Austin Area High School Course Catalog

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Academic Planning

Academic planning and course scheduling are vital components of a student's educational journey. It is our goal, at AASD, to empower students to make informed decisions, optimize their time and resources, and maximize their learning potential.

Grading Scale

94% – 100% = A

86% – 93% = B

78% – 85% = C

70% – 77% = D

0 – 69% = F

Graduation Credit Requirements

English=4

Math=4

Science=4

Social Studies=4

PE/Health=2.5

Fine Arts=1

Electives=9.5

Total=29.0

Distinguished Honor Roll

Students must achieve a combined average of 93% or above for the marking period, with no grade below an 86% in any subject.

Honor Roll

Students must achieve a combined average of 86% or above for the marking period, with no grade falling below 77% in any subject.

English Language Arts

English 9

Grade: 9
Number of Seats: will accommodate
Credits: 1

This course is designed to engage students in a dynamic exploration of various literary genres, including poetry, short stories, novels, and drama. Through a combination of reading, writing, listening, and speaking activities, students will develop critical thinking and communication skills. Students will focus on writing in multiple genres, including informational, persuasive, and argumentative essays, with an emphasis on clear organization and smooth transitions between ideas. The course will also strengthen grammar and conventions while expanding vocabulary to improve overall language proficiency. A key component of the course is a research-based presentation, where students will apply their research and writing skills to craft a compelling and well-supported argument.

English 10

Grade: 10
Number of Seats: will accommodate
Credits: 1

In this course, students will explore a wide range of literary genres, focusing on deepening their understanding of literature through reading and literary analysis. Emphasis will be placed on critical thinking and the skills needed to analyze and interpret texts in meaningful ways. Students will further develop their writing abilities by composing narrative, argumentative, and expository/informative essays. These writing assignments will encourage students to express their ideas clearly and persuasively, while focusing on structure, evidence, and style. Additionally, students will conduct independent research on a topic of their choice, applying their skills in gathering, analyzing, and presenting information. Through these experiences, students will continue to build their vocabulary and writing proficiency.

English 11/12 (high school level course)

Grades: 11&12
Number of seats: will accommodate
Credits: 1
This course invites students to engage with a rich array of literary texts, including poetry, nonfiction, short stories, drama, and novels by British and American authors. The course

places a strong emphasis on developing skills in reading, writing, and speaking, while continuing to expand vocabulary knowledge and usage. Throughout the year, students will refine their ability to communicate effectively both orally and in writing. A major focus will be on improving writing through detailed analysis and grammar exercises, while completing a variety of assignments designed to enhance both clarity and style. Students will work to produce writing that is clear, concise, and accurate, with a focus on expressing ideas thoughtfully and effectively. By the end of the course, students will be well-equipped with the writing skills needed for college-level work and beyond, as well as the oral communication skills required for a range of academic and professional settings.

English Composition 1

Grades: 11 & 12 (offered every other school year)
*Dual Enrollment Course through the University of Pittsburgh at Bradford
Number of Seats: will accommodate
Credits: 1 high school credit; 3 college credits (conditions apply)

This course is the first of two required competency courses in English composition that focuses on the writing process and on the kinds of writing common in the academic disciplines.

Literature and Interpretation

Grades: 11 & 12 (offered opposite school year of English Composition 1)
*Dual Enrollment Course through the University of Pittsburgh at Bradford
Number of Seats: will accommodate
Credits: 1 high school credit; 3 college credits (conditions apply)

This course is an examination of the ways in which both literary and non-literary texts create meaning and an introduction to some of the methods of literary interpretation, beginning with literary concepts like genre, narrative, character, and figurative language. Considers interaction among the reader, the writer, the text itself, and between different texts.

Math

Algebra 1 (Keystone course)

Grade: 9
Number of Seats: will accommodate
Prerequisites:
Credits: 1

Algebra 1 is a foundational mathematics course that introduces students to the basic concepts of algebra. This course covers topics such as solving equations and inequalities, graphing linear equations and functions, working with polynomials, factoring, and exploring quadratic equations. Students will also learn about systems of equations, exponential functions, and data analysis. Students will develop problem-solving skills, logical reasoning, and mathematical communication.

