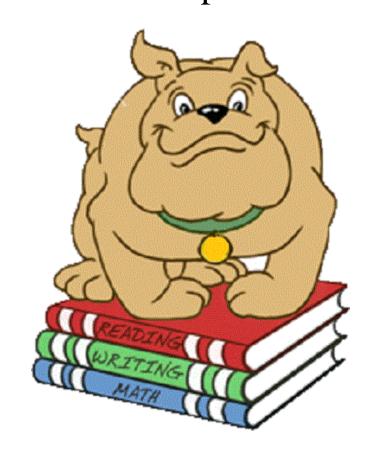
Tidioute Community Charter School

2017-2018 Middle School/High School Course Descriptions Guide



Graduation Requirements Grades 9-12

Curriculum Area	Required	Credits
	Grade	Needed
Art	9	1.00
Language/Music/Art	9-12	1.00
Philosophy	11-12	1.00
Computer	9	1.00
Writing Skills	10	.50
Career & Financial Planning	11 or 12	.50
Electives	9-12	5.00
English	9-12	4.00
Health	11	.50
Math	9-12	4.00
Mentorship	11 or 12	.50
Physical Education	9-12	1.00
Science	9-12	4.00
Social Studies	9-12	4.00
Total		28.00

A 35 hour mentorship is required for graduation. The Senior/career planning project is included as a requirement in English 12. *Students will be responsible for the senior project even if they are not enrolled in English 12.

History College Sequence

9th Grade

World History/ Civilization

10th Grade

Geography

11th Grade

U.S. History

*AP U.S. History

*College Course

12th Grade

U.S. Government/Economics

*A.P. Govt. and Politics

*College Course

History Career Sequence

9th Grade

World History/ Civilization

10th Grade

Geography

11th Grade

U.S. History

12th Grade

U.S. Government/Economics

Math College Sequence

8th Grade

Algebra 1

9th Grade

Advanced Algebra

10th Grade

Geometry

Geometry & *Trig.

11th Grade

*Trigonometry

Pre- Calculus or *College or *Statistics

12th Grade

*Pre Calculus

*College or Statistics

Math Career Sequence

8th Grade

Pre- Algebra

9th Grade

Algebra I

Algebra IC

10th Grade

Algebra II

Algebra I

11th Grade

Geometry

General Math or Geometry or Algebra II

12th Grade

*Trigonometry

Life Math or General Math or Geometry or Algebra II

English College Sequence

9th Grade

English 9

10th Grade

English 10

11th Grade

English 11

*Advanced Placement Literature/*College Course

12th Grade

English 12

*College Course

English Career Sequence

9th Grade

English 9

10th Grade

English 10

11th Grade

English 11

12th Grade

English 12

Science College Sequence

9th Grade

Biology

10th Grade

Chemistry

*Anatomy & Physiology

11th Grade

*Physics

*Organic Chemistry

*Anatomy & Physiology

12th Grade

*Advanced Biology

*Organic Chemistry

*Anatomy & Physiology

Science Career Sequence

9th Grade

Applied Biology

10th Grade

Biology or Chemistry

11th Grade

Physical Science, Earth Science, Forestry, Wildlife

12th Grade

Physical Science, Earth Science, Forestry, Wildlife

** Electives should include two consecutive years of a World Language course for any student considering post-secondary education.

In order for a student to graduate, the student must demonstrate proficiency in all required state assessments.

ART

Art Foundations II: Grade 7/R

9 Week Class

In this course, students will expand their knowledge gained from sixth grade Art by exploring new and different techniques in pottery, drawing, painting, sculpture, weaving, glazing, and sponging. Keeping a sketchbook will be an integral part of the course for practice and reference. The students will also create original work in at least one genre, create a genre paper that shows the use of analysts, interpretation, and synthesis, and continue to explore the world of art through a historical and systematic exploration of art (forms, genres, styles, philosophies, etc.).

Art Foundations III: Grade 8/R

9 Week Class

Students will study and produce artwork using the elements and principles of design and composition. Students will explore a variety of media for both two-dimensional and three-dimensional assignments. The processes of drawing, painting, printmaking, and sculpture will all be addressed. Art history, art criticism, and aesthetics will also be introduced and discussed throughout the course. The students will also create a theme project that shows the utilization of many mediums and techniques, complete a research project on an artist and their works, and participate in an exhibit.

Art Fundamentals I/II: Grade 9/R

Year Long/1 Credit

This class is a year-long course and is treated basically as an art history class with an illustrated study of architecture, painting, sculpture, and applied arts from prehistoric times through the Italian Renaissance. The students will also engage in the creation, production, and exhibition of a variety of unique works reflecting the integration of technology and using many mediums such as ceramics, painting, textiles, mosaics, etc. Students learn common denominators in themes in the arts, visual communication, the value of historical masterpieces, and the world of technology

in the arts. This class is expeditionary in nature and students leave this class with a well-rounded knowledge of the arts.

Art I: Grades 10-12/E Semester/.50 Credit

This course is intended for highly motivated students committed to serious study in art. Students will pursue work in a medium of their choice, be required to keep a sketchbook, prepare work for shows and competitions, and learn major concepts of art history. Information about art careers and college level art study will be included in this course. Emphasis will be placed on individual development, originality, problem-solving and involvement in the process.

Art II: Grades 10-12/E Semester/.50 Credit

This course is intended for highly motivated students continuing their commitment to serious study in art. Students will pursue work in a medium of their choice, be required to keep a sketchbook, prepare work for shows and competitions, and learn major concepts of art history. Information about art careers and college level art study will be included in this course. Emphasis will be placed on individual development, originality, problem-solving and involvement in the process. Prerequisites: Art I.

Drawing I/II: Grades 10-12/E

Semester/.50 Credit

The first portion of this class offers an introduction to basic principles of composition, proportion and perspective. It also places an emphasis on objective representation, methods and materials. Students will be required to keep a sketchbook. The second part of this class offers a further investigation of media and imagery. It also places an emphasis on creative use of, and experimentation with, drawing media. Students will also be required to keep a sketchbook.

Art Career Study: Grades 11-12/E

Semester/.50 Credit

This course allows any high school student the opportunity to work with the elementary classes alongside the art teacher. Through this experience, the mentor becomes very familiar with the elementary students while aiding them in their art projects, helping students clean their hands, and learning the personalities of the students through behaviors in class. The mentoring student must have adequate knowledge and interest in art making in order to properly help the multiaged art classes. Mentorship students will be expected to help prep art examples for the students and assist in the hanging and tearing down of artwork on display. During the mentoring process, the student keeps a record of daily events in a journal to reflect and respond with the teacher. As the students work together, they build rapport and a sense of trust with each other, and the outcome strengthens our school and leaves great reward for both mentor and elementary students.

Metals I & II: Grades 10-12/E

YearLong/1 Credit

This is a semester course intended for highly motivated students interested in the advanced art of metalworking. Students are introduced to fabricating metal on a small scale and the use of metal working tools. Through safety, students will saw, solder, and file their own unique projects based on a rubric for design. We learn the basics of metalworking and demonstrate skills. Visual communication is shown through class critiques where students display and discuss their processes and work. There will be a limit placed on enrollment.

CAREER PLANNING

Career and Financial Planning: Grade 11 or 12/R

Semester/.50 Credit

This class provides students the skills needed to make proper decisions for future careers and financial choices. Students will be exposed to many career opportunities so they can match abilities and skills with occupations. Students will also learn how to complete job applications and create resumes, and prepare for employment interviews. Finance topics include budgeting, banking, insurance, credit, investments, savings, purchasing insurance, borrowing, tax planning, selecting financial advisors, making wills, accumulating wealth, and current developments in the area of financial services. Students will prepare their own financial plan in this course.

Career Exploration: Grades 10-12/E

Semester/.50 Credit

This is a course that allows students through activity-centered and traditional lessons to utilize technology, develop beginning skills, and explore various career paths and individual careers. The course provides an opportunity for students to research information regarding additional courses and training related to each student's career field of interest. Students will investigate a wide range of career choices. They will understand the relevance of required courses and select elective courses more wisely. The student learning activities provide hands-on, real-world applications. Students will assess individual interests and abilities and help each student understand his or her future role as a worker and become aware of those skills necessary to be a contributing member of society.

Mentorship: Grades 11 or 12/R

Semester/.50 Credit

Students will spend 35 hours mentoring in a workplace, or several workplaces, of their choice to gain a realization of their own personal interests and assess the potential to develop a more definitive plan for future endeavors. Additionally, students will work towards understanding a successful transition from high school to the workplace or educational facility, and become prepared to be a contributing member of society. Students will complete an essay of their mentorship in the workplace which will include how the mentorship will help prepare for future personal or professional goals, research job duties, average work day information, required education/training/licensure, average salary/pay, and worksite location options. An in-class oral presentation may be required.

BUSINESS INFORMATION TECHNOLOGY

Computer Applications I: Grade 7/R

9 Week Class

This is a nine week course that focuses on word processing skills by assuming the role of an editor and advanced presentation skills. Students first begin by learning essential word processing skills that allow them to revise collections and stories written for children. Students edit the cover, format a poem, and add interest to a story by inserting clipart and formatting to illustrate the story. Next students create a comic strip using WordArt and shapes. Then they master the cut, copy and paste commands by editing another story. Finally, students combine all of their knowledge to complete the final editing of the children's book to print. In the second project, students focus on presentation skills by creating a marketing tool for a novel. In the style of a movie trailer, an animated preview of the book is created to entice people to read using

Microsoft PowerPoint. This includes an introduction to the characters, setting and plot. Text, graphics, animation, transitions, and sound effects are combined to produce a dazzling visual display of the novel.

Computer Applications II: Grade 8/R

9 Week Class

This is a nine week course that focuses on working with Microsoft Office by becoming marketing executives for an amusement park. Students complete projects that will review Microsoft PowerPoint and Microsoft Word skills and introduce Microsoft Excel, Microsoft Publisher and Microsoft Access. As marketing executives for an amusement park, students conduct internet research and review basic search strategies, conduct a survey, organize data and chart results. Students create a video advertisement, invitations and generate a calendar. Finally, students examine amusement park data and add records to a database. Students also use a query to report height restrictions on rides. Students showcase their work as a marketing executive as a culminating project.

