

Technology Education- Futures Lab

Futures Lab Learners explore and apply a wide range of technologies to project based work. Students develop and practice real-world skills such as problem-solving, collaboration, project-planning, and communication. Students create ePortfolios to document and present their work. Systems of technology explored in the Futures Lab include:

- Mechanics and Structures
- Computer Graphics
- Scientific Data and Analysis
- Digital Communications
- Alternative and Renewable Energy
- Robotics and Control Technology
- Circuitry
- Software Engineering
- Design and Modeling

7th and 8th Grade Physical Education

Course Description: Students in 7th and 8th grade Physical Education will take part in a 30-day fitness experience two different times throughout the school year. Students will practice proper hygiene by changing into school appropriate gym attire and wearing athletic shoes. Daily class activities include: hockey, soccer, basketball, softball/whiffle ball, team handball, team building, badminton, volleyball, weight lifting, football, invasion games

Instructional Resources: SPARK Curriculum

Course Unit Topics: Team Sports, Individual Sports, Lifetime Fitness

Course Name: Health Education

Middle School Health Education Philosophy

Provide all students with the skills and knowledge to consistently practice behaviors that promote lifelong health and well-being and to promote the health of others, the community and environment.

COURSE DESCRIPTION for HEALTH EDUCATION (grade 7)

Drugs & Alcohol

Students will explore gateway drugs, alcohol, tobacco, and marijuana and the long and short-term effects of their use. Emphasis will be placed on the tendency of gateway drugs to lead to the use of other drugs, often more dangerous and addictive. Students will analyze influences, practice refusal skills, and practice decision making skills.

Human Sexuality

In this abstinence-based unit, students will be introduced to basic human reproductive anatomy and physiology. The prevention of Sexually Transmitted Diseases (STDs) and pregnancy will be discussed with abstinence being the overlying theme. The promotion of healthy relationships will be explored by practicing health behavior skills. (goal setting, decision making, analyzing influences)

Wellness (Focus on Mental Health)

Students will understand how the components of wellness contribute to their life outlook. The content will discuss stress, emotions, anxiety, depression, suicide and decision making skills to navigate life.

COURSE DESCRIPTION for HEALTH EDUCATION (grade 8)

Human Sexuality

Students will continue to strengthen concepts and skills introduced in the seventh-grade course. Reproductive health and the influence on the social issues, and decision making and goal setting will be explored and analyzed. These social issues include, sexual harassment, sexual violence, reasons to postpone intercourse, STD risk, parenting, and contraceptives. Student will also refine and practice their goal setting and refusal skills.

Personal Health

Decision making: Students will utilize the decision-making model and analyze how it could be used in many health-related situations throughout their lives.

Stress: Students will discover how stress affects their individual health and well-being. They will evaluate a variety of stress management techniques and decide which work best for them.

Communication: Student will learn techniques to effectively communicate with others including conflict resolutions skills.

Safety: Students will discuss and develop ways of dealing with the safety issues that often affect individuals their age and practice self-management skills.

Resources:

Brainpop.com

Healthteacher.com

Rutgers University (Sexetc.org/Answer)

Course Name: 7th & 8th Grade Visual Arts

Course Description:

The Williamsport Area Middle School's Seventh and Eighth Grade Visual Arts class is a sampling of many art mediums. Student will work in Clay, Colored Pencils, Graphite, Print Making, Painting (Watercolors and Acrylic) and Sculpture. For each project students will learn Production, Aesthetics, History and Criticism (as aligned with Discipline-Based Art Education), surrounding a particular project. All of the projects include minimum objectives to allow for student creativity and differing end products amongst students. At the conclusion of each project students will complete a self-evaluation rubric reflecting on their artistic choices.

Instructional Resources:

- Teacher-made Power Points & Worksheets with class discussion
- Example Projects
- Artlex
- Art Since 1950 Text Book

Course Unit Topics

- Three-Dimensional Art : Earthware, Sculpture
- Two-Dimensional : Paint (Watercolors & Acrylic), Graphite, Colored Pencils.
- Graphic Design: Photography, Photoshop, Animation

Course Name: General Music

Course Description:

The seventh and eighth grade music curriculum builds off of the skills students learned in Intermediate school. Students will be learning to play instruments alone and with others, as well as compose, improvise, and analyze music. Instruments used will include keyboards, guitars, xylophones, drums, and other percussion instruments.