Algebra II

Grade: 10
Number of Seats: will accommodate
Prerequisites: Algebra I
Credits: 1

The primary focus of Algebra II will be on solving and graphing linear, quadratic, and polynomial functions, as well as understanding the properties of these functions. Students will also study exponential functions and sequences and series. Additionally, the course will cover matrices and determinants, complex numbers, and probability and statistics. Throughout the course, students will engage in problem-solving activities and will have opportunities to apply the concepts they have learned to real-world scenarios. By the end of the course, students will have developed a deep understanding of algebraic concepts and will be able to use this knowledge to solve complex problems. They will also have developed critical thinking and problem-solving skills that will prepare them for future success in mathematics and other academic disciplines.

Applied Math

Grades: 11&12
Number of Seats: will accommodate
Prerequisites: none
Credits: 1

This course is designed to provide students with a comprehensive understanding of fundamental concepts in Algebra II, Geometry, Trigonometry, and Statistics, and to develop their problem-solving skills through practical applications of these concepts. They will learn how to use the Pythagorean theorem and other geometric formulas to solve problems involving distance, area, and volume. Students will learn the basic trigonometric functions and how to use them to solve problems involving angles and triangles. They will also learn how to use trigonometry to solve real-world problems such as navigation and surveying. Students will learn how to collect and analyze data, and to use statistical tools to make predictions and draw conclusions. By the end of the course, students will have a strong

foundation in applied mathematics and be equipped with the skills to solve complex problems using mathematical concepts.

Calculus

Grade: 12
Number of Seats: will accommodate
Prerequisites: Must have Algebra II/Trigonometry
Credits: 1

This course introduces students to the fundamental concepts of differential and integral calculus, building on prior knowledge from algebra, geometry, and precalculus. It emphasizes problem-solving, critical thinking, and real-world applications of calculus. Topics include Limits & Continuity, Derivatives, Integrals, and the Fundamental theorem and applications of calculus.

Foundations in Personal Finance

Grades: 11&12
Number of Seats: will accommodate
Prerequisites: none
Credits: 1

Foundations in Personal Finance is an introductory course that provides students with a comprehensive understanding of the principles of personal finance. This course covers a range of topics related to personal finance, including budgeting, saving, investing, credit scores, insurance, retirement planning, and more. Throughout the course, students will learn how to create and stick to a budget, develop a savings plan, invest in stocks and bonds, manage credit card debt, and navigate the complexities of insurance and retirement planning. They will also learn about the importance of setting financial goals and creating a long-term plan for achieving financial freedom. By the end of the course, students will have a solid understanding of personal finance and the tools they need to manage their finances effectively. Whether they are planning for college, starting a career, or simply looking to improve their financial situation.

Geometry

Grade: 10
Number of Seats: will accommodate
Credits: 1
Prerequisites: Algebra 1

This Geometry course is designed to provide students with a comprehensive introduction to the principles of geometry. The course will cover topics such as points, lines, angles, planes, polygons, circles, congruence, similarity, transformations, and coordinate geometry. Throughout the course, students will be challenged to think critically, apply mathematical reasoning, and communicate their ideas effectively. They will develop skills such as logical thinking, spatial reasoning, and visualization, which are essential for success in many fields. By the end of the course, students will have a solid foundation in geometry, and be able to apply their knowledge to real-world situations. This course will prepare them for further study in mathematics and related fields, as well as provide them with the necessary skills for success in their future academic and professional pursuits.

Trigonometry

Grade: 11
Number of Seats: will accommodate
Prerequisites: Geometry and Algebra II preferred
Credits: 1

Trigonometry is a branch of mathematics that deals with the relationships between the sides and angles of triangles. Students will learn about the fundamental concepts of trigonometry, including trigonometric functions, right triangles, the unit circle, trigonometric identities, and graphing trigonometric functions. Students will also explore the real-world applications of trigonometry in areas such as physics, engineering, and architecture.

Science

Anatomy

Grades: 10-12
Course length: one semester
Number of Seats: will accommodate
Credits: 0.5
Curriculum Resource: OpenStax Anatomy and Physiology

Anatomy provides general study skills and a firm foundation for students preparing for an education in the medical field. Anatomical instruction is coupled with the investigation of key related terminology dealing with the “what, why and how” of human anatomy. Specifically, students will explore structures, functions and terms related to disease and the body systems. This semester includes the study of directional terms, the body in health and disease, the skeletal, muscular, integumentary, urinary, nervous cardiovascular,

respiratory, excretory, digestive and the endocrine systems. Students will also study diagnostic procedures, pharmacology, psychiatry, and types of healthcare professionals are investigated as well. Students will participate in online lab activities, virtual dissections, live dissections and hands-on activities in this course. By the end of the course, students will have a solid understanding of the anatomy and physiology of the human body, as well as an appreciation for the interconnectedness of its organ systems. They will be able to apply this knowledge to their own lives and make informed decisions about their health and well-being.

