequisites: BILD 1.

BILD 3. Organismic and Evolutionary Biology (4)

The first principles of evolutionary theory, classification, ecology, and behavior; a phylogenetic synopsis of the major groups of organisms from viruses to primates.

**BILD 10. Fundamental Concepts of Modern Biology (4)

An introduction to the biochemistry and genetics of cells and organisms; illustrations are drawn from microbiology and human biology. This course is designed for nonbiology students and does not satisfy a lower-division requirement for any biology major. Open to nonbiology majors only. Students may not receive credit for BILD 10 after receiving credit for BILD 1.

**BILD 20. Human Genetics in Modern Society (4)

Fundamentals of human genetics and introduction to modern genetic technology such as gene cloning and DNA finger printing. Applications of these techniques, such as forensic genetics, genetic screening, and genetic engineering. Social impacts and ethical implications of these applications. This course is designed for nonbiology students and does not satisfy a lower-division requirement for any biology major. Open to nonbiology majors only. Students may not receive credit for BILD 20 after receiving credit for BICD 100.

NATURAL SCIENCE (cont.)

Courses designed for non-science majors are noted with a double asterisk (**)

****BILD 32. Introduction to Cancer Biology (4)**

Cancer is the second leading cause of death both in the United States and globally. This course is an introduction to the basic biology of cancer including the cellular and genetic changes that characterize the development and progression of cancer, as well as a review of the major therapies currently being pursued to treat cancer. Topics that are emphasized in this course include the fundamental causes of cancers, the socioeconomic implications of cancer incidence, and basic preventative measures. This course does not satisfy any requirement for a biology major. Students may not receive credit for BILD 32 after receiving credit for BIMM 134.

****COGS 17. Neurobiology of Cognition (4)**

Introduction to the organization and functions of the nervous system. Topics include molecular, cellular, developmental, systems, and behavioral neurobiology. Specifically, structure and function of neurons, peripheral and central nervous systems, sensory, motor, and control systems, learning and memory mechanisms. Students may not receive credit for both BILD12 and COGS 17.

CHEMISTRY GE

****CHEM 4. Chemical Thinking (4)**

This is a one-quarter preparatory chemistry course intended for students continuing on to general chemistry. The course will focus on the development and analysis of submicroscopic models of matter and structure-property relationships to explain, predict, and control chemical behavior. May not receive credit for both CHEM 4 and CHEM 11. Includes a laboratory/discussion each week. Recommended: concurrent enrollment in MATH 3C, 4C or 10A or higher. Restricted to first year and sophomore enrollment.

CHEM 6A. General Chemistry I (4)

First quarter of a three-quarter sequence intended for science and engineering majors. Topics include atomic theory, bonding, molecular geometry, stoichiometry, types of reactions, and thermochemistry. May not be taken for credit after CHEM 6AH. Recommended: proficiency in high school chemistry and/or physics. Corequisite: MATH 10A or 20A or prior enrollment.

CHEM 6AH. Honors General Chemistry I (4)

First quarter of a three-quarter honors sequence intended for well-prepared science and engineering majors. Topics include quantum mechanics, molecular orbital theory, and bonding. An understanding of nomenclature, stoichiometry, and other fundamentals is assumed. Students completing 6AH may not subsequently take 6A for credit. Recommended: completion of a high school physics course strongly recommended. Concurrent enrollment in MATH 20A or higher.

Fall 2024 General Education Courses

NATURAL SCIENCE (cont.)

Courses designed for non-science majors are noted with a double asterisk (**)

CHEM 6B. General Chemistry II (4)

Second quarter of a three-quarter sequence intended for science and engineering majors. Topics include covalent bonding, gases, liquids, and solids, colligative properties, physical and chemical equilibria, acids and bases, solubility. May not be taken for credit after CHEM 6BH. Prerequisites: CHEM 6A or 6AH and MATH 10A or 20A. Recommended: concurrent or prior enrollment in MATH 10B or 20B.

CHEM 6C. General Chemistry III (4)

Third quarter of a three-quarter sequence intended for science and engineering majors. Topics include thermodynamics, kinetics, electrochemistry, coordination chemistry, and introductions to nuclear, main group organic, and biochemistry. May not be taken for credit after CHEM 6CH. Prerequisites: CHEM 6B or 6BH. Recommended: completion of MATH 10B or 20B.

