

NEW CASTLE JUNIOR/SENIOR HIGH SCHOOL COURSE DESCRIPTION BOOK



2019-2020 Board of School Directors

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NONDISCRIMINATION POLICY All activities and courses; including industrial arts, vocational-technical education, home economics, and physical education courses at the New Castle Area School District, are available to all students as required by Title XI, Title IX, and Section 504. If there are prerequisites, they are based on your ability and aptitude, not on race, color, national origin, sex, or any handicapping conditions. If you are physically or mentally handicapped, you may qualify for special services and instruction, and equipment modifications so you can successfully complete the course or participate in any activity. If you have any questions about equal educational opportunities or complaints of harassment or discrimination, contact New Castle Jr./Sr. High School, 310 Lincoln Ave., New Castle, PA 16101 (724) 656-4700.

New Castle Area School District



Mission Statement

The mission of the New Castle Area School District is to create a safe and respectful learning environment, fostered by collaborative community partnerships, where all students will develop necessary skills both academically and socially that will prepare future-ready life-long learners who will become productive citizens and resilient leaders in a global society.

Vision Statement

The vision of the New Castle Area School District is to provide a safe, respectful learning community for students that embraces diversity, promotes a high-quality academic program, and supports the development of the "whole child." Through use of research-based best practices, state-of-the-art resources, and relevant curricula designed to meet individual needs, the learning environment will enable students to maximize their academic potential while preparing them to be future-ready learners and resilient leaders in a global society.

Shared Values

We Believe:

- All students have the potential to learn and deserve the opportunity to receive high quality education that challenges them to think deeply and critically.
- Learning is a life-long journey supported through "whole child" development both at home and school.
- Social and emotional learning will help student and staff manage emotions, set positive goals, and build meaningful relationships through empathy and understanding.
- Educational excellence is achieved through the collaborative efforts of students, family, school, and community.
- Academically, socially, and athletically we empower students to explore their talents and creatively shape their own future.
- Students must be respectful responsible and resilient life-long learners in order to be productive citizens.
- Career readiness, awareness and exploration is essential for students of all ages to better prepare them to be productive citizens in this global society.
- Technology is a vital tool that can transform and personalize teaching and learning experiences for all students at all levels PreK – 12.

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Course Description Book 2019-2020

Introduction

In planning an effective and realistic high school program, the New Castle Area School District prepared this booklet to help coordinate your child's educational plans. It contains information about various curricular choices, individual course selection, and important school policies. A wide variety of courses are offered to meet the abilities and interests of all students. You should study the contents carefully and consult with your counselor before you plan a specific schedule for next year.

Keep this publication throughout the school year so you may refer to it for future planning, school policies, graduation requirements, etc. The information and guidelines contained in the booklet can help you avoid difficulties in carrying out your academic program.

As you select your courses, attention should be given to course requirements, entrance prerequisites, and course sequences. You should realistically assess your capabilities and ambitions. If you have any doubts or questions concerning a course, you are encouraged to discuss those concerns with the appropriate teacher or counselor.

In early spring, next year's freshman, sophomores, juniors, and seniors will have the opportunity to register for the upcoming year. Please read the course descriptions carefully and be prepared for your conference when it is scheduled. Requests for schedule changes will be difficult, if not impossible, to accommodate after the first Friday in May.

Important Notice

Parents/guardians and students are advised that course recommendations will be made by the student's current teacher for placement in English, Math, Science, Foreign Language and for Honors and AP levels of Social Studies courses. Some electives require auditions or application for admission to be completed and approved. Please take every effort to learn the requirements of enrollment in various courses.

A listing of the courses that students are pre-registered will be sent to parents for review. Parents/guardians who would like to make any changes to the recommendations for their child may do so through a scheduled meeting with the appropriate guidance counselor where rationale for the placement will be discussed. Parents/guardians will be required to sign a waiver of the recommendation for their child to be placed in a different course. Students placed in courses through a parent waiver of recommendation will be required to remain in the course for one full semester before any change of schedule will be considered.