Astronomy

Grades: 10-12
Course length: one semester
Number of Seats: will accommodate
Credits: 0.5
Curriculum Resource: OpenStax Astronomy

This course provides an introduction to the field of astronomy, which is the study of celestial objects, including planets, stars, galaxies, and the universe as a whole. Students will explore the methods and tools used by astronomers to observe and understand the universe, and gain an understanding of the physical and chemical principles that govern the behavior of celestial bodies.
The course begins with an exploration of the history of astronomy, including the development of telescopes and our understanding of the solar system. Students will learn about the various types of celestial objects and their properties, including their composition, size, and distance from Earth. The course will also cover the properties of light and how it can be used to study celestial objects. Students will delve into the life cycles of stars, and learn about the different types of stars and the forces that govern their evolution. By the end of the course, students will have gained an appreciation for the vastness and complexity of the universe, and a basic understanding of the methods and tools used by astronomers to study it. This course will prepare students for further studies in astronomy, physics, or related fields, and provide a foundation for pursuing a career in a science, technology, engineering, or mathematics (STEM) field.

Biology (Keystone Course)

Grade: 10
Number of Seats: will accommodate
Credit: 1
Science Curriculum Resource: CK12

Biology is the study of living organisms. Biology is learning what makes a hawk fly, how a caterpillar becomes a beautiful butterfly and studying ourselves in this changing world. There are new discoveries made every day in biology, so it is ever changing and there is always something new to learn. In their first semester of Biology, students will study the scientific process, characteristics of living organisms, ecology, organic molecules, cell structure, and cellular metabolic processes. The second semester some of the amazing biological processes that the students will look into are why they have the eye color that they do, why the flowers in front of their homes have different colors on the same flower, and they will investigate why various insects have adapted to pesticides that used to eliminate them. Students will also study the process of cell division, Mendelian genetics, DNA and how it codes for protein synthesis, and modern evolutionary theories.

Concepts in Biology

Grade 11 & 12
*Dual Enrollment Course through the University of Pittsburgh at Bradford
Number of Seats: will accommodate
Prerequisites: Biology I
Credits: 1 high school credit; 3 college credits (conditions apply)
Curriculum Resource: Campbell Essential Biology

This course provides a survey of biological concepts providing students with a good understanding of how biology relates to everyday life. Biology is the study of life. Because life is very diverse and abundant on Earth that means this is a very rich and complicated field of study. Nonetheless, there are many central principles to life, such energy usage, evolution, and the inheritance of traits that are common to all organisms. These central principles will be the primary focus of this course. Our discussion will also touch on ways that biology impacts our everyday life, as well as new discoveries in this rapidly moving field of study.

Concepts of Chemistry

Grade: 11 & 12 (offered every other school year)
*Dual Enrollment Course through the University of Pittsburgh at Bradford
Number of Seats: will accommodate
Prerequisites: Algebra I
Credits: 1
Curriculum Resource: Introductory Chemistry a Foundation Zumdahl

Chemistry is a full-year course split into two semesters. It is recommended that students take Chemistry after successfully completing Algebra I. Chemistry introduces various types of matter. Topics include scientific measurements, matter, atoms, the periodic table,

compounds, moles, nuclear chemistry, and chemical equations. Students will begin to make connections between chemistry and the world around them. The course emphasizes stoichiometry (chemical calculations), chemical equations, gas laws, elementary atomic structure and periodic properties of elements.

Concepts of Modern Physics

Grade: 11 & 12 (offered every other school year)
*Dual Enrollment Course through the University of Pittsburgh at Bradford
Number of Seats: will accommodate
Prerequisites: Algebra I and Trigonometry
Credits: 1 high school credit; 3 college credits (conditions apply)
Curriculum Resource: Physics Principles and Problems by Glencoe

This course is designed to introduce high school students to the fundamental principles of physics, with an emphasis on developing critical thinking and problem-solving skills. Throughout the course, students will learn to apply mathematical concepts to the study of physics, including algebra, geometry, and trigonometry. The first unit of the course will focus on mechanics, which covers topics such as motion, forces, and energy. Students will learn about Newton's laws of motion, work and energy, and momentum. The second unit will cover waves, including sound and light waves, as well as wave properties such as frequency, wavelength, and amplitude. The third unit of the course will cover electricity and magnetism, including topics such as electric circuits, electric fields, magnetic fields, and electromagnetic waves. By the end of the course, students will have a solid understanding of the principles of physics and be able to apply this knowledge to real-world problems. They will also have developed critical thinking and problem-solving skills that will serve them well in any field they choose to pursue.