Introduction to Computer Science: Grades 9/R

Year Long/ 1 Credit

This course will introduce students to the range of the field of computer science through an exploration of engaging and accessible topics. Part of the year will be spent reinforcing past skills and working on in-depth projects involving Microsoft Office, focusing on advanced Spreadsheet Application and Database Operations and incorporating Computer Science concepts. The remainder of the course is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. This class includes an introduction to structured programming/Photoshop. The concept of Cyber-Bullying will be discussed. This is a course that focuses on educating and empowering students with the skill set to leverage technology safely and effectively. Students engage in real word simulations by completing 7 modules that cover key concepts such as digital footprint, security, privacy, cyberbullying and digital time management. Up to ten hands-on activities are included in each module that builds skills ranging from picking out a computer to choosing credible sources while doing online research. Students will look at social networking, phishing, internet safety, computer ethics, plagiarism and validity of websites through lesson and activities. This course has real world simulations that allow students to apply what they have learned. Students will focus the second half of the year on computer based Keystone material.

Advanced Media Production: Grades 11-12/E

Semester/.50 Credit

Advanced Media Production is a semester long class offered to 11th and 12th graders. This course is designed to give students a hands-on experience in current technology, and for/or those interested in careers in Digital media and/or Design Arts. Students will primarily be using Final Cut Pro X and Photo Shop (both industry standards) to create visual, oral, and written projects. They will also be using the internet, digital cameras, and sound files. Students will work collaboratively with other classes to develop multimedia productions and documentaries of current TCCS Expeditionary projects. Due to the rigors of this course, seating is extremely limited.

Students will be given the challenge of documenting and presenting Expeditionary projects at TCCS. They will work not only with the course instructor, but also with various faculty members, classes, and community members to create real world projects. Students will work collaboratively; however, they will be responsible for individual assignments as well. They should feel a sense of accomplishment and pride in their work. Completed projects will be

utilized by TCCS, various classrooms, area business, community members, and/or in technology contests. Students will understand the need for and use of Copyright Laws and demonstrate proper computer ethics and safety. Assessments will include written examinations, project evaluations, quizzes, performance evaluation (ie .Collaboratively working within group, school, and community), and class work.

Prerequisite Courses: Due to the advanced use of technology and language the following course must be completed and /or proficient knowledge obtained before admittance into Advanced Media Production. Computer (basic keyboarding etc, computer (advanced) file transfer, maintaining data, etc., English (both written expression and oral). Photoshop, Graphic Design.

3-D Computer Animations: Grades 9-12/E

Semester/.50 Credit

This course is an introduction to computer programming using the Alice 3 programming environment and the Java programming language. Students will learn the fundamentals of object-oriented programming. The focus is on developing high quality, working software that solves real problems. The course is designed for students with no previous programming experience. Is a course that allows students to become animators. Students will learn how to use FlashCS5. Students will animate a story to learn how to animate using static, frame by frame, motion tweening, shape tweening, Bone Tools, and motion paths. After learning the basics, students will apply their knowledge and; produce their own Flash movie.

Business Communications and Ethics: Grades 10-12/E

Semester/.50 Credit

Business Communication affects all aspects of our lives. This introductory course will teach students to communicate in a clear, courteous, concise, complete and correct manner on both the personal and professional levels. Competency will be developed in oral, written, interpersonal, technological, and employment communication. Listening skills will be incorporated throughout the semester. The overriding goal is to provide students with a solid communication base, so they are able to communicate effectively. This course will also address the legal, moral, and societal issues of ethical conduct in the business environment. Actual case studies are used to illustrate appropriate relationships among employers, employees, customers, stockholders, and other business stakeholders. Topics include: codes of ethics, laws and regulations related to ethics, conflict of Interest, and moral philosophies associated with ethical conduct.

Adobe Photoshop I/II: Grades 10-12/E

Semester/.50 Credit

Adobe Photoshop I provides an introduction to working with images and taking photographs. Students will learn how to take high quality photos and will practice taking photos using the techniques taught. Students will then use the selection tools and the basic image manipulation tools to create a final project. The Adobe Photoshop II section of the course consists of seven sessions including an ending project where students create a scrapbook of their images throughout the course. The scrapbook will then be transformed into a Web Photo Gallery, Contact Sheet, or PDF Presentation. Adobe Photoshop II portion of the class allows students who passed the introduction class to learn advance features and sharpen the skills they learned in the introductory course like how to work with multiple layers, layer masks, blend modes and other options. Other topics include how to save time by creating tool presets and using Layer Comps to create multiple versions of a project in a single file. Students can learn how to control the color and lighting and perform digital makeovers on people in their images. Students can learn how to convert layers into a Smart Object and how to apply the Puppet Warp feature to images layers and masks to warp and stretch any object to create new designs. Students are free to create the images they choose to add to a final project showcasing their best work.

Computer Game Design/Grades 9-12/E

Semester/.50 Credit

This is a one semester course that will cover the basics of Computer programming. The student will be introduced to three programs that enable the students to design simple video game. The students will be introduced to Robot Basic, Scratch, and Game Maker Studio. Within the applications given, the students will be introduced to different computer programming languages. The students will learn to control a simulated robot, explore the geometry of computer graphics, and use animation as well as write basic video games.

Desktop Publishing I: Grades 10-12/E

Semester/.50 Credit

This course provides skill development in the electronic procedures of producing and editing publications. Students will create, format, illustrate, design, edit/revise, and print publications. Improved productivity of electronically produced newsletters, flyers, brochures, reports, advertising materials, and other publications is emphasized. Proofreading, document composition, and communication competencies are also included.

Developing Web Pages: Grades 10-12/E

Semester/.50 Credit

This course is an introductory course that teaches the foundational understanding of basic coding to learn basic web design skills. Introduction to Web Design teaches students the fundamentals of writing valid HTML and CSS code to create their own personal web pages. The course begins with the history of XHTML and the basic elements of a web page. The curriculum adheres closely to the International Society for Technology in Education Standards for Computer Science Educators (ISTE-CSE). The course teaches students how to create websites entirely by hand-coding valid XHTML 1.0 and CSS 2.1.

FAMILY AND CONSUMER SCIENCE

Family and Consumer Science: Grade 8/R

Semester Class

Family and Consumer Science is designed to provide students with basic information and skills needed to function effectively within the family and within a changing, complex society. FCCLA, family and individual healthy relationships, housing, clothing and textiles, child development, nutrition and meal planning, preparation, and service, home management, money management and consumer education, and workplace and career skills are topics covered in Family and Consumer Science. This course is a lab course in which students are required to prepare food in the food and nutrition unit.

Family and Consumer Science: Grades 9 - 12/E

Semester/.50Credit

Family and Consumer Science is designed to provide students with basic information and skills needed to function effectively within the family within a changing, complex society. FCCLA, family and individual health, relationships, housing, clothing and textiles, child development, nutrition and meal planning, preparation, and service, home management, money management and consumer education, and workplace and career skills are topics covered in Family and Consumer Science. This course is a lab course in which students are required to prepare food in the food and nutrition unit.

Child Development: Grade 9-12/E

Semester/.50 Credit

Focuses on the skills needed to guide the physical, intellectual, emotional and social development of children. Topics of study include pregnancy and prenatal development, birth and the newborn, types of growth and development, stages of development, rights and responsibilities of parents and children, needs of children, factors influencing the behavior of children, selection of child-care services, Health and safety of children, children with special needs, coping with crises, technology, and careers relates to child development.

Food and Nutrition: Grade 9-12/E

Semester/.50 Credit

Is a course that focus on the development of skill needed to select, prepare, and serve food that meets nutritional needs of individuals and families. Units covered in his course include nutrition, wright control in the food consumer, technology, microwave cookery, kitchen, organization and equipment, safety and sanitation, menu planning, serving and eating food, food preparation labs, eating away from home, and job and careers in the field of food and nutrition. Food preparation labs are an integral party of this course.

Marriage and the Family: Grade 11-12/E

Semester/.50 Credit

Is a course that studies the knowledge, skills, attitudes and behaviors all students need to participate in positive, caring, and respectful relationships in the family and with individuals at school. Topics include components of healthy relationships, roles and relationships; functions and expectations of various relationships; ethics in relationships; factors that impact relationships (e.g., power, conflicting interests, peer pressure, life events); establishing and maintaining relationships; building self-esteem and self-image through healthy relationships; communications styles; techniques for effective communication, leadership and teamwork; individual and group goal setting and decision making; preventing and managing stress and conflict; addressing violence and abuse; and related resources, services and agencies. We will also address personal and physical development, managing financial resources, and housing decisions.

Parenting: Grade 9-12/E

Semester/.50 Credit

Is a course designed to assist student in developing an understanding of the parenting process and of parenting skills. Competencies developed in this course will be useful to anyone who lives with, associates with, or works with children. The parenthood decision, costs of having and raising a child, child growth and development, providing nurturance, guidance techniques prevention of child abuse and neglect, selection of child care services, and jobs and careers related to parenting are topics studied intis course.

FOREIGN LANGUAGE

Spanish 1: Grades 7-12/E

Year Long/1 Credit

Beginning students study language that can be used in everyday conversation. The course is taught using a communicative approach. Students begin to communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students communicate about such topics as greetings, telling time, school subjects, foods, family and friends, and leisure activities. This class is conducted in Spanish as much as possible and an emphasis is placed on becoming a competent communicator. Students expand their understanding of culture by studying about the countries of the Hispanic world. Vocabulary will focus on school, shopping, family, clothes, weather,

simple foods found in restaurants and markets, holidays, and tourist activities. Credits are for grades 9-12 only.

Spanish 2: Grades 8-12/E

Year Long /1 Credit

Students will build on the basics learned in Spanish 1. The course is taught using a communicative approach. Students develop their communication in the target through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students continue to learn about Hispanic countries through written materials, movies, speakers, group projects, computer activities, music, and games. Success in the course depends greatly on a student's willingness to participate and use the language in class. Credits are for grades 9-12 only. Spanish I is a prerequisite.

Spanish 3: Grades 9-12/E

Year Long/1 Credit

Students deepen their communication in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. In addition to using the text, students use technology, watch films in the target language, give oral presentations and skits, read short stories, and write original stories in efforts to increase their knowledge and fluency in Spanish. Cultural topics focus on the customs and traditions of the people of the Spanish-speaking world. Spanish I and II are prerequisites. *Weighted class*.