Any change in schedule after courses begin in the fall will result in a W posted on the transcript for the student. It is very important that students take great time to plan their course selections. Guidance counselors will meet with each student during the selection process to review credits earned and credits required. Current teachers of courses are available to explain the course requirements of any program that a student is considering for enrollment.

New Castle Junior High School



7th Grade Course Outline

ELA 7 or Accelerated English 7
World Cultures
Math 7 or Pre-Algebra
Science 7
Physical Ed./Choir or General Music (90 days) (Each scheduled every other day) or Instrumental Music (meets every day) (180 days)
• STEAM CreAtions • Family Consumer Science • Technology & Gaming • Design & Modeling Rotation 9 weeks each
Foreign Language for identified students
Lunch

8th Grade Course Outline

ELA 8 or Accelerated English 8
U.S. History 8 or Accelerated U.S. History 8
Math 8 or Algebra I
Science 8 or Integrated Science
Physical Ed./Choir or General Music (90 days) (Each scheduled every other day) or Instrumental Music (meets every day) (180 days)
• Art • Research/Career Awareness • Automation & Robotics • Computer Science Rotation 9 weeks each
Foreign Language for identified students
Lunch

* Enrollment in a Foreign Language in 7th or 8th grade is based on assessment scores and exceptional academic excellence. Foreign Language in 7th or 8th grade will be in lieu of the double period of ELA, along with accelerated English.

* If a student elects Instrumental Music, Physical Education may be in place of STEAM CreAtions or Technology & Gaming in 7th grade or Art or Research/Career Awareness in 8th grade for a 9 week rotation.

Individual needs will be addressed with the family and school district for possible adjustments based on individual circumstances.

New Castle Senior High School



New Castle Senior High School aims to provide a program of studies which develops the skills and talents of each student. In addition to the required courses, students are encouraged to elect courses which are challenging. In completing the pre-registration form, be certain to list the credit value of each course as it appears in the course description book.

New Castle Junior/Senior High School Graduation Credit Requirements Starting for the Class of 2023

Course	Credits
English	4
Social Studies	4
Math	4
Science	4
Health/Phys Ed./Safety	2
Financial Literacy	.5
STEAM Elective	.5
Electives	6.5
Total	25.5

- Students must have earned 6 credits to be classified as Sophomores.
- Students must have earned 13 credits to be classified as Juniors.
- Students must have earned 19.5 credits to be classified as Seniors.
- Students must earn 25.5 credits to graduate.

A completed College and Career Readiness Project

- Career Evaluations – ASVAB
- Resume
- Cover Letter
- Senior Research Paper
- Job Shadowing
- Community Service

Note: Participation in the graduation ceremony is contingent upon a student's successful completion of an instructional program appropriate to his/her needs and upon the student having completed the credit requirements for graduation.

ACCELERATED COURSES INCLUDE:

Accelerated English 9
Accelerated English 10
Accelerated English 11
Accelerated English 12

HONORS COURSES INCLUDE:

Honors English I
Honors English II
Honors English III
Honors World Cultures
Honors Biology
Honors Concert Band
Honors Spanish V
Honors French V
Honors Italian V
Honors Calculus
Intro to Engineering
Principles of Engineering
English Design and Development
Computer Science Essentials

ADVANCED PLACEMENT COURSES:

Advanced Placement Calculus
Advanced Placement Chemistry
Advanced Placement English
Advanced Placement U.S. History
Advanced Placement Economics
Advanced Placement Biology
Advanced Placement Physics
Advanced Placement Computer Science Principles

COLLEGE IN HIGH SCHOOL COURSES

Advanced Placement Calculus
Advanced Placement English
Advanced Placement Chemistry
Advanced Placement U.S. History
Advanced Placement Economics
Advanced Placement Biology
Expository Comp. & Research
Honors Spanish V
Honors French V
CAD I, II, III
Introduction to Electronics
Graphics I, II, III, IV

* All students must meet the requirements of the New Castle Area School District attendance policy to receive credit for course taken. Advanced Placement tests are encouraged. Students must stay in the Accelerated, Honors, and Advanced course for the entire year. If a student decides to drop an Accelerated, Honors, or Advanced level course, a meeting with student, parents, teacher, and counselor will be held, before approval to withdraw is granted. This student will not receive credit for that semester of work.

