



**NORTHERN**

STATE UNIVERSITY

*NSU*

*CENTER FOR STATEWIDE E-LEARNING*

*2021-22*

*COURSE CATALOG*

### Three Methods of Delivery

- 1) **DDN:** DDN classes meet five days a week via DDN. A DDN course meets at a predetermined time with direct engagement between the teacher and the students on a daily basis. These synchronous classes typically connect students from several schools.
- 2) **Blended:** A blended course features the convenience of an online course and the engagement of a DDN course. Schools schedule the course at a time that fits the school's local schedule. The DDN connections are between the teacher and the school, on the school's local schedule. Schools with a low number of students in a blended class may need to consolidate sessions depending on staffing availability.
- 3) **Online:** An online course features the convenience of allowing a student to interact with the course work at a time determined by the student and the local school. Students view recorded class sessions, interacting with the content asynchronously. All class sessions and materials are available online. The course follows a traditional school calendar.

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# CTE – BUSINESS CAREER CLUSTER

## **ACCOUNTING I**

Course Number: 12104

1 Year

Blended Delivery

This course introduces concepts and principles based on a double entry system of maintaining electronic and manual financial records for a sole proprietorship, partnership and corporation. It includes analyzing business transactions, journalizing, posting, and preparing worksheets and financial statements. Technology will be incorporated as an essential tool where resources are available.

Topics include accounting careers; accounting cycle; accounting equation; journalizing and posting; financial statements; cash management; tax forms; and payroll.

Course Prerequisites: None

## **INTRODUCTION TO BUSINESS**

Course Number: 12051

Fall Semester

Blended Delivery

This course focuses on an introduction to business at an entry level in which students are introduced to all aspects of business: the domestic and international economies, financial principles, management strategies, administrative and information systems, ethics, and organizational and professional leadership. Students will analyze the elements of the business environment and focus on attitudinal and problem-solving skills inherent to success.

Topics include the role of business; economic systems; forms of business; management and marketing principles; financial planning; and investment options.

Course Prerequisites: None

## **BUSINESS LAW**

Course Number: 12054

Spring Semester

Blended Delivery

This course focuses on an understanding of the court system at the local, state and national level. Students will gain an understanding of contract law, their rights and responsibilities as citizens, utilization of financial transactions, employment and agency relationships, and the understanding of the regulations governing different types of business organizations.

Topics include court systems; sources of law; criminal law; tort law; contract law; consumer law; and employment law.

