

NORTHERN<br>STATE UNIVERSITY

## NSU CENTER FOR STATEWIDE E-LEARNING

> 2024-25 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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## ACCOUNTING I

Course Number: 12104
1 Year
Online 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 cycle, journalizing and posting, financial statements, cash management, tax forms, payroll, and QuickBooks Online.

Course Prerequisites: None

## INTRODUCTION TO BUSINESS

Course Number: 12051
1 Semester; Fall
Online 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
1 Semester; Spring
Online 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
1 Semester; Fall or Spring
Blended Delivery

Personal Finance courses provide students with an understanding of the concepts and principles involved in managing one's personal finances. These courses emphasize lifespan goal setting, individual and family decision making, and consumer rights as well as topics that are commonly associated with personal finance so that one can become a financially responsible consumer. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also investigate the effects of the global economy on consumers and the family.
Topics include preparing a budget, understanding paychecks and deductions, banking, investing, insurance, managing credit and income taxes.

Course Prerequisites: None

## INTRO TO LAW, PUBLIC SAFETY, SECURITY \& CORRECTIONS I

Course Number: 15001
1 Semester; Fall or Spring
Online Delivery

Exploration of Public Service Careers courses expose students to the duties, responsibilities, requirements, and career opportunities within public service. Course topics vary and may include, but are not limited to, public safety, police, fire, emergency services, law, forensics, corrections, fire/EMS and homeland security issues. Course activities depend upon the career clusters that students explore.

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.

## ENGLISH II

Course Number: 01002
1 Semester; Fall
Blended Delivery

English/Language Arts II (10th grade) courses usually offer 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 I

Course Number: 01151
1 Semester; Spring
Blended Delivery

Public Speaking courses enable 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 Delivery

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 NE1 (3 credit hours)
1 Semester; Fall or Spring
Online Delivery

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

## MATHEMATICS



## PRE-ALGEBRA

Course Number: 02051
1 Year
Blended Delivery

Pre-Algebra courses increase students' foundational mathematics skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.

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

Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

Course Prerequisites: Algebra I

## MATHEMATICS FOR COLLEGE READINESS

Course Number: 02138
1 Semester; Fall or Spring
Blended Delivery

Course Description: College Mathematics Preparation solidifies quantitative literacy through the use and extension of algebraic, geometric, and statistical concepts. The course prepares students for postsecondary liberal studies mathematics coursework; the course is not intended to serve as a remedial mathematics course. Course content includes algebraic operations, solutions of equations and inequalities, number sets, coordinate geometry, functions and graphs, probability and statistics, and data representation.

Appropriate Grade Levels: 11, 12
Course Prerequisites: Algebra I and II, Geometry

## CONSUMER MATHEMATICS

Course Number: 02157
1 Year
Blended Delivery

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

## PRE-CALCULUS

Course Number: 02110
1 Year
Online Delivery, DDN Delivery (9:20-10:10)

Pre-calculus 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.

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## AP CALCULUS AB

Course Number: 02124
1 Year
Online Delivery

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 piecewisedefined functions.

## AP STATISTICS

Course Number: 02203
1 Year
Online Delivery

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 114 (3 credit hours)

1 Semester; Fall or Spring
Online Delivery

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.

## SCIENCE



Course Number: 03159
1 Year
Blended Delivery
Physical Science courses involve the study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions.
This is NOT a credit recovery class.
Course Prerequisites: Concurrent enrollment in Algebra I or successful completion of Algebra I.

## 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.
This is NOT a credit recovery class.
Course Prerequisites: None

## CHEMISTRY

Course Number: 03101

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

Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.
This is NOT a credit recovery class.

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

## PHYSICS

Course Number: 03151
1 Year
Online Delivery

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.
This is NOT a credit recovery class.

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

## ANATOMY AND PHYSIOLOGY

Course Number: 03053
1 Year
Blended Delivery, Online Delivery
Usually taken after a comprehensive initial study of biology, Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.
This is NOT a credit recovery class.