New Castle Course	Seton Hill Course		Credits		Teacher
AP U.S. History	HY 103 U.S History		3		J. Shaftic
Honors Spanish 5	SP 105 Elem. Spanish Lang. & Cult. II		3		K. Townley
Honors French	FR105 Elementary French Language and Culture II		3		B Delgros
AP Biology	BL 150 Biology I	BL 162 Plant Bio & Ecology (second semester)	3	3 Second semester	T. Emery
Biology Labs	BL 151 Bio Lab		1 Included in 1 semester		T. Emery
AP Chemistry	CH 108 General Chem + Lab (Fall)	CH 109 General Chem 2 + Lab (second semester)	4	4 Second semester	S. Harlan
AP English	EL 263 Topics in World Literature		3		B. Ondako
Expository Comp & Research	LA 100 Basic Comp.		3		B. Ondako
AP Calculus	MA 130 Calculus with Analytic Geom.		4		F. Mantinaos
AP Economic	EC101 Principles of Microeconomics		3		M. Peluso

Students must be approved for admission to the course by teacher recommendation following strict guidelines with grades earned in prerequisite courses to be eligible for college credit.

These courses will be delivered with the rigor and intensity of a college level course. All courses will be taught by New Castle faculty that are trained and monitored closely by Seton Hill University.

Students enrolled in the courses will have the opportunity to use Seton Hill University resources. Students will also visit the campus during the school year to explore the school.

Transcript with Seton Hill courses and credits will be provided to each student. This transcript can be used in the college admission process for exemption from freshmen college level courses. Most colleges and universities will accept credits from Seton Hill. Students are not required to register for the college credit.

Pittsburgh Technical College College in High School

Pittsburgh Technical College proposes to work together with the High School to offer students the ability to earn college credits through the process of PTC College in High School Program.

Students will be able to:

1. Register for one or more approved courses on the attached listing. These courses have been reviewed and approved by both High School and PTC Representative.
2. Receive college credit for each course through Pittsburgh Technical College
3. Take college credit courses at a reduced rate of \$50.00 per credit (A four credit course would cost \$200.00, plus any required materials). The tuition payment is non-refundable if the student would withdraw from the course(s).
4. Tuition must be paid by November 1st.

Any interested student would complete the required enrollment form.

*Once the registration is approved through the High School and payment is received, the student will be registered in our Student Information System(SIS) and have access to the student portal at PTC.

Students enrolled in courses through PTC will have the ability to access the resources through the PTC Learning Center.

Important points to consider:

- These courses cannot be dropped once the school year has started. Students must remain in the course.
- It may be an extreme challenge to enroll in all of the courses (even if recommended by prerequisite teacher). Monitor and plan your schedule to avoid burn out and undue stress and anxiety.
- Most students will not be able to complete both AP Sciences, unless summer school program is completed to provide opening in school schedule to accommodate the two lab sciences. This option is only recommended for a student with a very extensive interest in science and a strong focus on study and preparation.
- There will be a processing fee for each course through the College in High School Program.

Pittsburgh Technical College (PTC) Articulation Agreement with New Castle High School

This partnership/articulation agreement will enhance the opportunities for students still enrolled in the high school experience.

1. PTC proposes to share our existing curriculum with New Castle to allow instructors at New Castle to teach to PTC curriculum.
2. Students would receive the training from New Castle instructors.
3. On a scheduled date(s) April of each year the students would sit for articulation testing.
4. A representative from PTC would proctor the tests and upon review of student results would grant exemption from test(s).
5. The exemption passing grade would be 80% or greater.