Instructional Resources:

Materials created by the Williamsport Area School District Music Department
Garage Band

Course Unit Topics :

Guitar

Drumming

Piano improvisation

Music composition

Theme and Variation

Electronic music (composition using Garage Band)

7th Grade Orchestra

Course Description: The purpose of the 7th Grade Orchestra is to develop and begin to refine the core individual and ensemble skills that will allow students to perform the finest in young

orchestra literature. This is an important year of musical growth and activity to help students transition from the intermediate school to the middle school ensemble. Opportunities to participate in select ensembles will be available through an audition process. Attendance at performances is required. 7th grade students wishing to participate in both instrumental and choral ensembles will be scheduled into Performing Music. The students will be "shared" on a rotating basis by both the choral and instrumental teachers.

Instructional Resources: Williamsport Area School District Middle School Orchestra board approved curriculum.

Course Unit Topics: The students will be working on Pitch, Rhythm, Musicality, Content Knowledge and Music Vocabulary throughout the year. They will also have two to three public performances per year.

8th Grade Orchestra

Course Description: The purpose of the 8th Grade Orchestra is to continue to develop and refine core and extended individual and ensemble skills that will allow students to perform the finest in young orchestra literature. This is an important year of musical growth and activity to help prepare students for the transition from the middle school to the high school ensembles. Opportunities to participate in select ensembles will be available through an audition process. Attendance at performances is required. 8th grade students wishing to participate in both instrumental and choral ensembles will be scheduled into Performing Music. The students will be "shared" on a rotating basis by both the choral and instrumental teachers.

Instructional Resources: Williamsport Area School District Middle School Orchestra board approved curriculum.

Course Unit Topics: The students will be working on Pitch, Rhythm, Musicality, Content Knowledge and Music Vocabulary throughout the year. They will also have two to three public performances per year.

Course Name: Band

Course Description:

7th Grade Band: The purpose of the 7th Grade Band is to develop and begin to refine the core individual and ensemble skills that will allow students to perform the finest in young band literature. This is an important year of musical growth and activity to help students transition from the intermediate school to the middle school ensemble. Opportunities to participate in select ensembles will be available to all students. Attendance at performances is required. 7th grade students wishing to participate in both instrumental and choral ensembles will be scheduled into Performing Music. The students will be "shared" on a rotating basis by both the choral and instrumental teachers.

8th Grade Band: The purpose of the 8th Grade Band is to continue to develop and refine core and extended individual and ensemble skills that will allow students to perform the finest in young band literature. This is an important year of musical growth and activity to help prepare students for the transition from the middle school to the high school ensembles. Opportunities to participate in select ensembles will be available to all students. Attendance at performances is required. 8th grade students wishing to participate in both instrumental and choral ensembles will be scheduled into Performing Music. The students will be "shared" on a rotating basis by both the choral and instrumental teachers.

Jazz Band: The goals of the Jazz Band are to offer students an opportunity to be exposed to all styles of jazz, experience the fundamental concepts of improvisation, practice and perform challenging music, and to provide a service to the school and community by performing at activities and events in and out of school.

Instructional Resources: Williamsport Area School District, Middle School Band, board approved curriculum.

Course Unit Topics: Student's will be working on tone quality, articulation, rhythm, musicality, content knowledge and music vocabulary. The student's will also participate in a number of public performances throughout the year.

Course Name: Choir- Grades 7, 8

This course is designed to build upon the skills learned in elementary general music and choir. Students from the 7th and 8th grade are selected for this group based on their ability to sing in a large group setting with accuracy of pitch, rhythm and intonation. Students will learn repertoire from different time periods and in multiple languages, as well as learn to sight sing. Acceptance into the choir is based upon a recommendation from any Williamsport Area School District choral specialist, or by audition. Rehearsals for this curricular ensemble meet during the school day. Attendance at one winter and one spring evening concert is required as part of the grading for this course.

Course Name: Chamber Choir- Grades 7,8

Chamber Choir is a select auditioned group available to both 7th and 8th graders. Rehearsals for this extra-curricular group will occur outside the regularly scheduled day. The director will determine the size of the group. Singers will be chosen based on vocal tone quality, sight singing ability, rhythmic accuracy and vocal blend. The group will sing different, more challenging repertoire than the curricular choir and may be offered additional performance opportunities. Acceptance is at the discretion of the director.

Course Name: School Musical- Grades 7,8

Any member of the 7th or 8th grade choir is invited and encouraged to audition for the school musical. Rehearsals will occur outside of the regular school day, and every attempt to avoid conflict with spring sports will be made. Interested students will be required to audition with a song and a reading. Depending on the chosen show, a dance audition may also be required. All materials will be provided to the students prior to the audition. The director will determine cast size as well the assignment of roles.