Course Prerequisites: Biology

## EARTH AND SPACE SCIENCE

Course Number: 03008
1 Year
Blended Delivery; Online Delivery

Earth and Space Science is a year-long course that introduces students to the study of the earth from a local and global perspective. Students will learn about time zones, latitude and longitude, atmosphere, weather, climate, matter, and energy transfer, solar system, stars, galaxies, and interstellar bodies. Advanced topics often include the study of the use of remote sensing, computer visualization, and computer modeling to enable earth scientists to understand earth as a complex and changing planet, as well as explore theories regarding the origin and evolution of the universe, space, and time. This is NOT a credit recovery class.

Course Prerequisites: None

## FORENSIC LABORATORY SCIENCE

Course Number: 03214
1 Semester; Fall or Spring
Online Delivery

Forensic Laboratory Science courses involve the application of biological, chemical, and physical science principles to data and physical evidence related to evidence collection and analysis. The courses focus on the application of scientific knowledge and scientific principles to collect, preserve, and analyze evidence in a laboratory setting. Topics may include but are not limited to entomology, forensic anthropology, serology, and fingerprinting.
This is NOT a credit recovery class.

Course Prerequisites: Recommended for students to have successfully completed one full year of Physical Science or Biology.

## AP CHEMISTRY

Course Number: 03106
1 Year
Online Delivery

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 Delivery

This is a college-prep physics course with a problem-solving component. It introduces students to the principles and methods of physics and shows 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. 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

## AP BIOLOGY

Course Number: 03056
1 Year
Online Delivery
AP Biology is a rigorous and challenging course, which is the equivalent of an introductory college biology course. AP Biology incorporates inquiry-based hands-on and virtual labs to promote critical thinking skills and reinforce the concepts and processes being learned. Students will learn experimental design that will help with developing, performing, and analyzing biology laboratories experiences. In addition, skills learned in this class will help students prepare for the Science Reasoning portion of the ACT exam.

AP Biology focuses on these four Big Ideas:
BIG IDEA 1: The process of evolution drives the diversity and unity of life.
BIG IDEA 2: Biological systems utilize energy and molecular building blocks to grow, to reproduce, and to maintain homeostasis.
BIG IDEA 3: Living systems store, retrieve, transmit, and respond to information essential to life processes.
BIG IDEA 4: Biological systems interact, and these interactions possess complex properties.
Topics learned in the Big Ideas include cells, homeostasis, chemistry of life, heredity, molecular genetics, biotechnology, evolution, nervous and immune system, and ecology. The content will be covered in depth, and greater expectations will be placed on interpretation and analysis of information than previous biology courses.

Course Prerequisites: Strongly recommended that students have completed chemistry before enrolling in AP Biology

## SOCIAL SCIENCE



## MODERN WORLD HISTORY

Course Number: 04053
1 Semester; Fall
Online 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
1 Semester; Fall
Online 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

## PSYCHOLOGY

Course Number: 04254
1 Semester; Spring
Online 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
1 Semester; Spring
Online 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.

## NATIVE AMERICAN STUDIES

Course Number: 04111
1 Semester; Spring
Online Delivery

This course will focus primarily on the Oceti Sakowin through inquiry-based investigations of history, culture, government, literature, art, and more. Additional areas of focus include historical and contemporary analyses of Tribal Nations across the US.

Course Prerequisites: None

## AP U.S. HISTORY

Course Number: 04104
1 Year
Online Delivery

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 NE1 (3 credit hours)
1 Semester; Fall or Spring
Online Delivery
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.

## *DUAL CREDIT <br> U.S. HISTORY I: HIST 151 NE1 ( 3 credit hours)

1 Semester; Fall
Online Delivery
This course includes surveys the background and development of the United States from its colonial origins to the Civil War and Reconstruction.
*DUAL CREDIT
U.S. HISTORY II: HIST 152 NE1 (3 credit hours)

1 Semester; Spring
Online Delivery
Surveys development of the United States since the Civil War and Reconstruction.

## WORLD LANGUAGES



## SPANISH I

Course Number: 24052
1 Year
Blended Delivery, Online Delivery, DDN Delivery (M-F 8:25-9:15, 11:30-12:20, 1:30-2:20, 2:30-3:20, 2:45-3:35)

Spanish I 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 Delivery, DDN Delivery (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: No semester grade below a "C" in the first year of Spanish I.


[^0]:    Course Prerequisites: Algebra I and II, Geometry