Earth/Planetary Science

Grades: 10-12
Course Length: One semester - one year
Number of Seats: adaptable from 1 - 15
Credits: 0.5 (half year)/1 (full year)

This course will introduce students to the fundamental concepts and principles of Earth Science, with a focus on geology, the environment, and the universe. Students will explore the physical and chemical processes that shape our planet. Upon completion of this course, students will have gained a solid foundation in Earth Science and will be able to apply their knowledge to real-world issues related to the environment and sustainability.

Environmental Ecology

Grade: 9
Seats: will accommodate
Credits: 1
Science Curriculum Resource: Pearson Environmental Science

Ecology is a course appropriate for learners of all levels and abilities, but is usually taken prior to Biology. Environmental Ecology is an introduction to the study of the human impact on the environment and conversely, how the environment impacts humans. Topics include earth systems, evolutionary design, structure and function of ecosystems, ecological succession, biological populations, agriculture, and human land usage, land cover, biodiversity, urbanization, drainage systems/watersheds, human impact upon the environment, energy crisis, air pollution, water pollution, environmental risk, solid waste disposal, ozone depletion and climate change.

Forensic Science

Grades: 10-12
Course Length: one semester - one year
Number of Seats: 8-15; 3 student minimum
Credits: 0.5 (half year)/1 credit (full year)

This course serves as an introductory class in the field of Forensic Studies. Students will explore most aspects of the topic including brief history of Forensics, demonstrations and practical application of motive, interview/questioning techniques, fingerprinting, handwriting analysis, tool/tire marks, casting of molds, ballistics, hair and fiber analysis, soil analysis, crime scene security, evidence collection, chain of custody, etc. Students will have practical, hands-on experience in many of the above topical areas. Students will work on solving at least two mock crimes while working as a team.

Geology/Surface Geomorphology

Grades: 10-12
Course Length: One semester - one year
Number of seats: will accommodate
Credits: 0.5 (half year)/1 credit (full year)

This course provides an introduction to the fundamental principles of geology and geomorphology. Geology is the study of the Earth's physical structure, composition, and history, while geomorphology is the study of the Earth's surface landforms and the processes that shape them. Students will also explore the relationship between geology and society,

including the use of natural resources and the impact of human activities on the Earth's geological processes. By the end of the course, students will have a strong foundation in the principles of geology and geomorphology, allowing them to better understand the natural processes that shape our planet.

Ice Ages and Glaciology

Grades: 10-12
Course length: One semester
Number of Seats: will accommodate
Credits: 0.5

Ice Ages and Glaciology is a course that examines the history of ice ages and the multiple facets of glaciology with specific focus on Ice Ages affecting our area of Northern Pennsylvania and Southwestern New York. Topics explored include the causes and effects of glacial periods, glacial landforms, (particularly regional glacial landforms, glacier dynamics and movement, the impact of climate change on glaciers, and the importance of snow and ice on the Earth's climate. Students will use a combination of lectures, field trips, and other exercises to gain a better understanding of the science and history of ice ages and glaciers and how they continue to shape our world. By the end of the course, students will be able to discuss the evidence for and against past and present ice ages and explain how glaciers shape the Earth's landforms.

Science of Mythology

Grades: 10-12
Course length: one semester
Number of Seats: 10-15
Credits: 0.5
Science Curriculum Resources: Various supplemental videos and texts

Mythology has been used since the first people gathered around the fire as a way to make sense of and explain humankind, human nature and the world in which we live. This course focuses on the many myths and legends woven into cultures around the world and explores any scientific/logical evidence either supporting, questioning or contradicting various myths. Students will examine the development of various myths and legends from all over the world and throughout human history. In this experience, they will gain knowledge of other cultures and draw parallels to their own world/belief systems. Moreover, students will search for, learn about, investigate and discuss scientific research which either confirms or contradicts or inspires further exploration of the validity of various myths.

Some topics include various creation stories vs. accepted scientific theories about the beginnings of the universe, our own planet and the development of life thereon, including the Big Bang Theory, Oparin/Miller "Salt Theory", Evolution, Creation, Natural Selection.