Course Name: Algebra 1

Course Description: Algebra I is the study of the basic structure of algebra from real numbers through functions and relations. The major topics of this first-year course are operations with real numbers and variables, the structure of our number system, the solution and graphing of equations and inequalities, systems of linear equations, operations with polynomials, and the concepts of functions and relations, and data analysis.

Instructional Resources: Study Island, Khan Academy

Course Unit Topics

Units:

- 1- Operations with Real Numbers and Expressions
- 2- Linear Equations
- 3- Coordinate Geometry
- 4- Geometric Relationships
- 5- Systems of Equations
- 6- Functions
- 7- Data Analysis
- 8- Linear Inequalities

Course Name: Algebra 2

Course Description: This course is designed to build on algebraic and geometric concepts. It develops advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers, quadratics, and concepts and includes the study of trigonometric functions.

Instructional Resources: Larson Algebra 2 textbook, various online resources

Course Unit Topics: Equations and Inequalities
Linear Equations and Functions
Linear Systems and Matrices
Quadratic Functions and Factoring
Polynomials and Polynomial Functions
Rational Exponents and Radical Functions

Exponential and Logarithmic Functions
Rational Functions
Counting Methods and Probability

Course Name: Pre-Algebra

Course Description: This course is intended to prepare students for entry into Algebra 1. Students will further develop their understanding of number theory and apply these principles to an increased focus on algebraic concepts and functions. In Geometry, students will expand their knowledge of three-dimensional shapes to include geometric transformations. Students will learn to analyze and interpret bivariate data to identify patterns. Rigorous application of the Standards of Mathematical Practices to include perseverance, selection of appropriate tools and the application of reasoning and logic in problem solving will be a keystone of the program. This curriculum is aligned to the PA Core Grade 8 state standards.

Instructional Resources: Go Math Textbook and Online Resource, Various online resources, SAS

Course Unit Topics : Real Numbers
Exponents and Scientific Notation
Proportional Relationships
Nonproportional Relationships
Writing Linear Equations
Functions
Solving Linear Equations
Solving Systems of Linear Equations
Transformations and Congruence
Transformations and Similarity
The Pythagorean Theorem
Volume
Scatter Plots
Two-Way Tables

Course Name: Math 7/Math 7 Enriched

Course Description: During this course students will learn a variety of mathematical concepts aligned to the PA Core standards. Students will engage in solving multi-step word problems utilizing varied strategies and methods which increases understanding of mathematical practices and processes. The year begins with rational number operations and ends with linear relationships increasing algebraic aptitude. This course serves as a foundation for algebraic classes.

Instructional Resources: Go Math Textbook, Khan Academy, Study Island, Interactive Notebooks, and various on-line materials.

Course Unit Topics:

- 1) The Number System
- 2) Proportional Relationships
- 3) Expressions, Equations and Inequalities
- 4) Geometry
- 5) Probability and Statistics
- 6) Linear Relationships

Course Name: 8th Grade Integrated Science

Course Description:

8th grade Integrated Science provides introduction and preparation for high school and collegiate areas of study. Course content matches the PDE Science grade 8 Assessment Anchors and Eligible Content.

Instructional Resources:

Focuscurriculum.com
Quizlet.com
search: KFCscience
Study Island
Teacher-created resources

Course Unit Topics

Applied sciences:
Crime Scene Investigation
Scientific Method
Chemistry

Physics:
Energy
Forces

Robotics & Automation

Course Name: 7th Grade Science

Course Description:

7th grade science will be investigating the following areas of science. Nature of Science and Design and Modeling (STEM). Nature of science is the unifying concepts and processes in science along with seeing science as inquiry. Engaging students in scientific inquiry helps students develop

- Understanding of scientific concepts.
- An appreciation of "how we know" what we know in science.

- Understanding of the nature of science.
- Skills necessary to become independent inquirers about the natural world.
- The dispositions to use the skills, abilities, and attitudes associated with science.

STEM Design and Modeling will function as an introduction to the design process and various design tools used in the design and engineering process. During this part of the course, students will constantly be collaborating in teams to work through problems as engineers and designers would. They will complete design challenges while simultaneously being exposed to the tools and software that they will need to complete them.

Instructional Resources:

Amassed and adapted curriculum from a wide variety of sources, including journals, lab books, Web sites, packaged curricula, and other teachers. These sources have been mapped to the standards of our school and state.