New Castle Area School District

		Pittsburgh Technical College		
CIP Code	Course	Program	Course	Credits
15.1301	CAD 1, 2, & 3	CAD	CAD101 Drafting 1 <i>(with test)</i>	4
			CAD111 AutoCAD <i>(with test)</i>	4
			CAD133 Mechanical Drafting 1 <i>(with test)</i>	4
			CAD143 Introduction to Parametric Modeling <i>(with test)</i>	3
11.0201	GameMaker Prog. 1 & 2 (Zulama)	Computer Programming	ITP306 Game Development 1	4
15.0303	Introduction to Electronics (PTC)	Electronics Engineering Technology	ELT101 Math for Electronics <i>(with test)</i>	4
			ELT115 Electricity <i>(with test)</i>	7
50.0402	Graphics 1, 2, 3, & 4	Graphic Design	GDA116 Drawing <i>(with test)</i>	1
			GDA126 Color Theory & Techniques <i>(with test)</i>	3
			GDA129 Computer Illustration (IL) <i>(with test)</i>	3
			GDA130 Digital Imaging <i>(with test)</i>	3
		General Education (Online)	GES150 Critical Thinking <i>(with test)</i>	4

SCHEDULE CHANGE POLICY

All schedule changes **MUST** be made by the first **Friday in MAY**. To make a schedule change, the student must secure and complete a change form from the guidance office. No changes will be accepted over the phone or by email. Because of class size or class conflicts, not all requests can be honored. The School District reserves the right to place a student in a course to ensure that he/she can earn the required amount of credits for graduation.

- Required courses may not be dropped at anytime.
- Requests to be scheduled into or out of a specific teacher's class will not be granted.

CLASS STANDING/PROMOTION CLASS STANDING

Freshman.....Transfer or Promotion from Grade 8

SophomoreCompletion of 6 credits

Junior.....Completion of 13 credits

Senior.....Completion of 19.5 credits

Graduation.....Completion of 25.5 credits

Students who do not meet the minimum credit requirement for class standing will not be promoted to the next grade. Class standing will affect the computing of class rank.

WEIGHTED GRADES/GRADE POINT AVERAGE 9TH – 12TH GRADE

The following grade point system is designed to reflect overall course difficulty and to encourage students to pursue academically challenging courses. The weighted grades will be used in computing class rank.

Regular Courses	Accelerated Courses	Honors Courses	Advanced Placement
A – 4.0	A – 4.25	A – 4.5	A – 5.0
B – 3.0	B – 3.25	B – 3.5	B – 4.0
C – 2.0	C – 2.25	C – 2.5	C – 3.0
D – 1.0	D – 1.25	D – 1.5	D – 2.0
F – 0	F – 0	F – 0	F – 0

School Counseling Department

Goal: The goal of the guidance staff at New Castle Senior High School is to aid each student to acquire the self-knowledge necessary to make sound decisions regarding his/her future and to help the student with the various concerns of adolescence.

Guidance:

1. Educational-high school and post-graduate
2. Vocational-career and job planning
3. Personal-adjustment to life during adolescence; guidance is available for those seeking assistance with any type of problem.
4. Scheduling Advising

Assessment/Testing Program:

SAT I, II, and ACT: Students should check the Guidance Bulletin Board for dates/deadlines
 7th and 8th grades - CDT and PSSA testing in Math, ELA, and Science 8
 9th, 10th, and 11th grades - CDT and Keystone testing in Algebra I, Literature 10, and Biology

Testing Calendar:

PSSA - March/April
 Keystone Exams - December and May
 AP Exams – May

Freshman: Career Interest Inventory	
Sophomores: PSAT	Juniors: PSAT
ASVAB	AP EXAMS
AP EXAMS	SAT TEST
	SAT SUBJECT TEST
	ACT TEST
Seniors: SAT TEST	
SAT SUBJECT TEST	
AP EXAMS	
ACT TEST	

College Admissions: Colleges use various criteria for evaluating student applications for acceptance. It is important that the student know the specific requirements established by the schools to which he/she is applying. The resources available in the Guidance Office are good sources for this information.

