

UW College Courses Online Course Descriptions

AIS 101 Introduction to American Indian Studies 3 cr

An interdisciplinary introduction to the history, culture, and sovereignty of American Indians through the disciplines of Anthropology, Business, Geography, History, Political Science, and Sociology. Students will engage American Indian perspectives of historical events and policies. Additionally, students will explore how historical events affect sovereignty, political relationships, and current American Indian issues. This course focuses on Wisconsin Indians, meeting the requirements of Wisconsin DPI Act 31.

AIS 277 Indians in American History 3 cr

This course surveys U.S. history with emphasis on contact in the age of exploration, interactions over time between Europeans and Native Americans, and adaptations and conflicts that emerged. The course will approach this from social, political, and economic perspectives from the colonial period to the present.

AIS 314 Indians of North America 3 cr

(AIS 314 and ANT 314 are the same course.) A survey of diverse and complex American Indian cultures and Peoples in North America. Exploring the impact of the past and the influences of Euro-American culture on Native Nations and Peoples with an emphasis on the varied Native responses to culture contact.

ANT 100 Introduction to Anthropology 3 cr

A survey of the subfields of anthropology, especially archaeology and physical and cultural anthropology. The course explores human biological evolution and variation, cultural evolution, language, and culture change.

ANT 105 Introduction to Biological Anthropology 4 cr

A study of evolutionary theory, the place of humans in the primate order, the fossil evidence for human evolution and interpretation of that evidence, the biological and genetic basis of human variation, and possible other topics of human biology. Includes online lab.

ANT 314 Indians of North America 3 cr

(AIS 314 and ANT 314 are the same course.) A survey of diverse and complex American Indian cultures and Peoples in North America. Exploring the impact of the past and the influences of Euro-American culture on Native Nations and Peoples with an emphasis on the varied Native responses to culture contact.

ART 175 Worlds of Art--Images/Objects/Ideas 3 cr

An introduction to the visual arts, intended for the non-art major, which emphasizes cross-cultural perspectives - specifically the impact race and ethnicity have on artistic production, art criticism, art philosophies and aesthetics among the four major ethnic groups in the United States - African American, Native American, Asian American, and Hispanic/Latino American. Field trips may be required.

ART 181 Survey: Ancient and Medieval Art 3 cr

Art and architecture from the Old Stone Age to the Gothic era. Field trip. Lecture.

ART 183 Survey: Renaissance - Modern Art 3 cr

Architecture, sculpture, painting, and decorative arts from the Late Middle Ages to the modern era. Field trip. Lecture.

AST 100 Survey of Astronomy 3 cr

Descriptive survey of astronomy for students with minimal background in mathematics and science. Topics include the solar system, stars, nebulae, galaxies, cosmology, and astronomical methods. Course may have a prerequisite.

BIO 101 Concepts of Biology 5 cr

An introduction to the fundamental principles of living organisms. Includes cell and tissue structure, growth, basic physiological processes, reproduction and inheritance, classification, evolution and ecology. Lecture, lab, and may also include demonstrations, discussion, and field trips.

BIO 105 Greek and Latin Origins of Medical and Scientific Terminology 3 cr

The course is designed to acquaint students pursuing science and other majors with the origins of technical terms they are likely to encounter.

BIO 141 Heredity 3 cr

Principles of heredity with applications to plant, animal and human inheritance; current advances in genetics and their bearing on the life sciences. Lecture and may also include demonstrations, discussion, and field trips. Course may have a prerequisite.

BIO 191 Environmental Science 4 cr

A contemporary study of the natural world through the human perspective. Emphasis on humans as a modifying force in the biophysical environment, including selected topics in ecological principles, pollution, population biology, and environmental management. This course meets the statutory requirement for Conservation of Natural Resources required for State certification for teachers of science and social sciences. Lecture, lab, and may include demonstrations, discussions, and field trips.

BUS 101 Introduction to Business 3 cr

Introduction to the role of business in the modern political, social and economic environments; describes career opportunities.

BUS 110 Personal Finance 3 cr

A study of personal financial management. Examines the financial problems and consequent financial decisions required of individuals in our economy. Subjects covered are applications in family budgeting, consumer buying decisions, borrowing, insurance, personal real estate, income taxation, investments, and estate planning.

BUS 194 Career & Life Planning 2 cr

This course will enable students to develop career goals and lay out a path for achieving these goals. Students will examine their personal interests, aptitudes, values, decision-making skills, academic plans, and career awareness. This personal, educational, and occupational information will then be organized and translated into an individualized course of action. Integration of career goals with current and future college course work will be stressed.