Course Prerequisites: None

**PERSONAL FINANCE**

Course Number: 19262

Fall Semester; Spring Semester

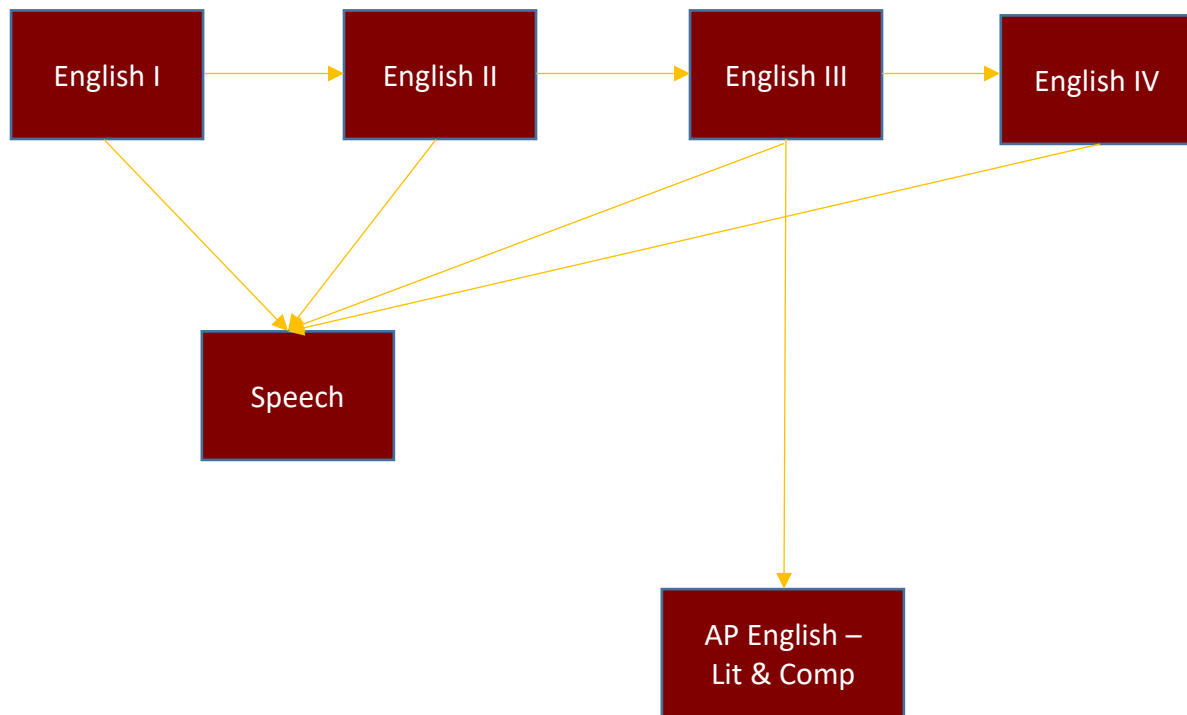
Blended Delivery; Online Delivery

Personal Finance introduces students to the knowledge and basic skills necessary for managing personal finances.

Topics include preparing a budget, understanding paychecks and deductions, banking, investing, insurance, managing credit and income taxes.

Course Prerequisites: None

# ENGLISH/LANGUAGE ARTS



## ENGLISH I

Course Number: 01001

1 Year

Blended Delivery

This English I (9th grade) course builds upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, including the four aspects of language use: reading, writing, speaking, and listening. The course introduces and defines various genres of literature, with writing exercises linked to reading selections.

Course Prerequisites: None

**ENGLISH II**

Course Number: 01002

1 Year

Blended Delivery

This English II (10th grade) course offers a balanced focus on composition and literature. Students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students may improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.

Course Prerequisites: English I

**ENGLISH III**

Course Number: 01003

1 Year

Blended Delivery

This English III (11th grade) course continues to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices receive greater emphasis than in previous courses.

Course Prerequisites: English I, II

**ENGLISH IV**

Course Number: 01004

1 Year

Blended Delivery

English IV (12th grade) courses blend composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write multi-paragraph essays, but they may also write one or more major research papers.

Course Prerequisites: English I, II, III

**SPEECH**

Course Number: 01151

Fall 2021

Blended

This Public Speaking course enables students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics include research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

Course Prerequisites: None



**AP ENGLISH – LITERATURE & COMPOSITION**

Course Number: 01006

1 Year

Online

Following the College Board’s suggested curriculum designed to parallel college-level English courses, AP English Literature and Composition courses enable students to develop critical standards for evaluating literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing).

Course Prerequisites: This course is designated for motivated students with a command of Standard English, an interest in exploring and analyzing challenging classical and contemporary literature, and a desire to analyze and interpret dominant literary genres and themes. The AP English Literature course is often offered to high school students. The course is designed to be challenging and rigorous.