Some of the criteria that colleges and universities consider are the following :

- Quality point average
- Strength of curriculum
- SAT I, SAT II, ACT scores (Junior year score & Senior year score)
- Essay
- Recommendations
- Interview
- Class rank *
- Test junior/senior year

*Class rank is by percentile. Guidance reports if the student is in the top 10%, 20% , etc. This option was developed so that our students will not be penalized because of the competitive environment here at the New Castle Senior High School.

Tutoring Program

Based on previous standardized test scores, Classroom Diagnostic Tools Data (CDTs), and/or teacher recommendation, students are provided with tutoring. To prepare for the Pennsylvania System of School Assessment (PSSA Exams), junior high students in the tutoring program will be provided tutoring in one or more of the following areas: English, Math, and Science. To meet state mandated remediation requirements and to prepare for the Keystone Exams, senior high students will be provided tutoring in one or more of the following areas: Literature, Algebra, and Biology. Students are provided the tutoring during the school day and are scheduled from their academic prep, elective courses, or rotation courses on a periodic routine.

Cooperative Work Experience

Seniors: 1.0 credit Pass/Fail

Cooperative education gives students the chance to attend school and perform entry level tasks in businesses within our community. Students will be required to submit an application to be considered for this class and must be in good standing with attendance, discipline and academics. All applicants will be screened by administration prior to approval. Participation in this program will be on a limited basis. Employment will be verified by the supervising teacher. The teacher, guidance counselor and employer will work together to assure student success in school and on the job. Graduation is the goal for every student so no student will be considered if they are behind in graduation requirements and credits. An orientation meetings will be held in May/September/January.

Additional Requirements:

- Application for co-op must be turned in at the end of 11th grade year to be considered for approval.
- Students will have class and remain in the building 1 day per week to work on soft skills and SEL curriculum. This will be worked out by teacher and employer.
- Assignments will be given each week and will need to be completed as per deadline given by instructor.
- Current work calendar/schedules must be turned in every two weeks or monthly.
- Students must turn in pay stubs bi-weekly
- On-site visits by teacher/guidance counselor/principal will happen at least once per 9 weeks (more frequent if necessary).
- At any time, students may be asked to return to school if teacher feels they are not upholding the established expectations.

Academic Preps/Study Hall Periods

Academic Preps are study periods for students to complete work, study for tests, get tutoring, and complete graduation requirements. Study halls are a non-credit class and will only be issued on a limited basis. School counselors, tutors, and principals will determine whether or not students requesting a study hall period will need one.

ART

ART ELECTIVES	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	ART 1	ART 1	ART 1	ART 1
	ART 2	ART 2	ART 2	ART 2
	JEWELRY	ART 3	ART 3	ART 3
	DIGITAL PHOTO	JEWELRY	JEWELRY	JEWELRY
	GRAPHICS I	GRAPHICS I	DIGITAL PHOTO	DIGITAL PHOTO
	GRAPHICS II	GRAPHICS II	GRAPHICS I	GRAPHICS I
		GRAPHICS III	GRAPHICS II	GRAPHICS II
		GRAPHICS IV	GRAPHICS III	PORTFOLIO PREP
			GRAPHICS IV	GRAPHICS III
			MARKETING & DESIGN	GRAPHICS IV
				MARKETING & DESIGN

7th STEAM CreAtions

This course will explore “making” in the Arts and Sciences with digital tools and other technology such as circuitry kits, as well as hands on projects with Interdisciplinary Installation and 3D Art projects.

8th GRADE ART

This course builds on visual measuring, drawing skills, and introduces principles of design and an understanding of life being inspired by art. Students will use critical thinking during subtractive 3D projects and group effort projects to influence their environment as seen in art history. This course expands the painting, shading techniques in 2 D and 3D projects. This course utilizes multi-media such as balsa foam, chalk, markers, computers, colored pencils, and a variety of paints. Homework reinforces class work through repetition. Following this class completion with advanced skills, a student can select to skip Basic Art in 9th grade.

ART 1

Freshmen, Sophomores, Juniors, and Seniors
Credit: 1.0

The course covers an introduction to techniques, concepts, and medias, often-through association with art history, emphasizing contemporary trends. The student will be responsible for the purchase of a sketchbook for this course. It includes drawing, painting, sculpture, ceramics, and printmaking. Only 8th grade art students with a grade average of at least 80%, or with the art teacher recommendation, may consider the option of electing the Art 1 course.