Nature of Science

Grades: 10-12
Course Length: one semester
Number of Seats: 12
Credits: 0.5

This course studies the nature of science and experimentation. Topics include Who, What, Where, When, How and Why Science is studied. Experimental design, data collection, observational vs. experimental science. Students design some mini experiments and one larger experiment. Topics also include lab report writing, data analysis and communication in various scientific fields.

Science 12 (high school level course)

Grade: 11
Number of Seats: will accommodate
Credits: 1

Science 12 is a comprehensive, interdisciplinary course that explores key concepts across multiple scientific fields, including physical science, biological science, environmental science, earth and space science, and the nature of science. This course provides students with a broad understanding of scientific principles and their applications to real-world issues.

Students will investigate topics such as energy and motion, ecosystems and biodiversity, climate change, planetary systems, and the scientific method. Critical thinking, problem-solving, and hands-on experimentation will be emphasized throughout the course.

Science of Science Fiction/Sci. Fi. Writing

Grades: 10-12
Course Length: One semester - one year
Number of Seats: 10-12
Credits: 0.5 (half year)/1 credit (full year)

Science of Science Fiction/Sci Fi. Writing is an introductory course designed to provide a broad overview of how Science Fiction and the human imagination have spurred advances in science and technology (applied science) and how the human imagination drives human ingenuity. The course provides students with the skills and knowledge necessary to write

science fiction stories. This course covers the fundamentals of science fiction thought, writing, including world building, characterization, theme, and plot structure. The course also explores the history of science fiction and examines how this genre has influenced literature, film, and popular culture, but most importantly scientific advancement that shapes our modern world. Students will learn how to develop their own science fiction worlds and characters and create compelling stories. Through writing exercises, readings, and class discussions, students will gain an understanding of how to craft engaging stories that explore the implications of science and technology. Students will develop their own works and receive feedback from peers and instructors. At the end of the course, students will have a portfolio of science fiction stories that they can use to pursue further publication.

Social Studies

American Political Process

Grade: 11 & 12 (offered every other school year)
*Dual Enrollment Course through the University of Pittsburgh at Bradford
Number of Seats: will accommodate
Credits: 1 high school credit; 3 college credits (conditions apply)

This course is an introductory course focusing on American politics and government. Emphasis is on political processes and institutions on the national level, including Congress, the presidency, the Supreme Court, political parties, pressure groups, and elections.

Introduction to Psychology

Grade: 11 & 12 (offered every other school year)
*Dual Enrollment Course through the University of Pittsburgh at Bradford
Number of Seats: will accommodate
Credits: 1 high school credit; 3 college credits (conditions apply)

This course offers an introduction to psychology and its major subfields. Topics include experimental psychology; research methodology and statistics; learning; memory; brain and behavior; perception; human development; assessment techniques; personality theories; social psychology; and psychological disorders and treatment.

US History

Grade: 9
Number of Seats: will accommodate

Credits: 1

U.S. History I covers the major events of early American history through World War II. Students will engage with a variety of primary and secondary sources to better understand the people and groups who contributed to the development of the United States. After taking this class, students will understand how the United States grew from a newly-formed republic into a global superpower, as well as the implications of those changes for today.

US History II

Grade: 10
Number of Seats: will accommodate
Credits: 1

United States History II takes students from America's emergence from World War II in 1945 to the present day. Students will use primary sources including documents, video, music, and art from the past eight decades to better understand the challenges and changes that have influenced the contemporary history of their country with a focus on better engaging with the world today. Students will learn about the social movements, conflicts, technology, and cultural developments that affected American life throughout this period of unprecedented change.

World Cultures

Grade: 11&12
Number of Seats: will accommodate
Credits: 1

This class is designed to give students a better understanding of the world, its geography, and its people. Students will come away understanding basic geographic tools, as well as the physical and cultural geography of different regions of the world's regions. Furthermore, students will study current issues facing the world today in order to help them become informed and engaged citizens.

World Regional Geography

Grade: 11 & 12 (offered every other school year)
*Dual Enrollment Course through the University of Pittsburgh at Bradford
Number of Seats: will accommodate
Credits: 1 high school credit; 3 college credits (conditions apply)

This course offers a systematic treatment of the physical, historical, cultural, and economic processes that have shaped global landscapes. Contemporary regional problems and prospects are emphasized.