~DUAL CREDIT

**COMPOSITION I: ENGL 101 NEL01 (3 credit hours)**

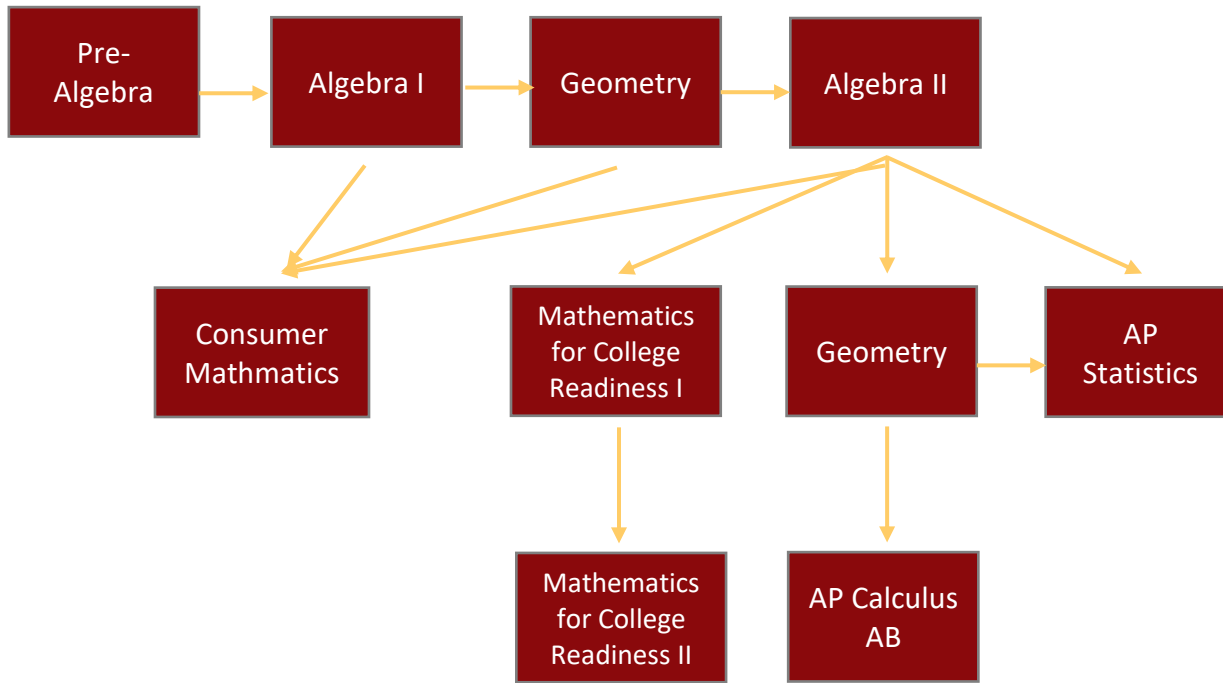
1 Semester

Online

This course focuses on practice in the skills, research and documentation needed for the effective academic writing. Analysis of a variety of academic and non-academic texts, rhetorical structures, critical thinking and audience will be included.

Course Prerequisites: Placement Test Score or satisfactory completion of ENGL 033

# MATHEMATICS



## PRE-ALGEBRA

Course Number: 02051

1 Year

Blended Delivery

This Pre-Algebra course is an intervention program designed exclusively to ensure that at-risk students are adequately prepared for Algebra 1. The class is implemented the year prior, to build and solidify foundational skills and conceptual understanding necessary to be successful in Algebra 1. This course includes the foundations of Algebra; operations with fractions; positive and negative numbers; ratios and proportionality; relationships with graphs; expression, equations, inequalities and exponents.

Course Prerequisites: 8th Grade Mathematics

**ALGEBRA I**

Course Number: 02052

1 Year

Blended Delivery

This Algebra I course includes the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

Course Prerequisites: None

**ALGEBRA II**

Course Number: 02056

1 Year

Blended Delivery

The Algebra II course topics include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

Course Prerequisites: Algebra I

**GEOMETRY**

Course Number: 02072

1 Year

Blended Delivery

This Geometry course takes previous mathematical knowledge and moves the focus towards generating mathematical ideas and arguments. Major concepts in this course include properties of plane and solid figures; deductive methods of reasoning, and the use of logic; the use of postulates, definitions and theorems to formulate proofs; triangle relationships; properties of quadrilaterals and other polygons; concepts of congruence, similarity, parallelism, perpendicularity and proportion; coordinate geometry; measurements in circles; and problem-solving using area, perimeter, volume and surface area.

Course Prerequisites: Algebra I

**MATHEMATICS FOR COLLEGE READINESS I**

Course Number: 02057

1 Semester (Fall and Spring)

Blended Delivery

This course is a general level course designed to give students exposure to concepts of advanced mathematics in preparation for College Algebra, ACT, SAT and college placement exams. The course strengthens and expands the concepts and techniques in Algebra II.

Course Prerequisites: Algebra I and II, Geometry

## **MATHEMATICS FOR COLLEGE READINESS II**

Course Number: 02057

1 Semester (Spring)

Blended Delivery

This course is a general level course designed to give students exposure to concepts of advanced mathematics in preparation for College Algebra, ACT, SAT and college placement exams. The course strengthens and expands the concepts and techniques in Mathematics for College Readiness I.