PHYSICS GE

PHYS 1A. Mechanics (3)

First quarter of a three-quarter introductory physics course, geared toward life-science majors. Equilibrium and motion of particles in one and two dimensions in the framework of Newtonian mechanics, force laws (including gravity), energy, momentum, rotational motion, conservation laws, and fluids. Examples will be drawn from astronomy, biology, sports, and current events. PHYS 1A and 1AL are designed to be taken concurrently but may be taken in separate terms; taking the lecture before the lab is the best alternative to enrolling in both. Students continuing to PHYS 1B/1BL will also need MATH 10B or 20B. Prerequisites: MATH 10A or 20A. Recommended preparation: concurrent or prior enrollment in MATH 10B or 20B.

PHYS 1AL. Mechanics Laboratory (2)

Physics laboratory course to accompany PHYS 1A. Experiments in Mechanics. PHYS 1A and 1AL are designed to be taken concurrently but may be taken in separate terms; taking the lecture before the lab is the best alternative to enrolling in both. Students continuing to PHYS 1B/1BL will also need MATH 10B or 20B. Prerequisites: MATH 10A or 20A. Recommended preparation: concurrent or prior enrollment in PHYS 1A and MATH 10B or 20B.

PHYS 1B. Electricity and Magnetism (3)

Second quarter of a three-quarter introductory physics course geared toward life-science majors. Electric fields, magnetic fields, DC and AC circuitry. PHYS 1B and 1BL are designed to be taken concurrently but may be taken in separate terms; taking the lecture before the lab is the best alternative to enrolling in both. Prerequisites: PHYS 1A or 2A, and MATH 10B or 20B.

PHYS 1BL. Electricity and Magnetism Laboratory (2)

Physics laboratory course to accompany PHYS 1B. Experiments in electricity and magnetism. Program or materials fee may apply. PHYS 1B and 1BL are designed to be taken concurrently but may be taken in separate terms; taking the lecture before the lab is the best alternative to enrolling in both. Prerequisites: PHYS 1A or 2A, 1AL or 2BL, and MATH 10B or 20B. Recommended preparation: concurrent or prior enrollment in PHYS 1B.

NATURAL SCIENCE (cont.)

Courses designed for non-science majors are noted with a double asterisk (**)

PHYS 1C. Waves, Optics, and Modern Physics (3)

Third quarter of a three-quarter introductory physics course geared toward life-science majors. The physics of oscillations and waves, vibrating strings and sound, and the interaction of light with matter as illustrated through optics and quantum mechanics. Examples from biology, sports, medicine, and current events. PHYS 1C and 1CL are designed to be taken concurrently but may be taken separately; taking the lecture before the lab is the best alternative to enrolling in both. Prerequisites: PHYS 1B or 2B, and MATH 10B or 20B.

PHYS 1CL. Waves, Optics, and Modern Physics Laboratory (2)

Physics laboratory course to accompany PHYS 1C. Experiments in waves, optics, and modern physics. Program or materials fee may apply. PHYS 1C and 1CL are designed to be taken concurrently but may be taken in separate terms; taking the lecture before the lab is the best alternative to enrolling in both. Prerequisites: PHYS 1B or 2B, 1BL or 2CL, and MATH 10B or 20B. Recommended preparation: concurrent or prior enrollment in PHYS 1C.

PHYS 2A. Physics—Mechanics (4)

A calculus-based science-engineering general physics course covering vectors, motion in one and two dimensions, Newton's first and second laws, work and energy, conservation of energy, linear momentum, collisions, rotational kinematics, rotational dynamics, equilibrium of rigid bodies, oscillations, gravitation. Students continuing to PHYS 2B/4B will also need MATH 20B. Prerequisites: MATH 10A-B or 20A or 20B or 20C or 31BH. Recommended preparation: prior or concurrent enrollment in MATH 20B.