PREREQUISITE: Basic Art or Teacher recommendation.

ART 2

Freshmen, Sophomores, Junior and Seniors

Credit: 1.0

The course is split into two semesters focusing on 2D and 3D techniques. The 3D techniques are designed to branch from the basic knowledge of working with clay as a medium that is attained in Basic Art and Art 1 classes. Students will be given advanced hand building as well as wheel-thrown assignments to complete. The second half of the semester will focus on 2D techniques, providing students with an opportunity to develop individual expression through drawing. The study of historical and contemporary artists will be an integral part of the course and discussion through oral and written critiques.

PREREQUISITE: Basic Art and Art 1. Teacher recommendation required.

ART 3

Sophomores, Juniors and Seniors

Credit: 1.0

A one year advanced level course in 2D and 3D processes with an emphasis on developing a greater depth of understanding of composition and application of the elements of art and principles of design. Famous artists will be researched and used as a learning tool when creating artwork. Assignments will encourage exploration of drawing and mixed media applications through still life observations, drawing from the figure, portrait study, illustrations, and imaginative works. Students will build upon previous experiences using a variety of drawing media including traditional pencil, oil, crayon, chalk pastel, and pen. Studio experiences also include ceramics, sculpture, and 3D design projects. With an emphasis on studio production, this course is designed to develop higher-level thinking. Each student will demonstrate progress over time by developing a body of work, organizing a portfolio, and student an art exhibit. This course may be repeated.

PREREQUISITE: Must have completed Art 2.

JEWELRY CASTING AND FABRICATING

Freshmen, Sophomores, Juniors, and Seniors

Credit: .5

Jewelry is a course in three-dimensional design which develops an understanding of the art elements and principles. It is designed as a yearlong course with the prerequisite of the teacher recommendation. This course introduces technical skills that are necessary to design and create artistic, personal adornment. This will provide the student with an in-depth study and practice of various jewelry making skills such as filing, sawing, soldering, casting, fabricating, and stone setting. Students will learn techniques of construction to create a variety of projects including necklaces, earrings, pins, and rings. With an emphasis on studio production, this course is designed to develop higher-level thinking, art-related technology skill, art criticism, art history, and aesthetics. Materials for required work will be provided. Students may supply other optional material. Teacher signature required.

PREREQUISITE: Teacher recommendation.

DIGITAL PHOTOGRAPHY

Freshmen, Sophomores, Juniors and Seniors

Credit: .5

Digital Photography will also be taught through the use of Photoshop and/or other digital programs. Concepts of composition and elements of art will be emphasized through the digital process of photography.

PREREQUISITE: Must have completed Basic Art and Art1. Teacher recommendation required.

GRAPHICS I

Freshmen, Sophomores, Juniors and Seniors

Credit: .5

This course offers foundation skills relevant to the discipline of graphic design. Students develop and expand their vocabularies in visual communications, exploring basic design elements and principles for solving communication problems. Students conduct research, generate ideas, study form and media, learn to analyze and discuss their own work as well as that of others, and become familiar with the graphic design process. We will be using various design programs, including Adobe Illustrator.

PREREQUISITE: Introduction to STEAM

GRAPHICS II

Freshmen, Sophomores, Juniors and Seniors

Credit: .5

In this course, students will build strong visual problem solving skills and explore three main phases of the creative process: defining problems, getting ideas, and creating form. Participants will take on a project from beginning to end, and along the way explore a variety of techniques for creative problem solving relevant to artists and designers. Activities might include sketching from pencil and the process to change design to digital art. Students will also learn relevance of art, from marketing to creating tangible art with vinyl cutters and other state-of-the-art equipment.