Course Prerequisites: Mathematics for College Readiness II

## **CONSUMER MATHEMATICS**

Course Number: 02157

1 Year

Blended Delivery, Online

Consumer Mathematics reinforces general mathematics topics (such as arithmetic using rational numbers, measurement, percent, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Major concepts in this course include managing personal income, taxation, buying and selling products and services, pricing and discounting products and services, consumer and business credit, interest, banking services, insurance, home ownership, and investment.

Course Prerequisites: Algebra I

## **PRECALCULUS**

Course Number: 02110

1 Year

Online, DDN (9:20-10:10)

Precalculus courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

Course Prerequisites: Algebra I and II, Geometry

### **AP CALCULUS AB**

Course Number: 02124

1 Year

Online

AP Calculus AB follows the College Board's suggested curriculum designed to parallel a first-semester college calculus course. The course topics include concepts and skills of limits, derivatives, definite integrals and the Fundamental Theorem of Calculus. Students are introduced to new ways of thinking about math, including graphical, numerical and analytical approaches; modeling; problem solving; and analysis emphasizing real-life data.

Course Prerequisites: Before studying calculus, all students should complete three or four years of secondary mathematics designed for college-bound students, courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions. These functions include linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise-defined functions.

### **AP STATISTICS**

Course Number: 02203

1 Year

Online

Following the College Board's suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.

Course Prerequisites: Algebra II (Before studying statistics, all students should complete three or four years of secondary mathematics designed for college-bound students, courses in which they study algebra, geometry.)

~DUAL CREDIT

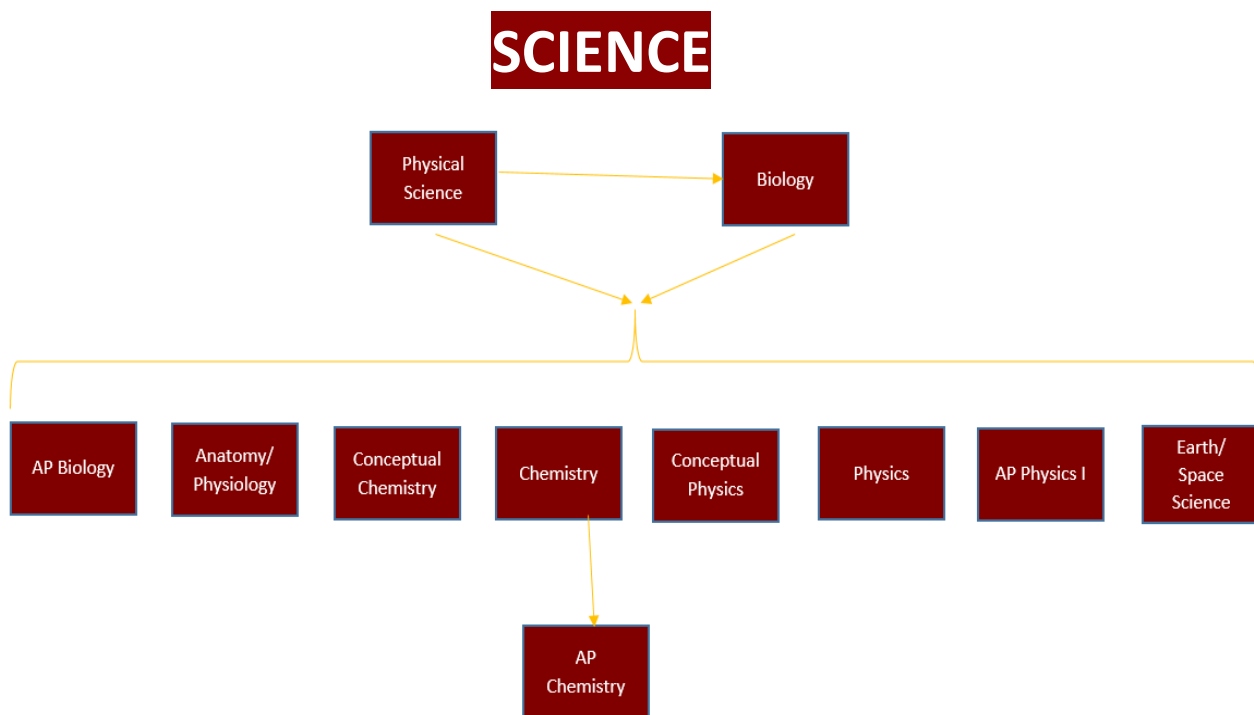
### **COLLEGE ALGEBRA: MATH 102 NEL01 (3 credit hours)**

1 Semester

Online

This course focuses on equations and inequalities; polynomial functions and graphs; exponents, radicals, binomial theorem, zeros of polynomials; systems of equations; exponential, logarithmic, and inverse functions, applications and graphs. Other topics selected from sequences, series, and complex numbers.