PHYS 2B. Physics—Electricity and Magnetism (4)

Continuation of PHYS 2A covering charge and matter, the electric field, Gauss's law, electric potential, capacitors and dielectrics, current and resistance, electromotive force and circuits, the magnetic field, Ampere's law, Faraday's law, inductance, electromagnetic oscillations, alternating currents and Maxwell's equations. Students continuing to PHYS 2C will also need MATH 20C or 31BH. Prerequisites: PHYS 2A or 4A and MATH 20B or 20C or 31BH. Recommended preparation: prior or concurrent enrollment in MATH 20C or 31BH.

PHYS 2C. Physics—Fluids, Waves, Thermodynamics, and Optics (4)

Continuation of PHYS 2B covering fluid mechanics, waves in elastic media, sound waves, temperature, heat and the first law of thermodynamics, kinetic theory of gases, entropy and the second law of thermodynamics, Maxwell's equations, electromagnetic waves, geometric optics, interference and diffraction. Students continuing to PHYS 2D will need MATH 20D. Prerequisites: PHYS 2A or 4A, and MATH 20C or 31BH. Recommended preparation: prior or concurrent enrollment in MATH 20D. Prior completion of PHYS 2B is strongly recommended.

Fall 2024 General Education Courses

NATURAL SCIENCE (cont.)

Courses designed for non-science majors are noted with a double asterisk (**)

PHYSICS GE

PHYS 4C. Physics for Physics Majors—Electricity and Magnetism (4)

Continuation of PHYS 4B covering charge and Coulomb's law, electric field, Gauss's law, electric potential, capacitors and dielectrics, current and resistance, magnetic field, Ampere's law, Faraday's law, inductance, AC circuits. Prerequisites: PHYS 2A or 4A, 2C or 4B, MATH 20C or 31BH, and 18 or 20F or 31AH. Recommended preparation: prior or concurrent enrollment in MATH 20E or 31CH.

****PHYS 12. Energy and the Environment (4)**

A course covering energy fundamentals, energy use in an industrial society and the impact of large-scale energy consumption. It addresses topics on fossil fuel, heat engines, solar energy, nuclear energy, energy conservation, transportation, air pollution and global effects. Concepts and quantitative analysis.

****SIO 15. Natural Disasters (4)**

Introduction to environmental perils and their impact on everyday life. Geological and meteorological processes, including earthquakes, volcanic activity, large storms, global climate change, mass extinctions throughout Earth's history, and human activity that causes and prevents natural disasters.

****SIO20R: The Atmosphere (4)**

This course describes the distinguishing features of the Earth's atmosphere, providing a nontechnical overview of the role of the atmosphere in meteorology and climate sciences. Topics include atmospheric structure, global temperature trends and their causes, water-temperature relationships, the ozone layer and hole, Earth's radiation balance forecasting transport and storms, greenhouse gas effects, aerosols and clouds, precipitation and acid rain, and climate change. Students may not receive credit for both SIO 20 and SIO 20R. ***Prerequisites:*** none.

****SIO 30. The Oceans (4)**

Presents modern ideas and descriptions of the physical, chemical, biological, and geological aspects of oceanography, and considers the interactions between these aspects. Intended for students interested in the oceans, but who do not necessarily intend to become professional scientists.

****SIO 40. Life and Climate on Earth (4)**

Explores life on Earth and its relationship to the environment—past, present, and future. Topics include origins of life, earth history, elemental cycles, global climate variability and human impacts on our environment.

****SIO 50. Introduction to Physical Geology (6)**

This course is an introduction to how our planet works, focusing on the formation and evolution of the solid earth, and the processes affecting both its surface and interior. Laboratories and substantial field component complement and extend the lecture material. Program and/or materials fees may apply.

Fall 2024 General Education Courses

MATHEMATICS, STATISTICS AND LOGIC

MATHEMATICS, ADVANCED STATISTICS

MATH 3C. Precalculus (4)
Functions and their graphs. Linear and polynomial functions, zeroes, inverse functions, exponential and logarithmic, trigonometric functions and their inverses. Emphasis on understanding algebraic, numerical, and graphical. (No credit given if taken after MATH 4C, 1A/10A, or 2A/20A.) Three or more years of high school mathematics or equivalent recommended. ***Prerequisites:*** Math Placement Exam qualifying score or MATH 3B.