STEAM

9th Grade STEM

Grade: 9
Length of Course: one semester - one year
Number of seats: will accommodate
Credits: 0.5 (half year)/1 (full year)

Ninth grade STEM is designed for students who have already completed foundational courses in science, technology, engineering, and math. This course builds on previous knowledge and covers advanced topics in these fields, with a focus on real-world applications and problem-solving.

Digital Fabrication

Grades: 10-12
Length of Course: one semester
Number of seats: will accommodate
Credits: 0.5

Digital Fabrication is a high school course that teaches students how to use computer-aided design software and digital fabrication tools like 3D printers, laser cutters, and CNC machines to create physical objects from digital designs. Students will learn about CAD software, design thinking, material properties, engineering principles, and safety while gaining skills in the modern manufacturing process.

Digital Fabrication 2

Grades: 10-12
Length of Course: one semester
Number of seats: will accommodate
Prerequisites: Digital Fabrication I
Credits: 0.5

Digital Fabrication 2 is an advanced high school course that covers advanced topics in CAD software, problem-solving, entrepreneurship, and real-world applications of digital

fabrication. Students will work on complex projects and develop skills in design thinking and safety while gaining a deep understanding of the potential of digital fabrication.

Fab Lab

Grades: 10-12
Course Length: one semester
Number of Seats: 10-12
Credits: 0.5

Fab Lab is a hands-on, project-based course that introduces students to the world of digital fabrication, engineering, and design. Using cutting-edge tools and technology, students will learn to create and manufacture projects using a 3D printer, CNC lathe, laser engraver, and woodworking equipment. They will work on individual and collaborative projects that integrate creativity, problem-solving, and technical expertise. Safety procedures and proper tool usage will be emphasized to ensure a responsible and productive lab environment.

Fine & Performing Arts

Advanced Art

Grades: 10-12
Course Length: one semester
Number of seats: 10-15
Credits: 0.5

Advanced Art is designed for students who want to further develop their skills and knowledge in various art forms. Students will explore techniques and concepts in drawing, painting, sculpture, printmaking, textiles, and mixed media. A variety of materials will be used such as graphite, charcoal, paint, clay, as well as digital media. A variety of projects are presented to students for them to have a choice in their artistic creation and expression of the medium or skills required to complete.

Art 9

Grade: 9
Number of Seats: will accommodate
Credits: 1 (full year)/0.5 (half year)

Students will enhance their artmaking experience based on the elements of art and the principles of design. Art 7 breaks down the elements of art individually and applies them to

artmaking processes. Art 8 covers selected principles of design throughout the course. Art 9 expands on the artmaking techniques and skills developed within the elements and principles. Big ideas are given and students create projects that show self reflection and individualization.

Clay/Crafts

Grades: 10-12
Course Length: one semester
Number of Seats: 10
Credits: 0.5

This class explores different art making practices. Within this course, students will work through learning the stages of clay and different clay making techniques. Students will also explore different craft mediums. Students will use design elements and will choose projects based on concepts or art making mediums. Students will be required to use reflection throughout their artmaking processes and reference it to art history.

Choice Board

Grades: 10-12
Course Length: one semester
Number of Seats: 10
Credits: 0.5

This class explores different art making practices. Within this course, students will work through multiple mediums while learning about art history. Students will use design elements and will choose projects based on concepts or art making mediums. Several project options are provided and students work through the course at a self pace using problem solving techniques and becoming resourceful through artmaking.

Creative Arts

Grades: 10-12
Course Length: one semester
Number of seats: 10
Credits: 0.5

This class explores different short reading passages and art making practices. Within this course, students will work through multiple mediums while learning about creative writing. Students will use design elements and will choose projects based on concepts or art making

mediums. Students will be required to use reflection throughout their artmaking processes and reference it to class readings.

Music 9

Grade: 9
Number of Seats: will accommodate
Credits: 1 (full year)/0.5 (half year)

Students will develop a deep understanding of the fundamentals of music theory and the essential elements of music. They will explore music composition, theory fundamentals, piano and guitar techniques, songwriting, and music appreciation. With a broad focus, students will study everything from the basics of music notation to more advanced concepts such as chord structures, harmonies, and melody writing. Throughout the course, students will learn to play basics on guitar or ukulele and will have opportunities to compose and perform their own music. They will also study the history and foundational elements of Broadway music, including the stories behind the songs and the secrets of musical theater.