Spanish 4: Grades 9-12/E

Year Long/1 Credit

The class is conducted in Spanish. Students communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening to explore cultural themes. In addition to using the text, students use technology, watch films in the target language, give oral presentations and skits, read short stories, and write original stories in efforts to increase their knowledge and fluency in Spanish. Cultural topics focus on the customs and traditions of the people of the Spanish-speaking world. Spanish I, II, and III are prerequisites. *Weighted class*.

HEALTH

Health 7/R Semester Class

This class will advance what was previously learned in the health curriculum K-6 and allow the students to understand the interdependence of physical, mental, social, intellectual, occupational and philosophical health, understand the benefits of establishing a pattern of behavior which will result in achieving habits conducive to lifelong fitness, and understand the skills required to develop and maintain healthy and responsible relationships during both adolescence and adulthood. They will also understand the benefits of a chemical free lifestyle, be aware of how one's drug use can impact another's health, and learn healthy ways to respond to problems associated with chemical use, understand that a healthy and responsible lifestyle aids in prevention of communicable and non-communicable diseases, recognize and understand factors that impact growth and development, as well as demonstrating the impact of nutritional choices on health. They will also understand that a variety of factors influence one's mental health, understand the interdependence of body systems and organs, and learn approved procedures for emergency care. In addition to this, the students will also understand the necessity for promoting a safe environment, the benefits of physical fitness, and the necessity of making wise nutritional choices.

Health: Grade 11 R

Semester/.50 Credit

This survey course is a compilation of ten major areas focusing on the total health and wellness of the individual and his/her community. These ten areas include: promoting a healthy lifestyle, mental health, community health, nutrition, occupational health, promoting a chemical-free lifestyle, adult CPR, prevention of lifestyle diseases, body systems and their development, functions, relationships, and healthy sexuality and interpersonal relationships.

LANGUAGE ARTS

English 7: Grade 7/R

Year Long Class

Collaborative learning activities enable students to work cooperatively and authentically. This course reinforces basic computer keyboarding skills and introduces word processing as a means of enhancing the writing process. Keyboarding and word processing skills provide students with effective tools for writing and revising. Analysis and writing of short stories, biographies, essays, and poems develop critical thinking, creative thinking, independent inquiry, and affective skills. Literary models cover a variety of themes from the serious to the light-hearted. The course includes an independent research project, which follows MLA style guidelines.

Writing 7: Grade 7/R

Semester Class

This class continues to emphasize the writing process of prewriting, drafting, revising, proofreading, and publishing. Paragraph writing expands into multi-paragraph essays as grammar, usage, and mechanics improve through informative, persuasive, and narrative writing. The study of reading passages from literature and/or content-area materials integrates each writing unit. Vocabulary and spelling skills expand and improve through focused study and integrated use (an emphasis shall be placed on the influence of Latin and Greek in the development of English- roots, prefixes, suffixes, etc.). Oral presentations assist in the development of communication skills.

Reading 7: Grade 7/ (Teacher Recommended)

Semester Class

This course will assist students in their basic reading skills. Techniques for vocabulary recognition and reading skills development will be emphasized. Students are experiencing some difficulty in ready comprehension would benefit from this class.

English 8: Grade 8/R

Year Long Class

Collaborative learning activities enable students to work authentically. This eighth grade curriculum also includes an in-depth study of selected stories, paragraph, essay, letter writing, and a research project. The course promotes higher-level skills (analysis, synthesis, and evaluation), independent inquiry, creative thinking to augment basic vocabulary usage, and mechanics. Reading and writing poetry, creation of speeches, and studies in logic aide in the development of communication skills. Computer word processing enhances the writing process and becomes a useful tool in writing development.

Writing 8: Grade 8/R

Semester Class

This class strengthens students' skills in following the writing process of prewriting, drafting, revising, proofreading, and publishing. Three types of writing (informative, persuasive, and narrative) in multi-paragraph formats expand grammar, usage, and mechanics skills. Literacy excerpts and reading passages from content areas serve as models of good writing and as sources of discussion, study, and writing topics, library research skills, following the MLA research. An emphasis on developing spelling and vocabulary skill helps students increase

sophistication of sentence structure. Oral presentations assist in the development of communication skills.

Reading 8: Grade 8(Teacher recommended)

Semester Class

This course will allow students to brush up on "foundational skills" to promote future success with reading and writing across the curriculum.

English 9: Grade 9/R

Year Long/1 Credit

This yearlong, integrated, ninth grade course focuses on developmentally appropriate skills for students to become discerning readers, insightful writers, effective communicators, and perceptive listeners. Students examine a variety of literary genres, including short story, poetry, drama, non-fiction and novel. The writing process emphasizes focus, organization, conventions, content and style. Students investigate various genres of literature, including poetry, nonfiction, novel, and drama to develop the theme. Students develop skills in paragraph and multiparagraph writing, including informative, persuasive, and narrative essays. They also develop creative writing skills and consistently practice critical, creative, and affective thinking. Students refine Pennsylvania Language Arts proficiencies, essential skills, and content standards, as well as test-taking strategies to ensure excellence in application of skills.

English 10: Grade 10/R

Year Long/1 Credit

This yearlong, integrated, tenth-grade course emphasizes interpersonal skills, research skills, public speaking, democratic processes, and oral interpretation. Fiction and non-fiction passages stimulate expository/technical writings and refinement of the oral and written processes. This course is also designed to improve students' oral communication skills, strengthen composition skills, and develop an understanding of the history of theater and an appreciation of dramatic world literature and American literature. Students refine Pennsylvania Language Arts proficiencies, essential skills, and content standards, as well as test-taking strategies to ensure excellence in application of skills. *An Apex Honors, AP, Apex, or College Level class may be substituted if all necessary PDE requirements are met in the substituted course.*

Writing Skills 10: Grade 10/R

Semester/.50 Credit

Writing skills is a writing course designed to help students develop proper sentence structure, punctuation, writing format, editing, and research writing skills. This course will instruct students in MLA, APA, and Chicago style writing. The overall goal is to prepare students for writing in the workplace, advanced writing courses, and college courses.

English 11: Grade 11/R

Year Long/1 Credit

This yearlong, eleventh grade course integrates the study of American literature, grammar, and composition (informative, technical, and creative), while refining oral communication skills. Students develop skills in conducting research and in writing research papers. Literature will include technical reading selections. This yearlong literature and composition course also focuses on the study of social, physical, metaphysical and historical influences on self-development. Through critical and creative thinking, independent inquiry, and affective responses, students produce a formal research paper, creative and expository writings, and group, class and individual projects relating to literature, philosophy and rhetoric. Students refine Pennsylvania Language Arts proficiencies, essential skills, and content standards, as well as test-taking strategies to ensure excellence in application of skills. *An Apex Honors, AP, Apex, or College Level class may be substituted if all necessary PDE requirements are met in the substituted course.*

English 12: Grade 12/R

Year Long/1 Credit

This yearlong, integrated, twelfth-grade course teaches final refinement of writing through research papers and other compositions. Through thematic units of study, including both literary and technical selections, students explore careers, life-long learning, and societal issues. This course integrates composition, world literature, history, sociology, psychology, philosophy, and rhetoric. Students utilize skills in critical and creative thinking, independent inquiry, and affective processes to write essays of analysis and evaluation, present panel discussions and oral reports, participate in-group discussions, and work independently at problem solving and research. An Apex Honors, AP, Apex, or College Level class may be substituted if all necessary PDE requirements are met in the substituted course. A senior project will still be required regardless of course substitutions for this class.

Literature Keystone Prep.: Grades 9-11/R (if needed)

Year Long/1 credit

This is a course designed to prepare students for success on the Keystone Literature Exam. Students will practice test samples and will learn all of the PA state literature terms necessary for completing the exam. Students will also practice various short answer questions. As the course progresses students will be assessed through the CDT computer program to diagnose specific needs for success on the test. *One elective credit may be earned the first time class is taken.*

AP Literature: Grades 11-12/E

Year Long/1 Credit

AP Literature engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. This is a rigorous course. *This course is an AP weighted course.*

Creative Writing: Grades 9-12/E

Semester/.50 Credit

This course helps students develop creative writing skills, primarily those utilized in creating poetry and prose. Through processes of reading, writing, and critiquing, students work toward preparing publication-quality manuscripts.

Gothic Literature/Mystery & Detective: Grades 9-12/E

Semester/.50 Credit

This course concentrates on analyzing and identifying the elements within gothic literature. It focuses on a distinguished set of characteristics that are present within each gothic selection that will be read. Students will have the opportunity to demonstrate their knowledge of the elements by writing their own gothic work. The Mystery & Detective portion of this class offers a historical, as well as a literary look at the genre of mystery writing. The students will study the various stages of the development of the genre, read a selection of short stories and novels that will illustrate the progression of the genre, and study the works as literary creations (plot, theme, characterization, etc.).

Scholarship Writing: Grade 12/E

Semester/.50 Credit

In Scholarship Writing students will receive help organizing and writing scholarships. They will be given time to research scholarships, and will be taught effective writing strategies for attaining scholarships. This class is only for seniors because students cannot apply for scholarships until their senior year.

Journalism/Science Fiction & Fantasy: Grades 9-12/E

Semester/.50 Credit

The first section of this course prepares students for newspaper and yearbook staff positions. It emphasizes writing in various journalistic styles and offers training in layout, design, headline and caption writing, and desktop publishing. Students will produce and distribute a regularly scheduled newspaper. The second focus in this course seeks to familiarize students with written SF/Fantasy as literature rather than as a pop culture phenomenon. Students will learn the history of written SF/Fantasy, study specific major works (both novels and short stories) as literary creations, and become acquainted with literary criticism in the field. Due to its focus on intensive writing, this course will only be offered to students in 9th-12th grade.

Yearbook I, II, III, IV: Grades 9-12/E

Year Long/1 Credit

Yearbook is a class for ninth through twelfth graders. It can be taken one year or all four years. The students are taught skills that include photography, layout and design, and planning the book. They learn to use the computer since the entire yearbook is completed online. They learn about scheduling in regard to planning sections of the book, school pictures, sales and other yearbook activities. They learn to work with the public, inside of the school building, as well as in our community and the surrounding towns. Time management and business skills are also emphasized.