BUS 201 Introductory Accounting 4 cr

Fundamental principles, terminology, techniques, and applications; books, accounts and financial statements for retailing and wholesaling concerns; treatment and presentation of proprietorship, partnership and corporate accounts. Course may have a prerequisite.

BUS 204 Managerial Accounting 3 cr

Interpretation and application of accounting reports by management in planning, coordinating, and controlling business activities; presentation, analysis and interpretation of financial data; internal control and reports to management; cost-volume-profit relationships, budgets, costs, and managerial decision making. Course may have a prerequisite.

BUS 210 Business Communication 3 cr

(BUS 210 and ENG 210 are the same course.) Study and practice of the techniques of achieving clarity, brevity and effectiveness in business communication. Planning, preparation, critiquing of business letters, memoranda, short and long reports, resumes, manuals of procedure, and oral reports. Course may have a prerequisite.

BUS 230 Introduction to Management Information Systems 3 cr

An introductory course designed to provide students with a fundamental knowledge of management information systems and their concepts including the use of information systems for management decision-making and the impact of information systems on management. Topics may vary as technology changes but the students will learn the tools of productivity (i.e. Excel) such as electronic spreadsheet, data base, and graphics. Course may have a prerequisite.

BUS 243 Economic and Business Statistics 3 cr

(BUS 243 and ECO 243 are the same course.) Elementary theory and business application of statistical techniques, probability and normal distribution, hypothesis testing, analysis and interpretation of economic and business data, index numbers, regression and time series analysis and Chi squares. Course may have a prerequisite.

BUS 272 The Legal Environment of Business 3 cr

This business law course presents a lively, contemporary and comprehensive examination of the legal and ethical environment in the United States within which business operates. Elements of traditional business law are covered in an engaging manner by applying concepts to hypothetical real life situations through a balanced mixture of reading, videos and activities. Gaining the knowledge of the legal and regulatory environment of business will provide a practical background for students in many careers. Course may have a prerequisite.

CHE 112 Foundations of Chemistry 2 cr

Designed to prepare students with limited science backgrounds for success in CHE 125, the CHE 145/155 sequence, or CHE 165. Through lectures and discussions, this course emphasizes fundamental chemical concepts, chemical nomenclature and problem-solving skills.

CHE 123 Chemistry and Society 3 cr

A course for non-science majors that covers basic chemistry concepts in a social context. May include explorations of how chemistry impacts the environment, public health, energy policies, and other contemporary social issues. Consists of lectures and may also include discussions and demonstrations. Not a suitable prerequisite for higher-level chemistry courses or pre-professional programs.

CHE 145 General Chemistry I 5 cr

For students whose programs require a year of college chemistry or who plan to take advanced courses in chemistry. Students may not count both CHE 125 and CHE 145 toward the Natural Sciences or Laboratory Science degree designation requirement for the Associate of Arts and Science degree. [Hybrid lab course](#) that includes required face-to-face lab sessions. Course may have a prerequisite.

CHE 155 General Chemistry II 5 cr

The second semester of a one-year course in college chemistry. Consists of lectures, discussions, and laboratories. For students whose programs require a year of college chemistry or who plan to take further courses in chemistry. [Hybrid lab course](#) that includes required face-to-face lab sessions. Course may have a prerequisite.

CHE 165 Chemistry for Engineers 5 cr

A one-semester chemistry course for engineering students. Topics include measurements, atomic theory, stoichiometry, molecular structure, thermochemistry, electrochemistry, solid state, material science, and organic chemistry. [Hybrid lab course](#) that includes required face-to-face lab sessions. Course may have a prerequisite.

CHE 203 Survey of Biochemistry 3 cr

A foundational course in the chemical makeup and metabolic processes of living organisms. Consists of lectures and may also include discussions and demonstrations. Together CHE 125 and CHE 203 constitute a year course with emphasis on organic and biological chemistry. Course may have a prerequisite.

CHE 250 Review and Updates in Chemistry and Biochemistry 3 cr

This course was designed specifically for the nursing consortium and is to be taken primarily by RNs already accepted into their BSN degree completion program. This course is not a substitute for the CHE 125/CHE 203 sequence required of students at the beginning of their academic careers, even if planning to enter the nursing profession. CHE 250 begins with a review of relevant topics in chemistry, both general and organic, and then covers topics typical of a biochemistry course such as biological molecules, metabolism, nutrition, protein function, and molecular biology.