MATH 4C. Precalculus for Science and Engineering (4)
Review of polynomials. Graphing functions and relations: graphing rational functions, effects of linear changes of coordinates. Circular functions and right triangle trigonometry. Reinforcement of function concept: exponential, logarithmic, and trigonometric functions. Vectors. Conic sections. Polar coordinates. (No credit given if taken after MATH 1A/10A or 2A/20A. Two units of credit given if taken after MATH 3C.) Three or more years of high school mathematics or equivalent recommended. ***Prerequisites:*** Math Placement Exam qualifying score, or MATH 3C, or ACT Math score of 25 or higher, or AP Calculus AB score (or subscore) of 2.

MATH 10A. Calculus I (4)
Differential calculus of functions of one variable, with applications. Functions, graphs, continuity, limits, derivatives, tangent lines, optimization problems. (No credit given if taken after or concurrent with MATH 20A.) ***Prerequisites:*** Math Placement Exam qualifying score, or AP Calculus AB score of 2, or SAT II Math Level 2 score of 600 or higher, or MATH 3C, or MATH 4C.

MATH 10B. Calculus II (4)
Integral calculus of functions of one variable, with applications. Antiderivatives, definite integrals, the Fundamental Theorem of Calculus, methods of integration, areas and volumes, separable differential equations. (No credit given if taken after or concurrent with MATH 20B.) ***Prerequisites:*** AP Calculus AB score of 3, 4, or 5 (or equivalent AB subscore on BC exam), or MATH 10A, or MATH 20A.

MATH 10C. Calculus III (4)
Introduction to functions of more than one variable. Vector geometry, partial derivatives, velocity and acceleration vectors, optimization problems. (No credit given if taken after or concurrent with 20C.) ***Prerequisites:*** AP Calculus BC score of 3, 4, or 5, or MATH 10B, or MATH 20B.

MATH 11. Calculus-Based Introductory Probability and Statistics (5)
Events and probabilities, conditional probability, Bayes' formula. Discrete and continuous random variables: mean, variance; binomial, Poisson distributions, normal, uniform, exponential distributions, central limit theorem. Sample statistics, confidence intervals, hypothesis testing, regression. Applications. Introduction to software for probabilistic and statistical analysis. Emphasis on connections between probability and statistics, numerical results of real data, and techniques of data analysis. ***Prerequisites:*** AP Calculus BC score of 3, 4, or 5, or MATH 10B or MATH 20B.

MATHEMATICS, STATISTICS AND LOGIC (cont.)

MATHEMATICS, ADVANCED STATISTICS

MATH 20A. Calculus for Science and Engineering (4)
Foundations of differential and integral calculus of one variable. Functions, graphs, continuity, limits, derivative, tangent line. Applications with algebraic, exponential, logarithmic, and trigonometric functions. Introduction to the integral. (Two credits given if taken after MATH 1A/10A and no credit given if taken after MATH 1B/10B or MATH 1C/10C. Formerly numbered MATH 2A.) ***Prerequisites:*** Math Placement Exam qualifying score, or AP Calculus AB score of 3 (or equivalent AB subscore on BC exam), or SAT II MATH 2C score of 650 or higher, or MATH 4C or MATH 10A.

MATH 20B. Calculus for Science and Engineering (4)
Integral calculus of one variable and its applications, with exponential, logarithmic, hyperbolic, and trigonometric functions. Methods of integration. Infinite series. Polar coordinates in the plane and complex exponentials. (Two units of credits given if taken after MATH 1B/10B or MATH 1C/10C.) ***Prerequisites:*** AP Calculus AB score of 4 or 5, or AP Calculus BC score of 3, or MATH 20A with a grade of C– or better, or MATH 10B with a grade of C– or better, or MATH 10C with a grade of C– or better.

MATH 20C. Calculus and Analytic Geometry for Science and Engineering (4)
Vector geometry, vector functions and their derivatives. Partial differentiation. Maxima and minima. Double integration. (Two units of credit given if taken after MATH 10C. Credit not offered for both MATH 20C and 31BH. Formerly numbered MATH 21C.) ***Prerequisites:*** AP Calculus BC score of 4 or 5, or MATH 20B with a grade of C– or better.