Music Theory

Grades: 10–12
Course Length: One Semester
Number of Seats: will accommodate
Credits: 0.5

Music Theory is an introductory course designed for high school students who want to develop a strong foundation in the fundamentals of music theory. Throughout the course, students will learn to read and write music notation, identify and analyze musical elements such as rhythm, melody, harmony, and form, and develop aural skills to identify intervals, scales, and chords.

Music Technology

Grades: 10–12
Course Length: One Semester
Number of Seats: will accommodate
Credits: 0.5

This course builds upon the fundamentals learned in the introductory courses and delves deeper into the analysis and creation of music. Throughout the course, students will develop their understanding of harmonic functions and voice leading, explore advanced chord progressions, and analyze more complex forms of music such as fugues and sonatas.

Additionally, students will further develop their aural skills and learn how to identify and transcribe more complex musical patterns and phrases. Students will also gain experience in composition and arranging, applying the concepts they learn to create their own pieces of music.

Modern Band

Grades: 7-12
Course Length: full year
The Modern Band program is a high school music course designed to introduce students to the world of rock band performance while exploring classic and modern pop music styles. In this course, students will learn to play rock band instruments, including guitar, bass, drums, keyboards, and vocals. They will also learn to work collaboratively as a band, building essential teamwork and communication skills.

By the end of the course, students will have developed a strong foundation in rock band performance, as well as a deep appreciation for the rich and diverse world of pop music. They will have gained essential skills in teamwork, communication, and creative problem-solving, preparing them for success in a wide range of future endeavors.

Chorus

Grades: 7-12
Course Length: full year
This high school chorus course will explore modern hits and provide students with the opportunity to learn and perform popular songs from a variety of genres. Students will develop their vocal technique, learn how to harmonize with others and work on their stage presence and performance skills. This class will offer a fun and engaging environment for students to express themselves creatively through music while also building teamwork and communication skills. Whether you're an experienced singer or just starting out, this class is perfect for anyone who loves to sing and wants to learn more about modern music.

Theater Arts

Grades: 10-12
Course length: One semester
Number of Seats: 5-15 ideal
Credits: 0.5

Drama is an exciting and engaging form of storytelling that explores the human condition and can be used to create powerful theatrical experiences. In this course, students will learn

the fundamentals of creating and performing a drama. Through a combination of practical work in the classroom and theoretical study, students will gain a comprehensive understanding of the dramatic form, exploring topics such as character, plot, dialogue, setting, and staging. The course will also cover aspects of production and performance, including design, directing, and acting. By the end of the course, students should have a thorough understanding of what goes into creating a successful and meaningful drama. At course end, students may be afforded the opportunity to complete a live performance in school.

Health & Wellness

Physical Education

Grades: 9-12
Course length: Full Year
Number of Seats: will accommodate
Credits: 0.25-0.50

Throughout the Physical Education course, students will be able to meet PA Academic Standards for Safety and Physical Education by being engaged in lessons focused on the following categories: safety and injury prevention, physical activity and concepts, principles and strategies of movement. In this course, students will learn topics such as, the ability to evaluate the benefits, risks and safety factors that are associated with self-selected life-long physical activities, aerobic and anaerobic exercise, goal-setting and team sports. Students will be assessed in these areas by attendance, behavior, and participation.

Cooking

Grades: 10-12
Course length: one semester
Number of Seats: 8
Credits: 0.5

Cooking classes are a great way to learn new culinary skills and techniques, as well as expand your repertoire of recipes. The course will cover a variety of topics, including basic knife skills, cooking methods (such as baking, sautéing, and roasting), flavor profiles, ingredient selection, menu planning, and presentation. You will also learn about different types of cuisines and how to prepare dishes from around the world. Throughout the course, you will work with a variety of ingredients, from fresh herbs and spices to meats and vegetables. The class will be interactive and engaging, with plenty of opportunities to ask questions and share

your own experiences. By the end of the course, you will have gained the skills and confidence to prepare delicious meals at home for yourself and your loved ones.

GenZen

Grade: 10-12
Course Length: One semester
Number of Seats: 10-15
Credits: 0.5

This course explores the dynamic relationship between mental and physical wellness, focusing on cultivating balance and resilience through mindfulness, meditation, and practices promoting calmness. Students will learn techniques to reduce stress, enhance self-awareness, and improve emotional and physical health.