CHE 343 Organic Chemistry I 3 cr

The first semester of a year course in organic chemistry. Consists of lectures and may also include discussions and demonstrations. Course may have a prerequisite.

CPS 105 Computer Applications 3 cr

Principles and use of computer applications including word processors, spreadsheets, and data bases. May also cover other applications such as telecommunications, graphics, statistics, simulations, or CAI. Does not include teaching of programming.

CPS 139 Web Page Development 2 cr

Development of web pages using HTML and Cascading Style Sheets. Introduction to XML documents and XHTML standards. This course involves extensive hands-on experience. Course may have a prerequisite.

CTA 103 Introduction to Public Speaking 3 cr

Study of the principles and techniques of effective speaking and listening in a variety of selected communication experiences.

CTA 218 Popular Culture in the Media 3 cr

An introduction to the analysis and interpretation of Popular Culture as an academic discipline. The class will examine forms of advertisement and entertainment including print and TV ads, films, television, music, and music videos. Course may have a prerequisite.

ECO 203 Economics - Macro 3 cr

The emphasis of the course is on macro analysis and covers areas such as national income, commercial banking, business fluctuations, monetary and fiscal policies, and economic growth. Designed for students who desire a basic one-year course (with ECO 204) in economics. Course may have a prerequisite.

ECO 204 Economics - Micro 3 cr

Emphasizes the micro economic approach concerning households, firms, and market structures with a focus on price determination and distribution of income. Foreign trade and international financial institutions are included. Course may have a prerequisite.

ECO 243 Economic and Business Statistics 3 cr

(BUS 243 and ECO 243 are the same course.) Elementary theory and business application of statistical techniques, probability and normal distribution, hypothesis testing, analysis and interpretation of economic and business data, index numbers, regression and time series analysis and Chi squares. Course may have a prerequisite.

EDU 201 Concepts, Issues, and Field Experience in Education 3 cr

Online discussion of educational principles, concepts, and issues related to student-teacher-school-community interactions, including developmental aspects, sociocultural influences, and human relations. Off-campus experience involving active participation in the program at an educational institution (four hours per week of off-campus experience will usually be required,

but number may vary with current DPI and 4-year campus requirements.) Course may have a prerequisite.

EDU 220 Education in a Pluralistic Society 3 cr

This course is designed to prepare students to be competent teachers in a pluralistic society. Current theory and research on the major issues confronting educators in a pluralistic society will be explored: immigration, poverty, issues particular to Native Americans, African Americans, Hispanic Americans and other culture/ethnic groups, exceptionalism, sexual orientation, religion and other special interest groups. Students in this course will have contact with students, colleagues, parents, and agencies representing different cultures, ethnicities and alternative lifestyles. The knowledge base and rationale for this course is specified in the Wisconsin Department of Public Instruction PI 34.15 (4) and s 118.19 statutory requirements for Teacher Education and Licensing.

EDU 230 Educational Psychology 3 cr

A study of the developmental process in children in the context of psychological principles of teaching and learning. Emphasis will be placed on understanding the social, emotional, physical, and intellectual development of children and adolescents. Attention will be directed toward the nature and conditions of learning, including the major types of learning, critical aspects of learning, and the problems encountered in fostering and directing learning. Course may have a prerequisite.

EDU 300 The Exceptional Individual 3 cr

The Exceptional Individual: The purpose of this course is to educate and prepare students to understand and work with individuals with disabilities within schools by providing accurate information about disabilities and current best practices in education. Emphasis will be placed on understanding historical, legal, and philosophical frameworks; defining categories of disability; describing legal and ethical perspectives; how issues of accessibility in educational and social arenas affect people with disabilities; learning the role disability plays in the lives of families; becoming familiar with label criteria for disabilities; and the examination of how the referral/placement processes can either discriminate against marginalized populations or facilitate inclusion. Course may have a prerequisite.

EGR 105 Engineering Fundamentals 3 cr

This course is designed to equip engineering students with the necessary tools and background information to prepare them to be successful engineering students as well as a successful practicing engineer. Topics covered in this course include project management, team work, technical writing, working with data and using spreadsheets, creating presentations, engineering design, and a thorough understanding of the engineering profession. Course may have a prerequisite.

EGR 110 Engineering Graphics with Computer Aided Drafting 3 cr

An introductory course in engineering graphics focusing on graphical communication. Topics include descriptive geometry elements, visualization, engineering drawing techniques, orthographic projection, pictorial representation, auxiliary views, section views, and basic dimensioning. The course incorporates computer aided drafting (CAD) with engineering applications using 2-D drawing and 3-D modeling techniques.