Media and Society: Grades 9-12/E

Semester/.50 Credit

This course focuses on visual literacy, advertising and moving images. Students will develop an informed and critical understanding of the nature of mass media, the techniques used by them, and the impact of these techniques. Students learn about different types of media and determine the difference between healthy and unhealthy media. Students learn to deconstruct photographs, magazine covers, bogus websites, news, toy commercials and advertisements.

Mythology: Grades 9-12/E

Semester/.50 Credit

This course focuses on Classical Mythology. Classical Mythology focuses on the Ancient Greek and Roman stories about heroes, gods and the universe and illustrates the influence of these myths on the art, literature and culture of the modern world.

Public Speaking: Grades 9-12/E

Semester/.50 Credit

This is a course that explores effective communication in one-to-one, small group and large group settings. Students analyze their communication skills and practice techniques to become more effective. This course is designed to introduce the students to; communication concepts, theories, and skill which people use intrapersonal and in professional settings

Literature and Film: Grades 9-12/E

Semester/.50 Credit

This course is a basic course that introduces essential concepts of film techniques, history, and criticism and supplies the background for more advanced work in film studies. It provides some familiarity with the artistic, economic, technological, and social factors that exerted an influence on the development of the medium and the industry to its present influential role in cultures today. Critical reading and historical research lead to active viewing and to precise written and oral evaluations of individual films.

This is a course that helps students develop creative writing skills, primarily those utilized in creating poetry and prose. Through processes of reading, writing and critiquing students work toward preparing publication-quality manuscripts.

MATHMATICS

*All students must take Algebra IA or Algebra IC in either grade 8, 9 or 10. All other mathematics classes will be teacher approved as core or elective.

Math 7: Grade 7 Year Long

Building on concepts mastered in grades K-6, this course will allow the students to solve one and two step linear equations and graph them, understand use of number operations and order of operations including integers, understand and use percent, and ratio and proportion. They will apply problem-solving strategies including tables, diagrams, calculator use, estimation, etc. Students will solve multi-step equations, including linear and quadratic, with experience in solving absolute value equations, and use and manipulate formulas with exposure to functions and relations. The students will also simplify expressions using rules of exponents and radicals with exposure to rationalizing, solve systems of equations and linear rate problems, and set up and solve ratio and proportion problems. Students will operate with matrices, understand appropriate scientific calculator use, and demonstrate familiarity with the basic properties of commutative, associative, distributive, and identity Upon teacher discretion, students will continue the following year in Pre-Algebra 8.

Pre-Algebra: Grade 7 Year Long

Building on concepts mastered in grades K-6, this course will allow the students to solve one and two step linear equations and graph them, understand use of number operations and order of operations including integers, understand and use percent, and ratio and proportion. They will apply problem-solving strategies including tables, diagrams, calculator use, estimation, etc. Students will solve multi-step equations, including linear and quadratic, with experience in solving absolute value equations, and use and manipulate formulas with exposure to functions and relations. The students will also simplify expressions using rules of exponents and radicals with exposure to rationalizing, solve systems of equations and linear rate problems, and set up and solve ratio and proportion problems. Students will operate with matrices, understand appropriate scientific calculator use, and demonstrate familiarity with the basic properties of commutative, associative, distributive, and identity Upon teacher discretion, students will continue the following year in Pre-Algebra 8 or Advance to Algebra IA.

Pre-Algebra: Grade 8 Year-Long

Building on concepts mastered in grades K-7, this course will allow the students to solve and graph one and two step linear equations, understand the use of number operations and order of operations including integers, and apply problem-solving strategies including tables, diagrams, calculator use, and estimation, etc. They will understand and use percent, ratio and proportion, demonstrate familiarity with basic properties of commutative, associative, distributive and identity, and solve multi-step equations, including linear and quadratic, with experience in solving absolute value equations. The students will also understand appropriate scientific calculator use, use and manipulate formulas with exposure to functions and relations, and simplify expressions using rules of exponents and radicals with exposure to

rationalizing. The students will also solve systems of equations and linear rate problems, set up and solve ratio and proportion problems, and operate with matrices. They will use deductive and inductive reasoning to investigate and move a variety of geometric conjectures including the use of analytic geometry, use trigonometry to solve problem situations involving triangles, and interpret and draw two and three dimensional objects to represent problem situations with geometric models and apply properties of figures. The students will also clarify figures in terms of congruence and similarity and apply these relationships with and without transformations, with and without coordinates, translate synthetic and coordinate representations including algebraic relationships, ordered pairs, equations of lines, geometric relationships, and apply Pythagorean's Theorem to problem situations.

PSSA Math Prep: Grade 7&8/R

Year-Long

Students will be exposed to sample questions used on past PSSA exams. Skills will be developed to be successful on the PSSAs. Study methods and organizational skills will be introduced and practiced for academic success. Expeditionary projects may be incorporated into this course.

Algebra IA: Grades 8, 9, or 10/R

Year Long/1Credit

This course will study the internal relationships of the real number system. Students will be required to learn properties, definitions, and the terminology which describe these relationships, as well as the manipulative skills necessary to alter expressions, equations, and inequalities, as needed. Students will also learn how to represent relationships graphically, rational numbers, polynomials (variables, terms, and expressions) in all 4 operations, factoring, linear and quadratic equalities including systems of both. This course is for students with good arithmetic skills who are interested in post-secondary education. This course is open on approval of a math teacher. It is possible that this class will be made available to students of the middle school.

Algebra IC: Grades 9-10 (As requested by instructor)

Year Long/1 Credit

The design of Algebra I C is the same as Algebra I using the same materials, texts, projects and assessments for the preparation of the Keystone exam. The students that are placed in this course are identified as struggling math students according to previous test scores and class grades. The idea of this course is to give the students the Algebra I course at a slower pace and have an additional lab with the course to re-enforce the material and to fill the skills gap that may have occurred in previous years. Algebra 1C Lab is required with this course.

Algebra 1C Lab: Grades 9

Year Long

This course is required if students are taking the Algebra IC class. This lab will reinforce the Algebra 1C material and fill in the skills gap that may have occurred in previous years.

Keystone Algebra Essentials: Grades 9-12(if needed)

Year Long/1 Credit

This class is designed for the students who have taken the Keystone exam and scored below basic or basic. The students will receive extra work and guidance on the topics that they need more work on based on the results from the Keystone exam. The goal of the class is individualized instruction on algebra content in order to pass the Keystone exam. *One elective credit may be earned the first time class is taken.*

Life Math: Grades 10-12

Year Long/1 Credit

Life Math is a course designed to help students see how math is used in their everyday world around them. Students will extend their knowledge of mathematics and develop appropriate

consumer and career mathematical skills. Course content will cover such topics as basic operations, ratio, percent, algebra and geometry concepts, probability, measurement, and many consumer topics. This course gives students the opportunity to acquire the tools necessary for daily living as an individual and in family life. Students will create foods from recipes that had to be doubled and had limited measurement tools available causing them to convert measurements. Students will investigate the science of nutrition using the food pyramid and calculate calorie intake and calculate the use of coupons. Students will focus on geometric patterns and learn basic sewing techniques through hand stitching. Students will focus on scale drawings and measurement, while determining the appropriate amount of paint and carpeting needed. Students will be introduced to finances through checkbook and credit card simulations and vacation planning.

General Math: Grades 10-12

Year Long/ 1 Credit

General Math is course that focuses of the review of basic mathematics skills. This includes the fundamental numeral operations of whole numbers, fractions, and decimals; ratios and proportion, percent, systems of measurement, and geometry. Algebra will be included at a basic level.

Advanced Algebra (Algebra II): Grades 9-10

Year Long/1 Credit

This course is open to any student who has passed Algebra 1A or 1C. This course is an expansion of algebra. Students will learn additional methods and investigate additional topics of algebra in both the real and imaginary number systems. Use of the graphing calculator may take place throughout the course.

Geometry: Grades 10-11-12

Year Long/1 Credit

This course is for students who have passed Algebra I and Algebra II. The concepts covered include mathematical reasoning, statistics and data analysis, algebraic functions, construction and similarities of polygons to transformation and symmetries, right angle triangles, circular functions, maximum/minimum values, sequences and series, and area under curve. Course also studies most of the principles of Euclidean geometry within two or three dimensions. Major emphasis is put on organization and interpretation of data and formulation of arguments for proofs.

Functions and Trigonometry: Grades 11-12

Year Long /1 Credit

This course is open to students who have passed Algebra I, Algebra II, and Geometry. This course integrates statistical and algebraic concepts, and previews calculus in work with functions and intuitive notions of limits. Use of the graphing calculator for plotting functions, analyzing data, and simulating experiments will take place throughout the course. <u>Weighted</u> <u>class.</u>

Pre-Calculus/College Level: Grades 11-12

Year-Long/1 Credit

This course is open to students who have passed Functions and Trigonometry. This course provides a review of the fundamentals of algebra, analytical geometry, and trigonometry. Emphasis is on calculus-oriented concepts including functional notations, graphing, and the applications of functions. The behavior of algebraic, exponential, and logarithmic, and trigonometric functions are explored with the use of the graphing calculator throughout the course. *Weighted class*.

Calculus: Grade 11-12 available online. Weighted class. Year-Long/1 Credit

Probability and Statistics; Grade 11-12

Year Long/1 credit

This course will provide students with an elementary introduction to probability and statistics. Students will apply what they learn to real-world problems involving probability and statistics. The course also provides the students a hands-on approach of application of probability and statistics. Topics include: data classification, frequency distributions, measures of central tendency, variation, and position, basic probability and counting principles, probability distribution, and confidence intervals. *Weighted class*.

ASVAB Math/Grades 10-12

Semester/.50 Credit

This course is designed for students who plan to enter the military after graduation. Many military careers require a solid understand of basic math principles and this course is designed to focus on those skills. The math section of the ASVAB is timed and there is no calculator or formula sheet use. This class will help students learn to set an appropriate pace and focus on how to solve each problem quickly and accurately. At the end of the course, the school will arrange for the ASVAB to be taken at the school.

Brain Teaser Math: Grades 9-12

Semester/.50 Credit

This course is focused on Problem-Solving and is designed to be an interactive and fun class for students who enjoy math. Students will be creating, solving, and discussing a wide range of interesting math problems, puzzles, and games. Some problems will arise from discussions in regular math classes; some are classical mathematical questions, while others are problems created by students in the class. This course consists of challenging, multi-step problems where the answer is not always obvious without straining your brain.