Course Unit Topics :

Nature of Science 1

Observations/Inferences/Predictions/Hypotheses/Theories/Laws

Nature of Science 2

Tools and measurements

Nature of Science 3

Scientific method and experimental design

Nature of Science 4

Patterns/Systems/Technology

Design & Modeling

They will learn about engineering and the STEM courses (science, technology, engineering, and math). Metric and customary systems of measurement will be studied, and students will use sketching and dimensioning techniques. Students will complete all steps of the Design Process

Course Name: 8th Grade English Language Arts

Course Description: In eighth grade, students continue to strengthen the development of reading, writing, and public speaking skills not just in language arts, but across the content areas. Students will engage in reading, writing, speaking and listening activities that will enable them to meet the rigorous needs and demands of the PA Common Core State Standards.

Instructional Resources:

The objective of English Language Arts class focuses on reading strategies and the writing process. Reading will be a combination of fiction, non-fiction, and poetry to achieve the targeted objectives of the PA State Standards. The overall goal is awareness to the purpose of reading and

the strategies good readers develop and practice. The writing component will be a combination of narrative, argumentative, explanatory, as well as answering text dependent analysis.

Course Unit Topics:

Exemplar Texts

All our students will be expected to read exemplar texts at or above grade level. Exemplar texts are rigorous texts that have been identified through The National Common Core Standards.

Young Adult Literature

Your child will be exploring new and exciting young adult literature this year. You will be entering a new phase in your child's literary life. You will notice that the books are filled with complex plots and exciting characters.

Writing

Students will be expected to write in different modes of writing. The focus of the writing will include the following domains: focus, content, organization, style and conventions.

In addition, students will be working throughout the year on text dependent analysis (TDA); where they will draw evidence from literary or informational texts to support analysis, reflection, and/or research.

Snapshot of Year

MP#1 Academic	Enriched
Novel	Novel
Copper Sun	Copper Sun
Book Clubs	The Rifle Book Clubs
Writing	Writing
Narrative	Narrative
Informative	Informative

MP#2 Academic	Enriched
Novel	Novel
To Kill A Mockingbird	The House of the Scorpion
Book Clubs	To Kill a Mockingbird
Writing	Writing
Argumentative	Argumentative

MP#3 Academic	Enriched
Novel	Novel
Anne Frank	Anne Frank
Book Clubs	Book Clubs
Writing	Writing
Informative	Informative

MP#4 Academic	Enriched
Novel	Novel
Romeo & Juliet	Romeo & Juliet
Writing	Writing
Informative	Informative

Course Name: 7th Grade Social Studies

Course Name: World History I – Ancient Civilizations

Course Description:

This course focuses on early world history and geography with a measured focus on content literacy; including reading, writing, listening, and speaking. Students will explore world history with an emphasis on historical thinking. Students will investigate human history from Early Man through Early Exploration, examining the social, political, economic, and religious aspects. By engaging in historical and geographic thinking, students will learn how to ask skillful questions and be able to analyze global patterns of continuity and change over time.

Instructional Resources:

Our World. National Geographic Society, 2006.

Novosad, Charles. *The Nystrom Desk Atlas*. Nystrom, 1998.

Blattner, Don, et al. *World Civilizations and Cultures*. Mark Twain Media Pub., 2012.

Other educational research-based, age-appropriate reading/writing instructional tools

Course Unit Topics :

- I. Foundations of History
- II. Basic Geography Skills
- III. World's First Cultures
- IV. Early Civilizations
 - a. Fertile Crescent
 - b. Nile River (Egypt)
 - c. Indus River (India)
 - d. Huang He (China)
- V. Ancient Greece
- VI. Roman Empire
- VII. Arab World

Course Name: Seventh Grade English Language Arts

Course Description:

Seventh grade English Language Arts is the study of skills in reading, writing, speaking, and listening. This course is intended to engage students in reading and analysis of all genres of literature (short story, novel, poetry, nonfiction, informational, etc.). By reading selected literary works, students deepen their understanding and enhance their appreciation of literature. Students will develop critical reading strategies that they will be required to apply during independent and classroom study. Students will also use the writing process to communicate effectively and efficiently. Students will enhance their development of vocabulary, grammar, and writing skills from a variety of sources to enable them to convey ideas, thoughts and feelings.

Instructional Resources:

Holt McDougal Literature textbook, a variety of short stories, novels, poems, dramas and non-fiction works. Additional programs include Word Generation and Read Naturally, as well as Accelerated Reader.

Course Unit Topics

PSSA standards aligned skill acquisition through literature, non-fiction, language acquisition, writing and text-dependent analysis.