MATH 180A. Introduction to Probability (4)
Probability spaces, random variables, independence, conditional probability, distribution, expectation, variance, joint distributions, central limit theorem. (Two units of credit offered for MATH 180A if ECON 120A previously, no credit offered if ECON 120A concurrently. Two units of credit offered for MATH 180A if MATH 183 or 186 taken previously or concurrently.) Prior or concurrent enrollment in MATH 109 is highly recommended. ***Prerequisites:*** Math 20C or MATH 31BH, or consent of instructor.

INTRODUCTORY STATISTICS

COGS 14A. Introduction to Research Methods (4)
Introduction to the scientific method. Methods of knowledge acquisition, research questions, hypotheses, operational definitions, variables, control. Observation, levels of measurement, reliability, validity. Experimentation and design: between-groups, within-subjects, quasi-experimental, factorial, single-subject. Correlational and observational studies. Ethics in research.

HDS 60. Introduction to Statistical Analysis (4)
This course provides an introduction to both descriptive and inferential statistics, core tools in the process of scientific discovery, and the interpretation of research. Emphasis on a conceptual understanding of statistics, numerical results of real data, and techniques of data analysis.

MATHEMATICS, STATISTICS AND LOGIC (cont.)

INTRODUCTORY STATISTICS

POLI 30D. Political Inquiry (4)
Introduction to the logic of inference in social science and to quantitative analysis in political science and public policy including research design, data collection, data description and computer graphics, and the logic of statistical inference (including linear regression). POLI 30 is Lecture only, and POLI 30D is Lecture plus Discussion section. These courses are equivalents of each other in regards to major requirements, and students may not receive credit for both 30 and 30D.

PSYC 60. Introduction to Statistics (4)
This course provides an introduction to both descriptive and inferential statistics, core tools in the process of scientific discovery and the interpretation of research.

SOCI 60. The Practice of Social Research (4)
This course introduces students to the fundamental principles of the design of social research. It examines the key varieties of evidence, sampling methods, logic of comparison, and causal reasoning researchers use in their study of social issues. Will not receive credit for SOCI 60 and SOCL 60.

COMPUTER PROGRAMMING AND LOGIC

BILD 62. Introduction to Python for Biologists (4)
Introductory class for biology students interested in using Python for data analysis and visualization. Course covers the basics of programming in Python and introduces students to various implementations of Python analyses for biological data such as time series and images. Students will use their own laptops. Students may receive credit for one of the following: BILD 62, COGS 18, CSE 6R, or CSE 8A.

COGS 18. Introduction to Python (4)
This class will teach fundamental Python programming skills and practices, including the “Zen of Python.” Students will focus on scientific computing and learn to write functions and tests, as well as how to debug code using the Jupyter Notebook programming environment. Students may receive credit for one of the following: BILD 62, COGS 18, CSE 8A, or CSE 6R. Recommended preparation: students with limited computing experience may take COGS 3.

CSS 1. Introductory Programming for Computational Social Science (4)
This course develops computational thinking practices and skills critical for defining, describing, and analyzing social science problems using a computational approach. Students will learn to program in Python in the context of computational social science problems.

Fall 2024 General Education Courses

MATHEMATICS, STATISTICS AND LOGIC (cont.)

COMPUTER PROGRAMMING AND LOGIC

CSE 8A. Introduction to Programming and Computational Problem-Solving I (4)
Introductory course for students interested in computer science and programming. Basics of programming including variables, conditionals, loops, functions/methods. Structured data storage such as arrays/lists and dictionaries, including data mutation. Hands-on experience with designing, writing, hand-tracing, compiling or interpreting, executing, testing, and debugging programs. Students solve relevant computational problems using a high-level programming language. CSE 8A is part of a two-course sequence (CSE 8A-B) that is equivalent to CSE 11. Students should take CSE 8B to complete this track. Students who have taken CSE 8B or CSE 11 may not take or receive credit for CSE 8A. Recommended preparation: No prior programming experience is assumed, but comfort using computers is helpful. Students should consult the CSE Course Placement Advice web page for assistance in choosing which CSE course to take first. Prerequisites: restricted to undergraduates. Graduate students will be allowed as space permits.