Space Math: Grades 9-12

Semester/.50 Credit

This course introduces students to the use of math in today's scientific discoveries. Through press releases and other articles, students will explore how many kinds of mathematics skills come together in exploring the universe. Students will discover how math is used in science and how simple math helped to understand recent discoveries. Topics will come from the NASA database and include Exploring Solar Alignments with Mathematics and Geometry, The Changing Pace of Global Warming, Death Stars, Taking a Stroll around a Martian Crater, Solar Power and Satellite Design, Martian Dust Devils, The Rate of Oil Spill Leakage in the Gulf Oil Spill, and the Changing Atmosphere of Pluto.

STEAM: Grades 10-12

Semester/.50 Credit

STEAM is an acronym for Science, Technology, Engineering, Art and Math. The focus of this course will be highly interactive group activities built around STEAM concepts. Each activity is designed to emphasize collaborative learning, critical and analytical thinking, creative thinking, problem-solving, and experimental design. Through participation in STEAM course activities, students will practice many of the critical skills needed for careers.

Math and Literature: Grades 9-12

Semester/.50 Credit

This course is designed to explore the relationship between words and Math. Students will have the opportunity to read from all genres to further increase their reading comprehension, vocabulary, and higher order thinking skills. There will be opportunities for students to read

both fiction and nonfiction, engage in author and genre studies, and read collaboratively in literature circles. Throughout the piece of work, students will be working on the hidden math that is interlaced in the story. Each piece will consist of small mathematical projects throughout the book and a large final math project at the end. Students will also have the opportunity to write their own piece while illustrating mathematical topics.

Fantasy Football and Math: Grades 9-12

Semester/.50 Credit

This course will cover the correlation between Fantasy Sports and how it relates to Mathematics. Math concepts cover Data Analysis and Probability Standards, Algebraic Concepts, Numbers and Operations Standards, and Measurement. This course is a fun, supplemental math course to reinforce math concepts already taught in math classes to help in preparation for the PSSA or for students who need supplemental instruction during enrichment period.

MUSIC

Grades 7-8 Must Choose One 'Grade 7/8' Music Elective

BAND

Beginning Band: Grades 7 & 8/E

Year Long

This class is for students who have had no previous experience in instrumental music. Beginning band classes are composed almost exclusively of sixth grade students, although seventh and eighth graders who did not start band as a sixth grader, and now wish to learn to play a wind or percussion instrument may enroll. Students will choose one of the five basic instruments for study such as flute, clarinet, saxophone, cornet/trumpet, or trombone. Securing an instrument is the responsibility of each individual student. Used instruments may be purchased or new instruments may be rented from music stores through rental plans. Used instrument prices vary according to the type of instrument and condition. The emphasis in Beginning Band is on the physical performance fundamentals associated with the chosen instrument. All students are expected to gain a basic understanding of music theory, history, and appreciation.

Concert Band I, II, III, & IV: Grades 9-12/E

Year Long/1 Credit

Students involved will perform music suited to their ability levels. Repertoire will encompass widely varied styles. Participation in all performances is considered an integral part of the course and is required.

CHOIR

Choir: Grades 7 & 8/E

Year Long

This is an age-appropriate vocal performance ensemble. Students will learn and perform appropriate repertoire while exhibiting proper vocal technique and musical expression. Various repertoires will be studied along with sight singing and the elements of literature in English and other languages. Participants will perform at least 5 times a year, both during the school day and seasonal evening performances. Participation in all performances is considered an integral part of the course and is required.

Concert Choir I, II, III, IV: Grades 9-12/E

Year-Long/1 Credit

This is the school's premiere vocal performance ensemble. Students will learn and perform appropriate repertoire while exhibiting proper vocal technique and musical expression. Various repertoires will be studied along with sight singing and the elements of literature in English and

other languages. Participants will perform at least 5 times a year, both during the school day and seasonal evening performances. Participation in all performances is considered an integral part of the course and is required.

GUITAR

Advanced Guitar I, II, III, IV: Grades 9-12/E Long/1 Credit

Year

Advanced guitar is for those students who have had at least two years of instruction on the instrument. The techniques learned in this class are very advanced and designed to allow students to perform a variety of music in a variety of ways. Musicianship and performance techniques are stressed a great deal at this level. The music theory presented at this level is equivalent to a college freshman's music theory course.

Beginning Guitar: Grades 7-12/E

Year Long/1 Credit

This class is designed for students with no previous guitar experience. Students will be introduced to the various types of guitars, their various parts and applications. They will be given fundamental instruction in music theory as it relates to the guitar. This will include, but not be limited to, chords, chord tabs, power chords, right hand strumming/picking techniques I, IV, V, chords in any given key, playing by ear and playing in an ensemble. While not primarily a performing class, students are offered a variety of opportunities to perform.

Intermediate Guitar: Grades 9-12/E

Year Long/1 Credit

This class is for those students who have completed beginning guitar or who have had at least one year of previous guitar instruction elsewhere. Intermediate guitar builds on the techniques learned in beginning guitar and takes them to a higher level of skill and expertise. Students will be given a deeper knowledge of music theory and be able to perform more demanding chords and strumming techniques. At this level, students are also given the opportunity to explore their ability to perform lead 'breaks' and basic song arrangements. This class is also given the opportunity to record in the TCCS recording studio.

PIANO

Students will be placed into basic, intermediate, or advanced class depending on their skill level. Advanced class students will have the opportunity to accompany the Concert Choir.

Basic Piano: Grades 7-8/E

Year Long/1 Credit

This semester course is designed for any student who wishes to learn the fundamentals of keyboard performance. The course is designed for students with no previous piano background. Music theory appropriate to the student's level is part of this class. During the year, each student composes an original song for the theory assignment. Students perform for one another in a weekly "In Class Recital" setting, as well as the Christmas and Spring Concerts. Participation in all performances is considered an integral part of the course and is required.

Basic Piano: Grades 9-12/E

Semester/.50 Credit

This semester course is designed for any senior high student who wishes to learn the fundamentals of keyboard performance. The course is designed for students with no previous

piano background. Music theory appropriate to the student's level is part of this class. During one semester, each student composes an original song for the theory assignment. Students perform for one another in a weekly "In Class Recital" setting, as well as the Christmas and Spring Concerts. Participation in all performances is considered an integral part of the course and is required.

Intermediate/Advanced Piano: Grades 9-12/E

Semester/.50 Credit

This semester course is designed to help increase keyboard skills to a degree that will permit the student to play a variety of music for self-enjoyment. Music theory appropriate to the student's level is part of this class. Each student composes an original song for the theory assignment. This semester course helps the student apply fundamentals of music theory and harmony to the keyboard. It is designed to offer experience in improvisation, transposition, modulation, and sight-reading. Students perform for one another in a weekly "In Class Recital" setting, as well as the Christmas and Spring Concerts. Participation in all performances is considered an integral part of the course and is required.

OTHER MUSIC

Music Theory: Grades 9-12/E

Semester/.50 Credit

This course digs into the building blocks of music: pitch, rhythm, scales, intervals, chords, and harmony, and illustrates how they flow together to make a song work. This course gives students a basic knowledge of music theory fundamentals, develops their sight reading skills and dictation abilities, and provides opportunities for composing and performing.

Music Appreciation: Grades 9-12/E

Semester/.05 Credit

This is an analytical listening course. Students will discuss, examine and discern the differences about musical styles and sociological aspects of each. Studies will include all styles of pop music, music history, theory, acoustics, and instrumentation. Two research papers and comprehensive tests are basis of assessment for this course.

Recording Engineering & Production: Grades 9-12/E

Year Long/1 Credit

This course is designed to introduce students to all the integral components that make up the art and science of sound recording. It is an exploratory course designed to give students the opportunity to examine and develop the necessary skills required to professionally record and produce a variety of musical styles. This is a lecture/studio course in which topics are presented by the instructor, recording components and theories are explained, and recording assignments are completed by the student. This will primarily be done in the recording studio with some assignments completed at home. While most of the grading for this course will be based on inclass procedures, there will also be quizzes and other tests from time to time. The course objectives will be as follows:

- 1) To introduce students to the use of recording equipment, recording procedures, and acceptable standards of work in the industry.
- 2) To introduce students to a wide variety of musical styles, musical instruments, and musical production techniques.
- 3) To orient students to the range of recording methods, topics, and occupations that characterizes the field.
- 4) To provide students with opportunities to develop basic recording skills in respect to all the components necessary to the field.

Music Theater Survey Course: Grade 9-12/E

Semester/.50 Credit

This non-performing semester course will study musical theater history, staging, plots, stars, librettists, and composers from early opera through modern Broadway musicals. A large variety of musicals will be observed through video recordings and discussions. Assessments will be based on written and oral reports, quizzes and class discussions.

PHYSICAL EDUCATION

Physical Education 7: Grade 7/R

9 Week Class

This class is aimed at furthering the lifetime fitness concepts achieved thus far, providing specific areas of concentration, and exposing the students to a myriad of activities. In general the students will identify and understand the various components of health related physical fitness /wellness, assess, interpret, analyze and evaluate his or her personal health related physical fitness and lifestyle, and study the effects of aging and the science of exercise.

Physical Education 8: Grade 8/R

9 Week Class

This class continues to build on skills learned from Physical Education 7, furthering the lifetime fitness concepts achieved thus far, providing specific areas of concentration, and exposing the students to a myriad of activities. In general the students will identify and understand the various components of health related physical fitness /wellness, assess, interpret, analyze and evaluate his or her personal health related physical fitness and lifestyle, and study the effects of aging and the science of exercise.

Physical Education General Concepts: Grades 9-12/R Semester/.25 Credit

This class builds on the skills learned in previous courses to work toward the goal of lifetime fitness by engaging in a variety of sports skills and activities which may include, but not limited to, volleyball, basketball, badminton, running, lacrosse, dance, and archer. Students will identify and understand various components of health related physical fitness/wellness, assessment, interpretation, and evaluation of his and her personal health related physical fitness and lifestyle.