PREREQUISITE: Graphics I

GRAPHICS III

Sophomores , Juniors, Seniors

Credit: .5

In this class we will be building upon skills learned in previous Graphic Design classes, and applying them to technology available. Students will use creative problem solving skills to break down designs made on the computer into layers that can be developed into tangible pieces of Art. Along with use of **Adobe Illustrator** and **Photoshop**, students will use the knowledge of those programs and transfer relevant skills into use on the Plotter, Vinyl Cutter, Laser Engraver, 3D printers and Silkscreening.

Students will also be required to use knowledge to advertise and market within the school. Assignments may be based on actual “jobs” and how to best represent their district with their skills in Graphic Design. They will be

required to construct and manage a Google Site to build a portfolio that they may use to market themselves beyond graduation

PREREQUISITE: Graphics II

GRAPHICS IV

Sophomores, Juniors, and Seniors

Credit: .5

In this class we will be building upon skills learned in previous Graphic Design classes, and continue to apply them to technology available. Students will continue to use creative problem solving skills to break down designs made on the computer into layers that can be developed into tangible pieces of Art. Along with use of **Adobe Illustrator** and **Photoshop**, students will use prior knowledge of those programs and transfer relevant skills into use on the Plotter, Vinyl Cutter, Laser Engraver, 3D printers and Silkscreening. Students will also be required to use knowledge to advertise and market within the school.

Assignments may be based on actual “jobs” and how to best represent their district with their skills in Graphic Design. They will be required to construct and manage a Google Site to build a portfolio that they may use to market themselves beyond graduation.

PREREQUISITE: Graphics III

MARKETING & DESIGN

Juniors and Seniors

Credit: 1.0

Marketing and Design will be a collaborative class encompassing business and graphic design/arts. Students will work collaboratively with design students to use real world design/marketing skills to create Advertisements, Announcements that are given to them as “jobs” from areas throughout the district. The class will also serve as a class to design and sell apparel and accessories from the Canes Corner. Students will learn the valuable skills of business through purchasing, creating and selling student made ware. Graphic Design is a prerequisite, as students will be using previous skills to eventually screenprint to sell.

PREREQUISITE: Graphic Design and/or Teacher Recommendation

PORTFOLIO PREP

Seniors

Credit: .5

Portfolio Prep is a semester course designed for students who want to continue their artistic efforts at a more advanced level and/or intend to further their education at an art school, college, or university. Students work in all areas of art with particular emphasis on drawing, painting, and 2D design. Other projects include 3D design, art history, and various strategies for looking at, discussing, and writing about their artwork and the artwork of others. Through a variety of independent projects students are encouraged to look at and respond to themselves in terms of the aesthetic world around them. Emphasis will be placed on the preparation of a portfolio geared for entry into university or art school utilizing the school's requirements for admission into their program. Students must also prepare for an exhibition in the spring.

PREREQUISITE: Basic Art and Art I. Teacher recommendation required

BUSINESS

BUSINESS	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	COMPUTER APPLICATIONS	COMPUTER APPLICATIONS	COMPUTER APPLICATIONS	COMPUTER APPLICATIONS
	WEB PAGE DESIGN	ACCOUNTING 1	ACCOUNTING 1	ACCOUNTING 1
	DESKTOP PUBLISHING	WEB PAGE DESIGN	ACCOUNTING 2	ACCOUNTING 2
	EVOLUTION OF GAMES	FINANCIAL LITERACY (SEM REQUIRED)		WEB PAGE DESIGN
	MOBILE GAME DESIGN	DESKTOP PUBLISHING	WEB PAGE DESIGN	DESKTOP PUBLISHING
	GAME DESIGN	EVOLUTION OF GAMES	DESKTOP PUBLISHING	ELEC OFFICE CAREER READINESS
	SCREENWRITING FOR GAMERS	MOBILE GAME DESIGN	ELEC OFFICE CAREER READINESS	SPORTS AND ENTERTAINMENT MANAGEMENT
	3D MODELING I	GAME DESIGN	EVOLUTION OF GAMES	MOBILE GAME DESIGN
		SCREENWRITING FOR GAMERS	MOBILE GAME DESIGN	GAME DESIGN
		GAME MAKER PROGRAMMING I	GAME DESIGN	SCREENWRITING FOR GAMERS
		3D MODELING I	SCREENWRITING FOR GAMERS	GAME MAKER PROGRAMMING I
			GAME MAKER PROGRAMMING I	3D MODELING I
			3D MODELING I	Entrepreneurship Academy with MIU IV and BC3
			MARKETING & DESIGN	MARKETING & DESIGN
				CO-OP WORK EXPERIENCE

ACCOUNTING I

Sophomores, Juniors, and Seniors

Freshmen - in honors math track with teacher recommendation.