CSE 11. Introduction to Programming and Computational Problem-Solving: Accelerated Pace (4)
Accelerated introductory programming including an object-oriented approach. Covers basic programming topics from CSE 8A including variables, conditionals, loops, functions/methods, structured data storage, and mutation. Also covers topics from CSE 8B including the Java programming language, class design, interfaces, basic class hierarchies, recursion, event based programming, and file I/O. Basics of command-line navigation for file management and running programs. Zero units of credit offered for CSE 11 if CSE 8B taken previously or concurrently. Recommended preparation: Significant prior programming experience (for example, high school AP CSA). Students should consult the CSE Course Placement Advice web page for assistance in choosing a first CSE course. Prerequisites: restricted to undergraduates. Graduate students will be allowed as space permits.

PHIL 10. Introduction to Logic (4)
Basic concepts and techniques in both informal and formal logic and reasoning, including a discussion of argument, inference, proof, and common fallacies, and an introduction to the syntax, semantics, and proof method in sentential (propositional) logic.

PHIL 12. Scientific Reasoning (4)
Strategies of scientific inquiry: how elementary logic, statistical inference, and experimental design are integrated to evaluate hypotheses in the natural and social sciences. May be used to fulfill general-education requirements for Marshall, Warren, and Eleanor Roosevelt Colleges.

Fall 2024 General Education Courses

HUMANITIES AND CULTUAL STUDIES

AAS 10R. Introduction to African American Studies (4)

This course will cover the experiences of peoples of African descent in the U.S. and broader African Diaspora from the vantage points of cultural production, political practice, socioeconomic conditions, and the overall struggle for social justice along intersecting lines of race, gender, and class. Topics reviewed include slavery (and slave rebellion), Reconstruction, Jim Crow apartheid, the Great Migration and Harlem Renaissance, and the Civil Rights and Black Power Movements.

ETHN 1R. Introduction to Ethnic Studies: Land and Labor (4)

This course examines key historical events and debates in the field that center around land and labor, including disputes about territory and natural resources, slavery and other forms of unfree labor, labor migration and recruitment, and US and transnational borders. Students may not receive credit for both ETHN 1A and ETHN 1.

ETHN 20R: Introduction to Asian American Studies (4)

This course introduces students to key issues in Asian American lives, with emphasis on the global historical context of migration; changing ethnic and racial consciousness; economic, social, and political status; cultural production; and family and gender relations.

GSS 20. Introduction to Global South Studies (4)

This introductory course examines historical and theoretical debates on the Global South. Especially important are socioeconomic, political, as well as cultural processes, as they are key factors to understanding the Global South across the globe.

GSS 27. Southeast Asia: History, Culture, and Politics (4)

An introduction to the history, culture, and politics of various regions of the Global South through multidisciplinary approaches and readings. Topics will vary each quarter.

HILD 7C. Race and Ethnicity in the United States (4)

A lecture-discussion course on the comparative ethnic history of the United States. Of central concern will be the Asian American and white ethnic groups, race, oppression, mass migrations, ethnicity, city life in industrial America, and power and protest in modern America.

HILD 10. East Asia: The Great Tradition (4)

The East Asia survey compares and contrasts the development of China, Korea, and Japan from ancient times to the present. This course explores the evolution of civilization from the first writing through classical Hei'an Japan, aristocratic Koryo, and late imperial Song China. Primary and secondary readings on basic ideas, institutions, and practices of the Confucian, Daoist, and Buddhist paths and of the state and family.

Fall 2024 General Education Courses

HUMANITIES AND CULTUAL STUDIES (cont.)

HILD 14. Film and History in Latin America (4)
Students watch films on Latin America and compare them to historical research on similar episodes or issues. Films will vary each year but will focus on the social and psychological consequences of colonialism, forced labor, religious beliefs, and "Modernization."

LATI 10. Reading North by South: Latin American Studies and the US Liberation Movements (4)
The purpose of this class is to study the multilayered relations between Latin American studies and the US liberation movements, particularly Third World movements, the Chicano movement, the black liberation movement, the indigenous movement, human rights activism, and trans-border activism. Students may not receive credit for LATI 100 and LATI 10.