Weight Lifting: Grade 9-12/E (10- students only) Semester/.50 Credit THIS DOES NOT COUNT AS A PE CREDIT. THIS IS AN ELECTIVE

Weight Lifting is designed to give you a basic understanding of and appreciation for strength training as well as for cardiovascular fitness. Throughout the course of the semester you will be exposed to many different training principles, benefits of strength training and current training issues. Some issues of importance include: basic muscle physiology (including bone, muscle, and connective tissue), proper warm-up (including flexibility and stability), training methods and modes, (9ncludigin safety issues and spotting). Nutritional factors in performance and health, basic cardiovascular and respiratory anatomy and physiology, psychological benefits of exercise, as well as many more.

Aerobic Walking: Grade 9-12/E Semester/.50 Credit THIS DOES NOT COUNT AS A PE. CREDIT. THIS IS AN ELECTIVE

Focus on cardiorespiratory fitness through aerobic walking on a walking track, trails, and nearby neighborhoods surrounding the campus. Lecture and lab activities focus on cardiorespiratory endurance, reduction or maintenance of body fat levels, safe and sound activity principles, nutrition, weight management/control, and risk factors for disease. Satisfies a lifetime fitness/wellness requirement for AA degree.

Kick-Box/ Boxing Aerobics: Grade 9-12 (10 students only) Semester/.50 Credit

Focuses on cardiorespiratory fitness using skill and techniques of kick-boxing combined with music. Develops general endurance e of the respiratory and circulatory systems, reduces or maintains body fat levels and teaches basic martial art skills such as punching, kicking, knee raises, and many combinations.

SAT READING

(Only taken by students who are taking the SAT toward the end of a semester.) Semester split with SAT Reading and SAT Math

SAT READING: Grade 10-12 Semester/.25 Credit

This class introduces students to the new SAT format. An overview of test layout and scoring will be given. Practice tests will be taken, focusing on passage-based reading, sentence completion, and critical reading skills. Student's language will be enhanced with weekly practice and tips for building their vocabulary. Computer based practice will also be given to enhance students success on the SAT.

SAT MATH

SAT MATH: Grade 10-12

Semester/.25 Credit

This course will provide the students with review of the mathematics needed to be successful on the mathematics sections of the SAT. The course we also explain how the test is scored and testing strategies for the students to be successful on the SAT. Topics include: Linear equations, linear inequalities, systems of equations and inequalities, graphs of linear equations and inequalities, ratios, proportional relationships, percentages, representing and analyzing quantitative data, finding and applying probability, identifying and creating algebraic expressions, creating, analyzing, and solving quadratic and other nonlinear equations, creating, using, and graphing exponential, quadratic, and other nonlinear functions.

SOCIAL STUDIES

Civics and Government: Grade 7/R

Year Long Class

In grade seven, students will study Civics. This course is designed to explain the purpose of government and the various types of government. They will know the diversity of Americans and what they value. Students will understand how a person becomes a citizen of the United States and will study the duties and responsibilities of citizens. The students will study what ideas influenced early colonial governments and the discontent between the colonists and British leading to the Declaration of Independence. Also, students will understand how the weaknesses of the Articles of Confederation led to the Constitution and how the federal government was organized. Students will study many different aspects of the Constitution and understand the powers expressed by Congress. Emphasis will be given to the functions and roles of the president and the requirements for becoming president. Students will study all of the different

branches of government and the powers and limits placed on the Supreme Court. Students will study the concepts of political parties. They will know what a political party does and know the major political parties of the United States. In addition, they will understand the voting process and the different types of elections that take place in the United States. Students will study the influence of public opinion and how it affects the government. The course is also design to explain the relationship between state and federal governments and how they are both organized. Students will learn how local governments are organized. Students will know the types of laws found in the American legal system and individual rights. Finally, they will understand the civil law process and the penalties for committing these crimes.

Pennsylvania Studies/US History: Grade 8/R

Year Long Class

Pennsylvania Studies is a one-semester course taken in the eighth grade that is an integrated program comparing and contrasting state and national development in the areas of politics, economics, history, and culture. The course uses Pennsylvania history as a basis for understanding current policies, practices, and state legislative procedures. Students acquire motivation to participate in the political process as concerned citizens. This course also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. The examination of individual leaders and their roles in a democratic society should be included. Selections from Pennsylvania arts and literature might also be analyzed for insights into historical events and cultural expressions. Additionally, students will study United States history, including a review of key ideas, events, and movements related to the discovery, exploration, and colonization of America, as well as the revolutionary and founding eras. Emphasis should be given to the principles of the Constitution of the United States and other founding-era documents and their applications to subsequent periods of national history and to civic and political life, the constitution of Pennsylvania, geographic and economic factors related to national development and westward expansion, and the changes brought about by the CMI War and Reconstruction period.

World History and Civilization: Grade 9/R

Year Long/1 Credit

World History emphasizes events and developments in the past that greatly affected large numbers of people across broad areas of the earth and that significantly influenced people and places in subsequent eras. Some key events and developments pertain primarily to particular people and places, and others, by contrast, involve trans-cultural interactions and exchanges between various peoples and places in different parts of the world. Students are expected to practice skills and processes of historical thinking and inquiry that involve chronological thinking, comprehension, analysis and interpretation, research, issues-analysis, and decisionmaking. They are expected to compare and contrast events and developments involving diverse people addivilizations in different regions of the world. Students are expected to examine examples of continuity and change, universality and particularity, and unity and diversity among various people and cultures from the past to the present. Finally, students are expected to apply content knowledge to the practice of thinking and inquiry skills and processes. There should be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history. The course is designed to give strong emphasis to students' critical thinking skills, ability to evaluate historical data, and the ability to analyze and synthesize information. An Honors class may be available.

World Geography: Grade 10/R

Year Long/1 Credit

World Geography provides an opportunity to study the interaction of humans and their environments in a world setting. Students study global patterns of physical (natural) and cultural

(human) characteristics, including earth/sun relationships, atmospheric and oceanic circulation, landforms, climate, vegetation, population, economic activity, political structures, culture, and International and interregional links. They use maps, graphs, and technology such as geographic information systems (GIS) to establish spatial relationships, which are the interaction of two or more physical and cultural characteristics within a designated place, area, or region. Historical trends and events provide a context for understanding cultural change. Countries and regions selected for study include examples from each continent. Students are expected to apply knowledge of geographic concepts to research, inquiry, and participatory processes. Geographic concepts that guide the course follow the Five Themes of Geography and the Six Basic Elements of the National Geography Standards. The Five Themes of Geography are Location, the Characteristics of Place, Human/Environment Interaction, Movement between Places, and Regions. The Six Elements of the National Geography Standards are The World in Spatial Terms, Places and Regions, Physical Systems, Human Systems, Environment and Society, and The Uses of Geography. *An Honors class may be available*.

United States History: Grade 11/R

Year Long/1 Credit

United States History is a yearlong classtaken at the eleventh grade level that builds upon concepts developed in previous studies of American history. Students in this course are expected to identify and review significant events, persons, and movements in the early development of the nation. After providing such a review, the course gives major emphasis to the interaction of key events, persons, and groups with political, economic, social, and cultural influences on state and national development in the late nineteenth, twentieth, and early twenty-first centuries. Students are expected to trace and analyze chronological periods and examine the relationship of significant themes and concepts in Pennsylvania and United States history. They are expected to develop skills and processes of historical thinking and inquiry that involve chronological thinking, comprehension, primary document analysis and interpretation, and research that includes the use of primary and secondary sources found at local and state historic sites, museums, libraries, and archival collections, including electronic sources. Opportunities are given to develop inquiry skills by gathering and organizing information from primary source material and a variety of historical and contemporary sources, accounts, and documents that provide diverse perspectives. Investigation of themes and issues includes cultural pluralism and diversity of opinion in American society. Students should exercise their skills as citizens in a democratic society by engaging in problem-solving and civic decision-making in the classroom, school, and community setting. An Honors class may be available.

United States Government & Economics: Grade 12/R

Year Long/1 Credit

United States Government is a one-semester course taken in the twelfth grade that provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States of America. Responsible and effective participation by citizens is stressed. Students will understand the nature of citizenship, politics, and government when they understand their rights and responsibilities as citizens and be able to explain how those rights and responsibilities as citizens are part of local, state, and national government in the United States today. Students will examine how the United States Constitution protects individual rights and provides the structures and functions for the various levels of government affecting their lives. Students will inquire about American government through primary and secondary sources and articulate, evaluate, and defend positions on political issues with sound reasoning and evidence. As a result, students can explain the roles of citizens in the United States and the participation of individuals and groups in government, politics, and civic activities, recognize the need for civic and political engagement of citizens, and exercise

rights and responsibilities in order to preserve and improve their civil society and constitutional government. Economics examines the allocation of scarce resources and their alternative uses for satisfying human wants. This course analyzes the economic reasoning used as consumers, producers, savers, investors, workers, voters, and government agencies make decisions. Key elements of the course include a study of scarcity and economic reasoning, supply and demand, market structures, the role of government, national income determination, money and the role of financial institutions, economic stabilization, and trade. *An Honors class may be available*.

Criminology/Notorious Criminals in History: Grades 10-12/E

Semester/.50 Credit

Students will explore the nature and extent of crime and the causes and prevention of
criminality. They will look at the study of the dynamic field of criminology such as the
motivation behind mass murder, the effects of violent media on young people, drug abuse, and
organized crime. Additionally, they will learn the many theories behind crime causation using a
variety of resources from lecture notes, video clips, real-life examples, research articles and
more. In summary, two final questions are attempted to be accomplished: Why do people do the
things they do? How can we explain the intricacies and diversity of human behavior?

AP U.S. History: Grades 11-12/E

Year Long/1 Credit

This survey course is a fast-paced, challenging year-long course available to juniors and seniors who are motivated to take the AP US History exam through College Board. This course requires students to develop and strengthen skills in note-taking, organization, logic, analysis, synthesis, evaluation, critical thinking, reading and writing. The course focuses on preparing students for the APUSH exam in May. The AP exam has no bearing on the grade for the course and students are not required to take the exam AP US History. Upon successful completion of the course the student will master a broad body of historical knowledge from colonization to present, demonstrate an understanding of historical chronology, use historical data to support from original documents, work effectively in groups to produce products, make presentations, and solve problems, how to effectively respond to Document Based Essay Questions (DBQs) and a Free Response Essay Questions (FRQs), prepare for and successfully pass the AP U.S. History Exam. The following themes are woven throughout unit discussions. Assessments will be structured around the themes American Diversity, American Identity, Demographic Changes, Globalization, Politics and Citizenship, Reform, Slavery and Its Legacies in North America. *This course is an AP weighted course*.