Course Prerequisites: ACT math sub-score 20 or higher **OR** ACCUPLACER scores: Elm. Algebra 76-120 **OR** College Level 0-50



**PHYSICAL SCIENCE**

Course Number: 03159

1 Year

Blended Delivery

Physical Science students will study the physical world and how it relates to physics and chemistry. Topics students will learn include Newton’s Laws, understanding and demonstrating the Law of Conservation of Mass, describing wave characteristics, analyzing electrical effects in terms of charged particles, and distinguishing among chemical, physical, and nuclear changes. This class is designed for freshmen with a basic understanding of age appropriate math concepts.

Course Prerequisites: None

**BIOLOGY**

Course Number: 03051

1 Year

Blended Delivery

Biology students will investigate topics such as biological molecules, cellular functions, genetics, classification of major groups of organisms, structure and functions of these groups, and ecology. All topics will be reinforced with laboratory exercises and activities that will help students develop and apply critical thinking process skills.

Course Prerequisites: None

## **CHEMISTRY**

Course Number: 03101

1 Year

Online, DDN (9:20-10:10, 2:45-3:35)

This course is the study of matter and the changes it can undergo. This is a college preparatory, laboratory and distance learning first-year high school chemistry course. Laboratory experiments will be used to introduce and/or reinforce concepts with support from simulations and practice.

Course Prerequisites: Algebra I. Completion or concurrent enrollment in Algebra II recommended.

## **PHYSICS**

Course Number: 03151

1 Year

Online, DDN (1:50-2:40)

This is a college-prep physics course with a problem-solving component requiring an Algebra II level of mathematics preparation and will include basic trigonometry (taught in the course). The topics to be covered in the first semester are Measurements, Mechanics, and Circular and Rotational Motion. The topics to be covered in the second semester are Electricity and Magnetism, Wave Motion, Thermodynamics, and Modern Physics.

Course Prerequisites: Math through Algebra II

## **ANATOMY/PHYSIOLOGY**

Course Number: 03053

1 Year

Blended Delivery, Online

Anatomy/Physiology is a laboratory course designed to prepare students in understanding the fundamental concepts of and relationship between basic human structure and function. Through interactive lecture, laboratory activities, projects and assessments, students will practice using correct anatomical terminology, study cells and tissues, and explore anatomical features of the major body systems while also analyzing the physiological mechanisms that maintain homeostasis in the human body. The topics covered during this course will include the integumentary system, skeletal system, muscular system, central nervous system, peripheral and autonomic nervous system, senses, endocrine system, blood and blood vessels, heart and cardiovascular system, lymphatic system and immunity, respiratory system, digestive system, urinary system, fluid, electrolyte and acid-base balance, reproductive system, and development and inheritance.

Course Prerequisites: Biology, Chemistry (Recommended)

**EARTH/SPACE SCIENCE**

Course Number: 03008

1 Year

Online

This is a year-long course in astronomy and earth studies with a problem-solving component requiring an Algebra I level of mathematics preparation. The topics covered in this course include the history of astronomy; tools of astronomers; the solar system; the birth, life, and death of stars; relativity; structure of the universe; makeup of the earth; earth history; motions and changes of the earth's surface; atmosphere; and weather. The course will also show how these principles are applied in order to explain the phenomena in the universe, the earth and of geology and meteorology as well as earth history. By the end of the course students will have a better grasp on how this amazing universe works.

Course Prerequisites: Algebra I



## **AP CHEMISTRY**

Course Number: 03106

1 Year

Online

Following the curricula recommended by the College Board, AP Chemistry courses usually follow high school chemistry and second-year algebra. Concepts covered may include the structure of matter; bonding of intermolecular forces; chemical reactions; kinetics; thermodynamics; and chemical equilibrium. For each concept, these courses emphasize the development of scientific inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. AP Chemistry courses include college-level laboratory investigations.