EGR 111 Solid Modeling and Design 1 cr

This project-based course introduces students to reverse engineering and three-dimensional design using industry standard solid modeling software (SolidWorks). The course assumes some previous knowledge of solid modeling, such as would typically be gained in an introductory engineering graphics and computer aided drafting course. This course will include one or more reverse engineering project(s) that will require the students application of engineering problem skills. Course may have a prerequisite.

EGR 201 Statics 3 cr

Principles of mechanics, force systems, equilibrium, structures, distributed forces, moments of inertia of areas, and friction. The course will serve the requirements of the several engineering curricula. Course may have a prerequisite.

EGR 202 Dynamics 3 cr

Kinematics, force-mass-acceleration relations, work and energy, impulse and momentum, and moments of inertia of mass. This course will serve the requirements of the several engineering curricula. Course may have a prerequisite.

EGR 203 Mechanics of Materials 4 cr

Stress and strain, torsion, bending of beams, compound stresses, principal stresses, deflection of beams, statically indeterminate members, columns, elastic buckling, fatigue, creep, impact, and concrete properties. Course may have a prerequisite.

EGR 263 Engineering Thermodynamics 3 cr

First and second laws of thermodynamics; thermodynamic properties of real and ideal gases, vapors, and mixtures; analysis of power and refrigeration cycles. Course may have a prerequisite.

EGR 282 Engineering Economics 3 cr

Economic and financial factors in the engineering environment to be considered in managerial decision making. Emphasizes the time value of money, present worth analysis, uniform series, rate of return, benefit cost ratios, depreciation, income taxes, inflation. Course may have a prerequisite.

ENG 098 Introduction to College Writing 3 non-degree cr

A composition course focusing on the conventions of academic writing, the composing process, critical thinking, and critical reading. Emphasis will be on reading and writing activities designed to prepare students for successful transition to college-level writing.

ENG 101 College Writing and Critical Reading 3 cr

A composition course focusing on academic writing, the writing process, and critical reading. Emphasis will be on essays that incorporate readings. Course may have a prerequisite.

ENG 102 Critical Writing, Reading, and Research 3 cr

A composition course focusing on researched academic writing that presents information, ideas, and arguments. Emphasis will be on the writing process, critical thinking, and critical reading. Course may have a prerequisite.

ENG 201 Intermediate Composition 3 cr

A composition course that builds on learning from first-year college writing to help students develop more advanced reading, writing, and research strategies and skills. Introduces students to key concepts in the field of writing studies and their application to the writing process. Emphasizes independent inquiry, critical reading, and rhetorical adaptability. Course may have a prerequisite.

ENG 203 Creative Writing I 3 cr

Chiefly devoted to writing and studying one or more of the following: fiction, poetry, and drama. Course may have a prerequisite.

ENG 210 Business Communication 3 cr

(BUS 210 and ENG 210 are the same course.) Study and practice of the techniques of achieving clarity, brevity and effectiveness in business communication. Planning, preparation, critiquing of business letters, memoranda, short and long reports, resumes, manuals of procedure, and oral reports. Course may have a prerequisite.

ENG 250 Introduction to Literary Studies 3 cr

An introduction to the discipline of literary studies through its fundamental approaches to reading, interpreting, and writing about a variety of texts, ranging from the classic to the contemporary with the goal of understanding, appreciating, and enjoying literature. Course may have a prerequisite.

ENG 263 American Literature II 3 cr

A study of the development of American literature after 1865 through a survey of significant poetry, fiction, and nonfiction. Course may have a prerequisite.

ENG 278 Multicultural Literature in America 3 cr

A study of ethnic literatures in America, chiefly African American, Asian American, Native American, and/or Latino, though not necessarily limited to these groups. Course may have a prerequisite.

GEO 101 Introduction to Cultural Geography 3 cr

A survey of world patterns of culture, such as population, language, religion, urban and rural settlement, and their causal relationships, emphasizing the global diversity of world cultures, contrasting world views and the issues thus raised.

GEO 125 Physical Geography 5 cr

The geography of Earth's physical characteristics, including weather and climate, climate types, water, soils, Earth materials, landforms, and Earth resources; study of the processes and interactions creating Earth's physical geographic patterns. Two or four hours of lab per week depending on the credit. Field trip(s) may be required.