Health 9

Grade: 9
Course Length: Full Year
Credits: 0.5

Health 9 is a comprehensive course designed to help students develop the knowledge and skills needed to make healthy, informed decisions. This course covers key topics such as mental and emotional health, nutrition, physical fitness, personal hygiene, substance abuse prevention, human development, and disease prevention.

Students will explore the impact of lifestyle choices on overall well-being and learn strategies for maintaining a healthy body and mind. The course also emphasizes decision-making, goal-setting, and communication skills to promote positive relationships and responsible behavior.

Science of Aging

Grades: 10-12
Course length: One semester
Number of Seats: 10
Credits: 0.5

This course is designed to explore the physical/physiological, emotional and mental changes that happen to organisms (with focus on the human organism) throughout the course of its life. Students will learn about the various developmental and growth changes within human development.

Outdoor Recreation.

Grades: 10-12
Course Length: one semester
Number of Seats: 10
Credits: 0.5

Outdoor Recreation is an engaging, hands-on course that immerses students in various outdoor activities, including hiking, mountain biking, fishing, and snowshoeing. Designed to promote an appreciation for nature and physical activity, this course also teaches essential outdoor skills such as tree identification, knot tying, navigation, and wilderness safety.

Students will develop a deeper understanding of environmental leadership, outdoor ethics, and survival skills while participating in activities that build confidence, teamwork, and problem-solving abilities.

World Languages

Introduction to American Sign Language

Grade: 9
Length of Course: one semester
Number of Seats: will accommodate
Credits: 0.5

This course is an introduction to American Sign Language (ASL), a visual and spatial language used primarily by the Deaf and hard-of-hearing community in the United States and Canada. In this course, students will learn the basic elements of ASL, including handshape, movement, location, orientation, and facial expressions, as well as the grammatical structures used to convey meaning. Students will also explore Deaf culture, history, and values, and learn how to communicate in a culturally appropriate way. By the end of the course, students will be able to engage in simple conversations in ASL, demonstrate an understanding of Deaf culture and values, and appreciate the richness and diversity of the Deaf community.

Introduction to Computer Science

Grade: 9
Length of Course: one semester
Number of Seats: will accommodate
Credits: 1

This course is split into two sections. The first portion of the class will introduce students to text based coding. The second portion of the class will have the students using physical computing devices to program robots to interact with the environment using various sensors. The first portion of the class uses drawing & animation as a framework for learning text based coding. Through this course, students will gain foundational knowledge of programming concepts, including variables, functions, loops, and conditionals, as well as an understanding of how these concepts can be used to create interactive animations and visualizations. For the second portion of the class, students will use physical computing devices such as microBit, Hummingbird via BirdBrain Technologies, and Sphero and program the various components to interact with the environment.

Spanish 1

Grade: 9
Course Length: full year
Number of Seats: will accommodate

Spanish 1 is an introductory language course designed to develop basic communication skills in Spanish. Students will learn fundamental vocabulary, grammar, pronunciation, and sentence structure to build a strong foundation in listening, speaking, reading, and writing. The course emphasizes everyday conversational skills, cultural awareness, and real-world language application.

Career and Technical Education

Career Exploration

Grades: 10-12
Length of course: 2 days/rotation for entire school year
Number of Seats: will accommodate
Credits: 0.5

This Career Exploration course is designed to help high school students discover and prepare for future career opportunities. Students will explore the 16 career clusters, identifying potential career paths that align with their skills, interests, and goals. Through interactive activities, research, and hands-on projects, students will gain a deeper understanding of various professions and the education and training required for each.

A key component of this course is the development of a career portfolio, which includes interest inventories, resumes, cover letters, and personal career goals. Students will also

participate in a finance project, learning essential budgeting and financial planning skills to prepare for life after high school.

The course will feature guest speakers from various industries, providing real-world insights into different career fields. Additionally, students will have opportunities to visit colleges and technical schools, allowing them to explore post-secondary education options.

Seneca Highlands Career and Technical Center

Grades: 10-12
Availability: 2 students per program
Credits: 3 credits per school year

The Seneca Highlands Career and Technical Center (CTC) is a half-day, career training facility located in Port Allegany. The school serves students in grades 10-12 from area school districts in Cameron, McKean, and Potter counties. Students at the CTC learn both technical and soft vocational skills while earning industry-recognized certifications in one of 10 programs: Auto Mechanics, Building Construction, Culinary Arts, Early Childhood Education, Engineering Technology, Health Services. Heavy Equipment Maintenance, Networking, Public Safety & Security, and Welding.