Current Events/ Rock N Roll Music History Grades 10-12 Year Long class/1 Credit

Semester 1: Students will review current events happening around the world in the areas of polices, society and economics. Students will conduct research on significant topics relative to current events daily. Students will be up-to-date on worldly events and will express their knowledge through writing and reading. Students will use the Internet, newspapers, and television, foreign and domestic, as sources for information each day.

Semester 2: This course is design for students to learn about American and World culture through Rock N Roll music. Historical research projects will be required. Eras of our music will be studies including Elvis Presley, Beatles, ACDC, Bob Dylan, Chuck Berry, Johnny Cash, and Led Zeppelin to modern day music like Green Day and Blink 182. This will be collaboration

between the History Department and the Music Department and expeditionary trip to the Rock N Roll Hall of Fame in Cleveland, OH will be planned.

Introduction to Criminal Justice: E/9-12 Grade

Semester/.50 Credit

Is a course that will cover the key content areas in Law, Public, Safety, Corrections, and Security Careers. The class includes past- to present perspective as well as many real world incidents and cases that illustrate the applications of legal concepts.

Multicultural Awareness: E/ 9-12Grade Credit

Semester/.50

Is a course that examines the United States as a multicultural nation. The course emphasizes the perspectives of minority groups while allowing students from all backgrounds to better understand and appreciate how race, culture and ethnicity, and identity contribute to their experiences. Major topics in the course include identity, immigration, assimilation and distinctiveness, power and oppression, struggles for rights, regionalism, culture and the media, and the formation of new cultures.

Native American History: Grade/E

Semester/.50 Credit

Is a course will study the chronological accounts of this place on the world stage. It will study-line format on such events as; the construction of pyramids, Native American influences on the idea of the European Renaissance, Western, Expansion and the impact of Native Americans. The course will proved an understanding of the long neglected aspect toward their heritage.

Women's Studies: Grade/E

Semester/.50 Credit

Is a course that provided students with studies of specific historical eras, events, or concepts. The development of historical research skills using primary and secondary sources is emphasized. Students will gain an understanding and appreciation of the roles women have played in history of the United States up to the present times. The content will focus on contributions and influences of women in the United States as well as social history and current issues of gender equality and domestic violence.

World Wars: Grade/E

Semester/.50 Credit

Is a course where students will study different wars that happened during the history of the world. Major wars covered are Civil War, WW1, WW2, Korean War and Vietnam War. There are projects that the students are to participate in.

Conspiracy Theories in History: Grade/ E

Semester/.50 Credit

In this course, we will examine some of the most influential conspiracy theories in history, dealing with some of the world's most historic events, such as the NASA Moon Landing, The assassination of John F. Kennedy, the horrific Tuskegee Experiments, and top secret government programs. This class is designed to help the student think critically on historically controversial topics. The goal is for each student to examine all of the evidence given in a conspiracy and give draw a logical conclusion.

SOCIAL SCIENCES

Sociology: Grades 11-12/E

Semester/.50 Credit

Sociology is an elective course that studies human society and social relationships are an essential part of a civilized society and how we interact with each other is important so that we

can find answers to questions and solve problems in our world. "Sociology teaches us to look at life in a scientific, systematic way." The way that we view the world comes from what we learn in our everyday activities. "The values, beliefs, lifestyles of those around us, as well as historic events help to mold us into unique individuals who have varied outlooks on social reality." This course deals with the social atmosphere that helps to make us who we are and how we behave. Sociology will cover topics such as culture, violence, deviance, social control, socialization and personality, group behavior, social class, and social institutions. The key component of this course is to study ourselves and the society that influences our behavior.

Psychology: Grades 11-12/E

Semester/.50 Credit

This course covers core concepts in psychology beginning with the use of the scientific method in research and the physiological basis for behavior. Topics covered will include social psychology, perception, states of consciousness, memory and learning. There will be a focus on human growth and development, personality, stress and adjustment, and ends with a unit on abnormal behavior, treatments, and therapy.

Class time is divided between lecture, films, discussions, experiments, and demonstrations. During the first semester, students take frequent unit tests, design, implement, and write a report on a social psychology experiment, write a paper on a movie selected by the instructor, and create a dream log with dream analysis and critique of that analysis. Students will take frequent unit tests, read a book on which a paper is assigned.

SCIENCE, ECOLOGY, AND ENVIRONMENT

9th grade must take either Applied or Academic Biology All other classes will be teacher approved as core or elective.

Life Science: Grade 7/R

Year Long

Instruction will take place in the classroom, the laboratory, and the field. Students will complete work using the scientific method with individual scientific investigations supported by field research on a topic student choice. The formal study of life science begins with an introduction to the characteristics and needs of living things. From there, students will examine evolution through Darwin's expedition to the Galapagos Islands, his observations of finches, and his theory of natural selection. Students will then turn their focus to viruses, such as Eco land, AIDs, and microorganisms, such as bacteria. The subsequent unit is dedicated to protists, fungi and plants as students learn the chemistry of living organisms. Theyear concludes with a study of invertebrate and vertebrate animals and a field project completed in conjunction with the students' geography course. Furthermore, in this course the students will look at an object's motion as the result of all forces acting on it, matter has observable physical properties and the potential to mix and form new materials. This course also discusses the ideas that solid, liquid and gaseous earth materials all circulate in large scale systems at a variety of time scales, giving rise to landscapes, the rock cycle, ocean currents, weather, and climate. This course deals with the conceptual understanding that energy is neither created nor destroyed. Energy can be transformed from one form to another, but transformation between forms often results in the loss of useable energy through the production of heat.

Environmental Science: Grade 8/R

Year Long

The environmental science curriculum is focused on both strengthening the skills needed for the process of a scientific investigation and preparing the students for the demands of high school science, all the while recognizing that the world is the richest laboratory. Class discussions, text, and the internet will be important tools for studying the complexity of environmental issues. However, students will also use the local environment as a resource. Students will explore the interdependence of the ecosystems and ecology in the part of the course. Next, students will study the different parts of the biosphere and recognize how changes can occur. Students will then study the different biomes on Earth by completing a large project identifying the biomes around the world. They will then take those biomes and break them down and analyze the ecosystems that make them work. Finally, students will undertake a larger exploration of the major environmental issues of today. These issues include biodiversity and human population growth, endangered species, the greenhouse effect and global warming, and water resource and pollution.

Applied Biology: Grade 9/R

Year Long/1 Credit

This course covers the same material as the biology class but focusing on concepts within biology. All of the big ideas are identical to the academic biology class. This class is designed for learners whom may struggle with sciences

Academic Biology: Grades 9/R

Year Long/1 Credit

This course is defined as the study of all living things and their relationships to each other. Topics include the structure and function of the cell, the processes of photosynthesis, respiration, cell regulation, mitosis and cell division, and genetics. Use of the microscope is an integral part of laboratory work. Students are expected to work independently and to exhibit higher-level critical thinking skills.

Advanced Biology: Grades 10-12

Year Long/1 Credit

In this class, students further their understanding of the concepts presented in the biology class. Examples of materials covered in the class are the Theory of Evolution through Natural Selection, gene expression, the central dogma of biology, and classification of life. The class depends a higher-level thinking and discussion within the classroom. Prerequisite: Academic Biology. *Weighted class*.

AP Biology: Grades 11-12

Year Long/1 Credit

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions.

Anatomy & Physiology: Grades 10-12

Year Long/1 Credit

In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Topics are presented through an integration of biology, chemistry, and physics. Students will study the structures and functions of the human body and body systems and will investigate the body's responses to forces. *Weighted class*.

Applied Physical Science: Grades 10-12

Year Long/1 Credit

This course provides an introduction to the study of the relationships between motion and energy, force and motion, energy and work, heat, electricity, magnetism, waves, sound, light, composition of matter, the periodic table, bonding, water, and solutions. Problem-solving is

emphasized through hands-on exploration and through guided discovery discussion of key conceptual ideas about the physical world around us.

Forestry/Grades 9-12

Year Long/1 Credit

Upon completing studies on aquatics, students will be able to determine pH, alkalinity, and dissolved oxygen percent saturation of water sample with given information and explain each property. Furthermore, this course will cover the identification of (to include calls) common and significant aquatic organisms from a given identification list. This course will also cover six specific aquatic or wetland environments given their physical, chemical, and biological characteristics of each and how these ecosystems are vital to the survival of the environments around them. During the Forestry course of study, students will be able to identify common species without a key and specific or unusual species of trees or shrubs using a botanical key (use of a botanical key is an important skill in many environmental professions). Also, the students will be able to understand their timber and wildlife values. This course will also explain general forest-typing based on the dominant tree species. Describe major forest types found in Pennsylvania, analyze, and type a specific forest site. During this course, students will study State of the Forest, 2009. This is a summary of the most current data available describing Pennsylvania's forest resources. Particularly, note the patterns of forestland ownership, area of forests, distribution of age and size classes and of tree species, wood volume statistics and, regeneration issues. This course will describe the distribution of forest land ownership in Pennsylvania as cited in the "Forest Features" section of this report. Also, the students will be able to describe values and benefits of forests for recreation, wildlife, and watershed quality. Furthermore, the course will discuss the benefits of maintaining trees in urban and suburban communities and factors affecting their health and survival.

Astronomy: Grades 10-12

Semester/.50 Credit

This class focuses on celestial bodies and the position of the earth within space. Units covered will include constellations, phases of the moon, and the Doppler Effect.

Biology II: Grades 10-12/R (if needed)

Year Long/1 Credit

Students who do not pass the Biology Keystone test will receive remedial education in preparation for the make-up test. Within the class the students will receive remediation in the areas that they are most deficient. Anchors that appear on the biology keystone test include basic biological principles, bioenergetics, chemical basis of life, homeostasis and transport, cell growth and division, genetics, ecology, and evolution. *One elective credit may be earned the first time class is taken*.

Chemistry: Grades 10-12

Year-Long/1 Credit

This course includes the theory and composition of the atom, the properties of matter, chemical reactions and equations, molar relationships, properties and behavior of gases, chemical bonding, solutions, reaction rates, acids and bases and electrochemistry. The class also includes the study of elements and their periodic properties, empirical formulas, properties and behaviors of solids and liquids. Chemistry laboratories are performed with an emphasis on problem-solving and proper use of scientific techniques.