GEO 170 Disasters-Living on the Edge 4 cr

(Same as GLG 170) Study of various environmental hazards, their causes, impacts on humans, and mitigations. Core topics are natural hazards (earthquakes, volcanoes, flooding, landslides,

tornadoes, hurricanes), and anthropogenic hazards (climate change/global warming, nuclear hazards, and overpopulation). Additional topics may be covered: coastal hazards, pollution of groundwater, air, soil, and water, other atmospheric hazards (extreme weather, droughts), impacts from space, extinctions, biohazards, chemical hazards, and terrorism. Includes lab.

GLG 170 Disasters-Living on the Edge 4 cr

(Same as GEO 170) Study of various environmental hazards, their causes, impacts on humans, and mitigations. Core topics are natural hazards (earthquakes, volcanoes, flooding, landslides, tornadoes, hurricanes), and anthropogenic hazards (climate change/global warming, nuclear hazards, and overpopulation). Additional topics may be covered: coastal hazards, pollution of groundwater, air, soil, and water, other atmospheric hazards (extreme weather, droughts), impacts from space, extinctions, biohazards, chemical hazards, and terrorism. Includes lab.

GSW 101 Introduction to Gender, Sexuality, and Women's Studies 3 cr

An introduction to the major issues addressed by women's and gender studies with an emphasis on interdisciplinary social science theories and methodologies involved in gaining accurate knowledge about women's lives and contributions to society, both within the United States and around the world. Perspectives, texts, and methodologies from across the social science disciplines ranging from history, economics, sociology, political science, public health, criminal justice, psychology, and others will be used to understand the experience of women and the cultural construction of gender.

GSW 202 Feminist Philosophy 3 cr

(PHI 202 and GSW 202 are the same course.) An introduction to feminist philosophies through a study and critique of traditional and feminist views about women, their lives, society, and knowledge, with particular attention to theories of women's oppression.

GSW 210 Women's Health & Sexuality in Society 3 cr

This course will offer basic facts about the structure and functioning of the female body; issues in women's health and sexuality will be approached interdisciplinarily and will include physical, mental, emotional, and social health and wellness topics and will be framed by discussions of race, class, and other cultural identities. Cultural, social, economic and political contexts will be explored.

HES 127 Fitness for Life 3 cr

A contemporary examination of the effects of lifestyle, wellness, and health promotion on the individual. Instruction in procedures for self-evaluation as well as individualization of exercise prescription for the development of fitness. Participation in a planned program of aerobic activity and resistance training is required.

HES 209 Nutrition and Weight Management 3 cr

Through the lens of the natural sciences, this course will examine the basic principles of nutrition, digestion, and metabolism. Students will interpret and analyze the effects of these principles on one's diet, weight, fitness level, and overall health. Students will reflect upon the conclusions drawn from the data, with the goal of integrating healthy behaviors into their personal lifestyle.

HES 217 Social Aspects of Sport 3 cr

A course focusing on sport institutions as social organizations and how they function within a culture. Emphasis is placed on group structure and membership, group pressure, socialization, stratification, and deviance as they apply to the sports setting. Selected interdisciplinary topics demonstrating the connections between sport and: media, business/economy, gender, race/ethnicity, social class, politics, and religion.

HIS 101 History of the United States: From the Era of the Columbian Exchange to the Era of the Civil War 3 cr

A survey of American political, economic, social, and intellectual history from the Age of European Exploration and the period of colonization to the era of the American Civil War. This course thoroughly integrates the experiences of African Americans, Native Americans, Hispanics, and/or Asian Americans into US history in a manner that fosters understanding and appreciation of the perspectives and experiences of at least two of these groups as well as their contributions to, and interactions within, American society.

HIS 102 History of the United States: From the Era of the Civil War to the Present 3 cr

A survey of American political, economic, social, and intellectual history from the era of the Civil War to the Present. This course thoroughly integrates the experiences of African Americans, Native Americans, Hispanics, and/or Asian Americans into US history in a manner that fosters understanding and appreciation of the perspectives and experiences of at least two of these groups as well as their contributions to, and interactions within, American society.

HIS 105 History of Western Civilization from Ancient Times to the Era of the Renaissance 3 cr

Survey of Western Civilization from ancient times through the Renaissance, emphasizing the distinctive features of Western culture, political development, economic development, and the contributions made by non-Western people.

HIS 106 History of Western Civilization from the Era of the Renaissance to Contemporary Times 3 cr

Survey of Western Civilization from the Renaissance to contemporary times, emphasizing the further development of Western culture, political institutions, and economic institutions, including reference to the interaction among the peoples of the modern world.