Course Prerequisites: Successful completion of a first-year chemistry course

## **AP PHYSICS I**

Course Number: 03165

1 Year

Online

The intent of this course is to introduce students to the principles and methods of physics and to show them how these principles are applied in order to explain the phenomena of the physical world. The inquiry-based laboratory experiences and demonstrations will give the students insight into how experimentation leads to the discovery of new scientific principles. Cooperative attitudes will be nurtured through the use of group activities. In addition to the knowledge base developed in physics, use of computer technologies are integrated throughout the entire course. The use of these technologies is intended to impart the following specific skills: ability to use a Web browser to access online information; ability to use bulletin boards; ability to download files; and ability to use software packages for data acquisition and analysis. As set forth by the College Board in the curriculum framework, this course will include the following **BIG IDEAS**.

**BIG IDEA 1:** Objects and systems have properties such as mass and charge. Systems may have internal structure.

**BIG IDEA 2:** Fields existing in space can be used to explain interactions.

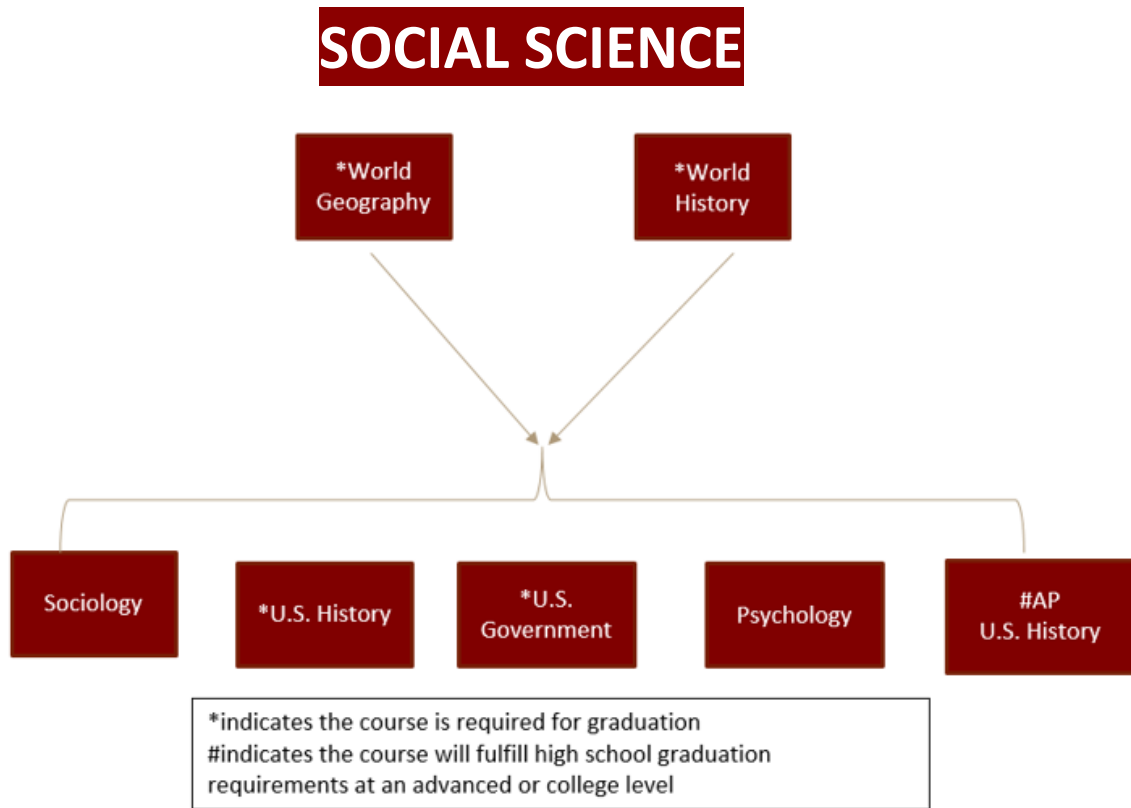
**BIG IDEA 3:** The interactions of an object with other objects can be described by forces.