Stream Ecology: Grades 10-12

Semester/.50 Credit

The students participating in this class will use the abundance of natural waterways around the school to study the interaction of the organisms that live within the stream. The interaction of the aquatic environment with the terrestrial will also be investigated. This class is very hands-

on, and the student will be outside an average of once a week. *This course is offered during the* 1st Semester.

Entomology: Grades 10-12

Semester/.50 Credit

This course is the study of insects. Dependent on the weather, students will be actively collecting insects from the outdoors. Information to be included is anatomy, identification, and economic importance of insects. *This course is offered during* 2^{nd} *Semester*.

Ecology: Grade 10-12

Semester/.50 Credit

This course will study the interaction between organisms and their environment by collecting environment data, finding signs of wildlife and investigating how species interact with each other and their environment. Students will be required to go outside for some of the lessons.

Organic Chemistry: Grades 11-12

Year Long/1Credit

This course is chemistry-based off of the carbon atom. Organic molecules are the basis for what makes living things. This course is significantly different from the inorganic class and requires a large amount of thinking about invisible molecules. Chemistry is a prerequisite. *Weighted class*.

Physics: Grades 10-12

Year Long/1 Credit

This course is based on the study of motion, acceleration, forces, gravitation, momentum, work, energy, machines, sound, light, optics, electricity and circuits. The class also covers vectors such as reflection and refraction, electric fields, and parallel and series circuit. Students are expected to work independently, exhibit higher-level critical thinking skills, and possess strong math skills. The knowledge of concepts is integral to the study of this science. *Weighted class*.

Wildlife: Grades 10-12

Year Long/1Credit

In this class, students participate in several ongoing wildlife research projects and then plan, execute, and create scientific publication and/or presentation a specific wildlife research project of their own. The class also requires that each student conduct a substantial outreach activity related to their major research topic with a group beyond the school community. Wildlife students also provide leadership to younger students on several wildlife and habitat research projects. The study of each selected species includes a comprehensive natural history review and includes its landscape and ecological context pertaining to its relationship with humans. The specific literature and course material used varies depending upon the animals selected for study. In all cases, key areas of study include the ethical and moral implications of live animal research, safety, wildlife management techniques and procedures, field research design and execution, and the preparation and delivery of research findings in a scientific presentation and/or publication.

Earth Science: Grade 11-12

Yearlong/1 Credit

This is a course that investigates topics in structures and the makeup of the earth around us. It is intended for any student interested in studying the earth's history, the dynamics of the earth and its ocean. Topics include rock and mineral identification, topography maps, plate tectonics, weathering and erosion.

Service Learning: Grades 10-12/E

Semester/.50 Credit

Leadership and Service Learning emphasize the importance of leadership skills, volunteering, and professionalism in the development of personal qualities. This course focuses on the benefits of community service, leadership roles, and civic responsibilities. Course projects and activities incorporate and reinforce academic skills such as math and science. Students are encouraged to explore areas of critical and creative thinking, responsibility, and cultural awareness as they relate to character development. Current technology is used to enhance communication skills and promote professionalism. This is a semester course that will introduce students to the terms and forms of Service-Learning and community service projects and how these projects are designed. This course will teach students the fundamentals of Service-Learning and have a strong focus on writing and deeper thinking about the world around them. This course will help students have a lifetime of engaged, responsible and active community involvement and leadership. Students participate in projects within the local community. (This course may be repeated.)

PHILOSOPHY

Philosophy I: Grades 11-12/R

Semester/.50 Credit

This class serves as a basic introduction to philosophy. This course will study topics such as prejudice, tolerance, rightness, family heritage, moral relationships, spiritual living, and the history of famous philosophers. Selected novels will be used to help students to understand the fundamental concepts of philosophy. It builds the framework from which students may begin to ask their own questions about themselves and the world we live in.

PhilosophyII: Grades 11-12/R

Semester/.50 Credit

This class reviews the content of Philosophy 1, and then builds on that content to provide an extensive overview with depth to the history of western philosophy. Concepts of logical thinking, decision making, and judging right from wrong are explored. The culminating activities are designed to make students better decision makers uses the principles of philosophers. Students will write about evaluating and comparing different philosophical ideas.

TECHNOLOGY EDUCATION

Technology Education: Grade 7/R

9 Week

This is an introduction to the working of a wood shop. The students in this course are trained in the basics of measurement and able to read a tape measure with 100% accuracy. They are versed in the utmost safety standards that are required in a wood shop environment. During the nine weeks, the student will be introduced to, and by the end of the nine weeks, will have mastered using a scroll saw. The students will work on many projects using soft wood. They will learn to follow a pattern and make many things such as a whale, flying geese, puzzles, 3D animals, and cutting boards. By completing these projects, the students will become proficient at cutting, sanding, staining, and painting.

Technology Education/Skills for Life: Grade 8/R

9 Week

Building on the skills gained and concepts mastered in the seventh grade, this class reiterates and augments the basic fundamentals of Technology Education. In this class, the students will demonstrate correct safety practices and concerns when working on technology lab activities, demonstrate technical and organizational skills in following through on individual and team technology problems, use problem-solving and creative thinking abilities to solve a variety of technical problems, and use computers and other new technology to help solve problems in Technology Education. The students will also utilize cooperative learning skills in managing personal relationship skills in each module. Students will also be introduced to the basics of plumbing, carpentry, electricity, drywall, drywall finishing, and painting.

CO2 dragsters and Rocketry Grades 9-12

Semester Course /.50 Credits

The students will build miniature racing cars which are rocket-powered by a carbon dioxide cartridge and race them. Students learn about the forces of gravity, drag, wind resistance, and the motion of air as a fluid. The projects mainly test the aerodynamic, mass and friction properties of a car.

The Students will design and their own Model Rocket and launch it. The student will be introduced to the scientific principles of flight, propulsion, and aerodynamics. Newton's laws of motion are introduced and explained in practical terms.

Robotics Grades 9 -12/E

Semester Class/.50 Credit

Robotics is a one semester fun hands on course on how to build, design, and program a Lego EV3 Robots. Through this course the students will be exposed basics of mechanical engineering, design, and computer programming. The students will be introduced to concepts such as gear ratios, spur, worm and bevel gears. The students will gain practical experience using the EV3 Lego Robot kits with programing motors, lamps and different types of sensors. Student will be exposed to practical mathematical concepts such as angle, ratios and proportions, averages, spatial reasoning and patterns. The student will be introduced to computer programing concepts such as structures, loop and subroutines. The students taking this course will gain experience in problem solving and creativity. Students will assessed on team work, creativity, work ethic and the ability to complete robot challenges set forth in the class

Electricity I, II, III, IV: Grades 9-12/E Semester/.50 Credit

Electricity exposes students to the circuitry that is found in today's residential homes. By the end of the course, students will be able to wire simple to the most complex circuits in the home. Students will be able to wire receptacles, lights, and switches into many circuit combinations. The student will also be proficient at wiring 3-way and 4-way switches and service entrances. This is a hands-on course and a work will be done in the class room.

Technical Aspects of Drafting & Cad/Grades 9-12/E

Semester/.50 Credit

This is an introductory course that focuses on the basic drafting concepts that are used in industry. Students will do technical sketching, board drawing, and computer drafting using Solid Edge. Emphasis will be placed on Geometric Construction and Multi-View projections. Students who elect to take this course must be able to measure and have basic math skills.

These wood working courses is driven by the ability of the individual student. Beginning students will work the mastering the use of each machine in the shop safely. This class is a student-led class. The instructor is a facilitator and is available for advice as well as giving direction on advanced skills not yet known to the student. The student is expected to be working on a project daily based on level of skill the student. After a project is completed, it is expected that the student will choose a project that is more challenging than previous projects they had completed. The goal of these classes is to teach safety, responsibility, work ethic, and pride in their work, and skills they can use over a lifetime.

Welding 1: Grades 9-12/E

Semester/.50 Credit

This course provides the exploration, study and hands-on exploration of metal working and joining. Students will study the occupations through use of textbook and visiting related sites on field trips. Textbook studies are reinforced with hands on activities of sheet metal work, threading, and sandcasting, use of hand tools, shop machines, (OAW) Oxy-Acetylene welding, (SMAW) Shielded Metal Arc Welding, (GMAW) Gas Metal Arc Welding, (OAC) Oxy-Acetylene Cutting, and (PAC) Plasma Arc Cutting. Activities are conducted in a teamwork environment.

Welding II, III, IV: Grades 9-12/E

Semester/.50 Credit

This course involves more independent work than Welding I. More complex projects are involved in Welding II requiring more complex attention to "lay-out" and design.

Additional Information

AP/Honors Courses/Dual Enrollment

Honors classes are available with the supervision of a certified teacher. If a course is eligible for an Honors class, it is indicated in the course description.

If a student would like to take an AP class, the student must have demonstrated previous work ethic and be approved by the AP teacher to qualify for this class.

*Weighted Grade Courses

High School weighted classes are indicated at the end of each weighted course description. Physics, Advanced Biology, Organic Chemistry, Anatomy & Physiology, Functions & Trigonometry, Pre-Calculus, Spanish III, Spanish IV, AP English, AP History, AP Spanish, and Courses offered from Gannon University or any Board approved Dual Enrollment University classes. Honors classes are also weighted. Honors English and History are available on an individual basis. Weighted courses will be taught at an accelerated rate and have nightly homework.

Weighted Grading Scale

Regular Course	Weighted HS & Honors Course	AP	University Course
A=4	A=5	A=5.5	A=6
B=3	B=4	B=4.5	B=5
C=2	C=3	C=3.5	C=4

D=1	D=1	D=1	D=2
F=0	F=0	F=0	F=0

Keystone Courses

Students not passing the Keystone tests are required by PDE to take Keystone Prep classes; these prep classes will be counted as electives the first time the class is taken.

Senior Project

A 35 hour mentorship is required for graduation. English 12 includes a required senior project. Students that do not take English 12 and replace it will an AP or Gannon Class are still required to complete their senior project in order to graduate.

Not all courses will be offered annually. The administration reserves the right to schedule classes based on enrollment.

E= Elective

R=Required