HIS 127 The World in the Twentieth Century 3 cr

Survey of the major trends in Europe, Asia, Africa, and the Americas since 1900; the two world wars; the social and political revolutions of our time; Fascism and Communism; and the new states of Africa and Asia.

HIS 161 World History to 1500 3 cr

A topical approach to the history of premodern humankind. Special attention will be given to the emergence, development, and interaction of civilizations in Asia, Africa, Europe, and the Americas.

HIS 162 World History Since 1500 3 cr

A topical history of global humankind with emphasis on the rise of the West to world dominance and the various ways in which the peoples of Africa, Asia, and Latin America have responded to the Western challenge.

HIS 258 The Holocaust: Politics of Peace, Nationalism, and War 3 cr

This class presents students with the historical background and current scholarly debate about the best documented genocide in recent history. A combination of race based thinking, radical nationalism and brutality occasioned by war opened the door for the Nazi Party to lead Germans and other Europeans in a systematic campaign to eliminate the Jews. Students will explore a variety of sources produced during and after the period, including films, posters and literature. Raised will be questions about the limits of obedience to authority, what constitutes "race" or "ethnic" differences, and ultimately whether or not guilt for related crimes can ever be forgiven.

HIS 272 History and Culture of the Sciences 3 cr

This course will examine, in a historical context, how science has been constructed and how it has interacted with other aspects of society, such as politics, religion, culture, and economics. These themes will be addressed by closely studying two transformations in scientific and human thought: first, the shift from an Earth-centered to a sun-centered universe, and second, the development of the theory of Evolution by natural selection. Finally, we will briefly consider the emergence of new major scientific and cultural transitions which are now occurring.

HIS 277 Indians in American History 3 cr

This course surveys U.S. history with emphasis on contact in the age of exploration, interactions over time between Europeans and Native Americans, and adaptations and conflicts that emerged. The course will approach this from social, political, and economic perspectives from the colonial period to the present. Course focuses on understanding the perspectives of Native Americans.

MAT 081 Topics in Geometry 3 non-degree cr

Designed for students who have not had high school geometry. Includes methods of proof, properties of simple plane figures, congruence, and similarity. This course is offered through a contractual arrangement with the local WTCS institution as MAT 085. This course is offered by campus TRIO/student support services program as MAT 087.

MAT 091 Elementary Algebra 3 non-degree cr

Intended for students with little or no previous algebra. Topics include the real number system and operations with real numbers and algebraic expressions, linear equations and inequalities, polynomials, factoring, and introduction to quadratic equations.

MAT 105 Introduction to College Algebra 3 cr

Emphasizes algebraic techniques with polynomials, fractional expressions, exponents and radicals, linear and quadratic equations, and inequalities. Introduction to functions, their graphs, and analytic geometry. Course may have a prerequisite.

MAT 108 Quantitative Reasoning 3 cr

This course is intended to develop analytic reasoning and the ability to solve quantitative problems. Topics to be covered include construction and interpretation of graphs, functional relationships, descriptive statistics, geometry and spatial visualization, math of finance, exponential growth, and basic probability. Appropriate use of units and dimensions, estimates, mathematical notation and available technology will be emphasized throughout the course. Course may have a prerequisite.

MAT 110 College Algebra 3 cr

Definition of function and sequence; linear and nonlinear functions and graphs including logarithmic and exponential functions; systems of linear equations and Gauss-Jordan method; theory of polynomial equations; conic sections and optional topics such as mathematical induction, matrix solution of linear systems, and Cramer's rule. Course may have a prerequisite.

MAT 113 Trigonometry 2 cr

Trigonometric functions, their basic properties and graphs, identities, inverse trigonometric functions, solving trigonometric equations, solutions of triangles. Course may have a prerequisite.

MAT 117 Elementary Statistics 3 cr

The primary aim of the course is a basic understanding and use of statistical concepts and methods to facilitate study and research in other disciplines. Includes measures of central tendency, measures of variability, grouped data, the normal distribution, central limit theorem, hypothesis testing, estimation, T-distribution and chi square test. Course may have a prerequisite.

MAT 210 Topics in Finite Mathematics 3 cr

Matrices, linear programming and applications, probability, Markov chains, and mathematics of finance. Course may have a prerequisite.

MAT 221 Calculus and Analytical Geometry I 5 cr

Analytic geometry, functions, limits and continuity, the derivative, integrals, techniques and applications of differentiation, applications of integration, logarithmic and exponential functions, and trigonometric functions. Course may have a prerequisite.