**BIG IDEA 4:** Interactions between systems can result in changes in those systems.

**BIG IDEA 5:** Changes that occur as a result of interactions are constrained by conservation laws.

**BIG IDEA 6:** Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for the description of other phenomena.

Course Prerequisites: Algebra II



**WORLD HISTORY**

Course Number: 04053  
Fall Semester  
Blended Delivery

This modern World History course introduces students to political, social, and economic matters from the Renaissance to the present. The course will consist of historical investigations where students will evaluate why and how events occurred. In doing so, they will acquire relevant knowledge about significant events, developments, individuals, groups, documents, places, and ideas in World History.

Course Prerequisites: None

**SOCIOLOGY**

Course Number: 04258  
Fall Semester  
Blended Delivery

This Sociology course introduces students to the study of human behavior in society. This course provides an overview of sociology, including topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

Course Prerequisites: Recommended for students with junior or senior status

**WORLD GEOGRAPHY**

Course Number: 04001

Spring Semester

Blended Delivery

This course provides students with an overview of world geography. Geographic reasoning will be imbedded with a spatial perspective as students utilize and create maps, imagery, and geospatial technology in investigations about the Earth's wide diversity of environments and cultures.

Course Prerequisites: None

**PSYCHOLOGY**

Course Number: 04254

Spring Semester

Blended Delivery

This course introduces students to the study of individual human behavior. Course content includes an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.

Course Prerequisites: Recommended for students with junior or senior status

**U.S. GOVERNMENT**

Course Number: 04151

Spring Semester

Blended Delivery

U.S. Government—Comprehensive course provides an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. This course may examine the structure and function of state and local governments and may cover certain economic and legal topics.

Course Prerequisites: None.

**U.S. HISTORY**

Course Number: 04103

1 Year

Blended Delivery

This modern U.S. History course introduces students to political, social, and economic matters from Reconstruction to the present. The course will consist of historical investigations where students will evaluate why and how events occurred. In doing so, they will acquire relevant knowledge about significant events, developments, individuals, groups, documents, places, and ideas in U.S. History.

Course Prerequisites: Recommended for students with junior or senior status

**AP U.S. HISTORY**

Course Number: 04104

1 Year

Online

Following the College Board's suggested curriculum designed to parallel college-level U.S. History courses, AP U.S. History courses provide students with the analytical skills and factual knowledge necessary to address critically problems and materials in U.S. history. Students learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. The course examines the discovery and settlement of the New World through the recent past.

Course Prerequisites: None

~DUAL CREDIT

**AMERICAN GOVERNMENT: POLS 100 NEL01 (3 credit hours)**

1 Semester

Online

This course is comprised of a study of the basic principles of the US system of government with emphasis on problems relating to governmental structure and policies.

Course Prerequisites: None

~DUAL CREDIT

**U.S. HISTORY I: HIST 151 NEL01 (3 credit hours)**

1 Semester

Online

This course includes surveys the background and development of the United States from its colonial origins to the Civil War and Reconstruction.

Course Prerequisites: None

~DUAL CREDIT

**U.S. HISTORY II: HIST 152 NEL01 (3 credit hours)**

1 Semester

Online

Surveys development of the United States since the Civil War and Reconstruction.

Course Prerequisites: None

# WORLD LANGUAGES



## **SPANISH I**

Course Number: 24052

1 Year

Blended Delivery, Online, DDN (M-F 8:25-9:15, 11:30-12:20, 1:30-2:20, 2:30-3:20, 2:45-3:35)

This course is designed to introduce students to Spanish language and culture, Spanish I courses prepare students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on a variety of topics. They introduce the relationships among products, practices, and perspectives of Spanish-speaking cultures.

Course Prerequisites: None

## **SPANISH II**

Course Number: 24053

1 Year

Blended Delivery, Online, DDN (M-F 9:20-10:10)

This course builds upon skills developed in Spanish I, preparing students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on concrete topics. Spanish II courses introduce the relationships among products, practices, and perspectives of Spanish-speaking cultures

Course Prerequisites: Grade of C or better in Spanish I

## **SPANISH III**

Course Number: 24054

1 Year

Online

This course prepares students to communicate authentically in Spanish by interpreting (reading, listening, viewing, exchanging (speaking and listening; reading and writing, and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. These courses expand a students' knowledge of relationships among products, practices, and perspectives of Spanish-speaking countries and cultures.

Course Prerequisites: Grade of C or better in Spanish II (A "B" average in English is recommended. Spanish III, as a high school course from NSU, is designed for students who are university-bound.)