LATI 50. Introduction to Latin America (4)
Interdisciplinary overview of society and culture in Latin America—including Mexico, the Caribbean, and South America: legacies of conquest, patterns of economic development, changing roles of women, expressions of popular culture, cycles of political change, and US-Latin American relations.

LTEN 29. Introduction to Chicano Literature (4)
This course provides an introduction to the literary production of the population of Mexican origin in the United States. Students will examine a variety of texts dealing with the historical (social, economic, and political) experiences of this heterogeneous population.

FINE ARTS

MUS 4. Introduction to Western Music (4)
A brief survey of the history of Western music from the Middle Ages to the present. Much attention will be paid to the direct experience of listening to music and attendance of concerts. Class consists of lectures, listening labs, and live performances.

MUS 5R. Sound in Time (4)
An examination and exploration of the art and science of music making. Topics include acoustics, improvisation, composition, and electronic and popular forms. There will be required listening, reading, and creative assignments. No previous musical background required.

MUS 7. Music, Science, and Computers (4)
Exploration of the interactions among music, science, and technology, including the history and current development of science and technology from the perspective of music. *Prerequisites:* none.

Fall 2024 General Education Courses

FINE ARTS (cont.)

MUS 8. American Music: Jazz Cultures (4)

Jazz is one of the primary foundations for American music in the twentieth and twenty-first centuries. This course highlights the multicultural and international scope of jazz by taking a thematic rather than a chronological approach to the subject, and by highlighting the music and lives of a diverse array of jazz practitioners from around the country and around the world. Students may not receive credit for both MUS 8 and MUS 8GS.

MUS 15. Popular Music (4)

A course on popular music from different time periods, covered through lectures, films, and listening sessions. Topics vary from year to year. May be repeated once for credit.

MUS 19R. Blacktronika: Afrofuturism in Electronic Music (4)

Explores the lineage of electronic music's Black pioneers, who have been integral but overlooked in the discussion around the creation and development of house, techno, drum and bass, and experimental music. These musics were developed with sociopolitical movements at the foundation of the sounds. We will investigate the African diaspora lens through the artists' usage of science fiction, technology, and futurist ideologies.

TDGE 1. Introduction to Theatre (4)

An introduction to fundamental concepts in drama and performance. Students will attend performances and learn about how the theatre functions as an art and as an industry in today's world.

TDGE 10. Theatre and Film (4)

Theatre and Film analyzes the essential differences between theatrical and cinematic approaches to drama. Through selected play/film combinations, the course looks at how the director uses actors and the visual languages of the stage and screen to guide and stimulate the audience's responses.

TDGE 11. Great Performances on Film (4)

Course examines major accomplishments in screen acting from the work of actors in films or in film genres. May be taken for credit three times. ***Prerequisites:*** none.

TDHT 21. Ancient and Medieval Theatre (4)

Ancient and medieval theatre. Explores the roots of contemporary theatre in world performance traditions of ancient history with a focus on humans' gravitation toward ritual and play. Examples come from Egypt, Greece, Rome, Mesoamerica, Japan, China, India, Indonesia, Persia, and England.

VIS 1. Introduction to Art Making: Two-Dimensional Practices (4)

An introduction to the concepts and techniques of two-dimensional art making with an emphasis on drawing. Lectures and studio classes will introduce skills and concepts of contemporary drawing practice in relation to a variety of genres such as illustration, comics, advertising, animation, and other forms of visualization. This course is offered only one time each year.

FINE ARTS (cont.)

VIS 20. Introduction to Art History (4)

This course examines history of Western art and architecture through such defining issues as the respective roles of tradition and innovation in the production and appreciation of art; the relation of art to its broader intellectual and historical contexts; and the changing concepts of the monument, the artist, meaning, style, and "art" itself. Representative examples will be selected from different periods, ranging from Antiquity to Modern. Content will vary with the instructor.

VIS 84. Film History (4)

A survey of the history and the art of the cinema. The course will cover a range of national and international cinemas from the origins of cinema and the contributions of the earliest filmmakers to film movements and styles of the late twentieth century. Program or materials fees may apply. ***Prerequisites:*** none.