MAT 222 Calculus & Analytical Geometry II 5 cr

Continuation of 221. Techniques of integration, polar coordinates, conic sections, infinite series, and vectors of two and three dimensions. Note: the order of topics covered in MAT 221 and MAT 222 may depend on the text used and the instructor. Course may have a prerequisite.

MAT 223 Calculus & Analytical Geometry III 5 cr

Continuation of MAT 222. Analytic geometry of three dimensions, functions of several variables, partial differentiation, multiple integration, and introduction to differential equations. Course may have a prerequisite.

MAT 234 Calculus of Several Variables 3 cr

Continuation of MAT 222. Analytic geometry of three dimensions, functions of several variables, and multiple integration. This course is equivalent to MAT 223 without differential equations. Course may have a prerequisite.

MAT 240 Statistical Analysis 3 cr

Elements of probability theory; collection and presentation of sample data; basic problems of statistical inference; applications, including quality control; regression; and hypothesis testing. Course may have a prerequisite.

MAT 271 Ordinary Differential Equations 3 cr

Ordinary differential equations of the first and second order, series solutions, higher order linear equations, the Wronskian, Laplace transform and applications, numerical methods and boundary value problems. Course may have a prerequisite.

MLG 100 Introduction to Meteorology 4 cr

The study of the conditions and the processes of the atmosphere that constitute weather. This includes both description and explanation of various atmospheric processes. Topics include: solar energy budget, heating of the atmosphere, temperature, air pressure, winds, atmospheric moisture, precipitation, air masses, fronts, mid-latitude cyclones, thunderstorms, tornadoes, hurricanes, analysis of weather maps, and forecasting. Includes lab.

MUS 170 Fundamentals of Music 3 cr

This course is designed to acquaint the student with the fundamentals of music through experiences with the keyboard, rhythm instruments, singing, listening, and note reading. Required for some elementary education majors and open to the general student. Acceptable as preparation for a music major or minor program. Course may have a prerequisite.

MUS 273 Jazz History and Appreciation 3 cr

An introduction to the styles and forms of jazz through a study of its history, literature, cultural influences, musical structure, and prominent performers. Includes recorded listening experiences.

MUS 278 History of Rock and Roll 3 cr

A study of Rock and Roll with emphasis on the roots, origins, and influential figures in the history of this cultural phenomenon. Includes recorded listening experiences.

PHI 202 Feminist Philosophy 3 cr

(PHI 202 and GSW 202 are the same course.) An introduction to feminist philosophies through a study and critique of traditional and feminist views about women, their lives, society, and knowledge, with particular attention to theories of women's oppression.

PHI 237 Technology, Values and Society 3 cr

An examination of the philosophical issues that emerge from the world of technology in which we live. Topics may include: freedom, censorship, privacy, equality, democratic participation, intellectual property, education, law enforcement, institutional change, work, and all the personal and public choices about technology and its use with which we are confronted today.

PHY 141 College Physics I 5 cr

The study of mechanics, heat, wave motion and sound. Recommended for students majoring in business, elementary education, medical technology, pharmacy, pre-dentistry and pre-medical studies. Three hours of lecture and three -four hours of laboratory-discussion per week or equivalent. [Hybrid lab course](#) that includes required face-to-face lab sessions. Course may have a prerequisite.

PHY 201 University Physics I 5 cr

The study of mechanics, heat, wave motion, and sound. Recommended for physical science and engineering majors. Three hours of lecture, one hour of discussion, and three hours of laboratory per week or equivalent. [Hybrid lab course](#) that includes required face-to-face lab sessions. Course may have a prerequisite.

PHY 202 University Physics II 5 cr

A continuation of Physics 201. Electricity, magnetism, light, and some modern physics. [Hybrid lab course](#) that includes required face-to-face lab sessions. Course may have a prerequisite.

PHY 205 Modern Physics 3 cr

Introduction to atomic, nuclear, and solid state physics; kinetic theory, special relativity, and quantum theory. Course may have a prerequisite.

POL 104 American Government and Politics 3 cr

Analysis of the decision-making structure and processes of American national government, including the role of parties and interest groups, and the value preferences within American society which affect the formation of public policy.

POL 120 Politics of Crime and Punishment 3 cr

Focuses on the competing goals of public policy in criminal justice, from public order, due process, efficiency, rights and liberties. Analyzes the interplay of key actors including police, courts and prisons in policy-making and implementation. Includes the role of media and myth.

POL 175 International Politics 3 cr

Global problems, issues and debates since the end of the Cold War, including terrorism, cultural and religious conflict and changing power relations. Impact of social, economic and technological change and evolution of the state system. Cooperative problem-solving and peace-making.

POL 285 Politics of World Inequality and Development 3 cr

Why are some countries rich and others poor? Major theories and history of economic development. The role of the state in diverse economies. Effect of the global trade system, democracy, quality of life, and the environment. Examines human rights, experiences of indigenous people, gender, and the role of militarism.

POL 385 (U)Politics of World Inequality and Development 3 cr

Why are some countries rich and others poor? Major theories and history of economic development. The role of the state in diverse economies. Effects of the global trade system and

international financial institutions on economic growth, democracy, quality of life, and the environment. Examines human rights, experiences of indigenous people, gender, and the role of militarism.

PSY 202 Introductory Psychology 3 cr

Survey of major content areas in Psychology. Topics include research methodology, learning, memory, cognition, biological psychology, sensation, perception, motivation, emotion, development, personality, psychopathology, and social psychology. Course may have a prerequisite.

PSY 210 Statistical Methods in Psychology 3 cr

An introduction to descriptive and inferential statistics. Topics include measures of central tendency, measures of variability, correlation and regression, sampling distributions, and hypothesis testing procedures including t-tests and analysis of variance. Course may have a prerequisite.

PSY 250 Life Span Developmental Psychology 3 cr

A survey of human development theories and research. Topics include the biological, cognitive, emotional, and social development of the individual from the prenatal period through old age and the process of death and dying. Course may have a prerequisite.

PSY 309 Abnormal Psychology 3 cr

Contemporary theory and research on abnormal behavior, includes diagnostic categories, approaches to treatment, and understanding of abnormal behavior. Course may have a prerequisite.

PSY 360 Psychology of Childhood and Adolescence 3 cr

A survey of human development theories and research. Topics include the biological, cognitive, emotional and social development of the individual from the prenatal period through adolescence. Course may have a prerequisite.

PSY 362 Psychology of Adulthood and Aging 3 cr

A survey of human development theories and research. Topics include biological, cognitive, emotional and social development of the individual from young adulthood through old age and the process of death and dying. Course may have a prerequisite.

REL 101 Introduction to the Study of Religion 3 cr

This course introduces students to various methods employed in the academic study of religion and will provide opportunity for students to apply these methods to diverse expressions of the religious life. This course is primarily a global awareness competencies course.

SOC 101 Introduction to Sociology 3 cr

Introduction to the basic concepts, theories and methods of Sociology, emphasizing the significance of the self and culture, social process and organization, and forces of social stability and change.

SOC 231 Crime and Criminal Justice 3 cr

Explores the nature of crime and reviews ideas about definitions, causes, and solutions. Includes an introduction to the day-to-day functioning of the criminal justice system, the police, lawyers, courts, and correctional personnel. Course may have a prerequisite.

SOC 234 Sociology of Race and Ethnicity 3 cr

The experience of American racial, religious, ethnic and nationality groups. The nature of intergroup relations in the United States. Relationship of intergroup dynamics to social change, and to basic ideological, technological, and institutional structures and processes. Emphasis on social conflict over the distribution of economic and political power, family patterns, housing, education, and access to the legal system. Course may have a prerequisite.

SOC 355 Sociology of the Environment 3 cr

Explores the socio-cultural foundations of our relationship with the natural environment. Examines the relationship between environmental degradation and social, political, and economic structures. Explores beliefs and values about the environment and their expression in various forms of environmentalism and environmental movements. Also analyzes the presentation of environmental issues in cultural, political, and scientific domains.

SOC 455 (U)Sociology of the Environment 3 cr

Explores the socio-cultural foundations of our relationship with the natural environment. Examines the relationship between environmental degradation and social, political, and economic structures. Explores beliefs and values about the environment and their expression in various forms of environmentalism and environmental movements. Also analyzes the presentation of environmental issues in cultural, political, and scientific domains. Course may have a prerequisite.

SPA 101 First Semester Spanish 4 cr

For students who have had no previous training in the language. Emphasis on reading, writing, listening, and speaking in Spanish. Classes also may include cultural studies of Spain and Latin America. Field trip may be required.

SPA 102 Second Semester Spanish 4 cr

This course is a continuation of SPA 101. This course integrates cultural studies of Spanish-speaking countries while emphasizing reading, writing, listening, and speaking in Spanish. Field trip may be required. Course may have a prerequisite.