Credit: 1.0

Accounting I will give the student a thorough background in the basic accounting procedures used to operate a business. The concepts and procedures presented will serve as a foundation for employment in careers in business and provide the skills needed for college accounting courses. Students will study the theory and logic of the accounting cycle to understand and interpret financial data. The principles and methods of analyzing transactions, recording transactions, posting, and preparing financial statements are an integral part of the course. The focus of this course is on service and merchandising businesses organized as sole proprietorships and partnerships. All future business majors as well as any college bound students should take this course.

PREREQUISITE: None

ACCOUNTING II

Juniors and Seniors
Credit: 1.0

Accounting II is designed for students interested in a career in business or those who wish to further their knowledge in the course. Accounting II is an advanced course that builds upon the basics acquired in Accounting I. Topics in this course will improve and broaden student knowledge and understanding of accounting concepts and procedures to include accruals and depreciation and apply them to corporate accounting. Special emphasis will be placed on payroll systems, special journals, and automated accounting.

PREREQUISITE: Accounting 1, grade of 70% or higher

ACCOUNTING III

Seniors
Credit: 1.0

This course includes advanced accounting procedures similar to those used by Certified Public Accountants. Time is spent on corporate accounting. Preparation of taxes for individuals and corporations is an integral part of this course. This course runs every other year.

PREREQUISITE: None

FINANCIAL LITERACY

Sophomores
Credit: .5

This is a required course that will introduce students to real-life situations for personal growth. Emphasis is placed on goals, budgeting, saving, checking, credit, career options, and insurance. This course will get students ready for the real world.

PREREQUISITE: None

COMPUTER APPLICATIONS

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

Student-applied activities in Microsoft Office include Excel, Access, and PowerPoint presentations. Evaluation is based upon the timely completion of lab activities in each of the various applications. Students must also complete a class project. Students will also learn how to use Google Apps for Education G-Suite. These skills will be similar to skills they learn with Microsoft Office.

PREREQUISITE: None

WEB PAGE DESIGN

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

The Web Page Design course is designed to provide students with skills that will make them more marketable in today's competitive business world. This course introduces students to the entire design process, from developing an idea to the finished product. Students will determine a target market, plan out the design, and apply design techniques. Using software, students will create their own graphics, learn how to make animated graphics, demonstrate essential design and layout techniques, and manage an entire website with proper storage and hyperlink navigation. Students will use Dreamweaver for this course.

PREREQUISITE: None

DESKTOP PUBLISHING

Juniors and Seniors
Credit: .5

Desktop Publishing is an elective available for 11th and 12th grade students. This course will focus on Microsoft functions, applications, and skills specific to Word and Publisher. Emphasis will focus on the layout and design of documents including brochures, pamphlets, newsletters, and other printed materials. Students will design their own personal publication.

PREREQUISITE: None

ELECTRONIC OFFICE / CAREER READINESS

Juniors and Seniors
Credit: 1.0

This course provides practical, up-to-date information that will prepare students for working in offices. Students will study information processing, telephone procedures and filing, basic communication, math skills, decision making, and problem solving. The emphasis is on practical applications-everyday skills and knowledge needed to be successful. Topics discussed include extensive information on effective use of computers, software programs, telephone equipment, and other office technology that includes computer networking concepts and telecommunications practices. The class also focuses on attitudes and human relationships that emphasize soft skills as much as on functional skills. These skills include understanding the importance of teamwork and the value of self-confidence. Career information and employability skills introduce students to the vast array of job opportunities and the most effective methods for pursuing those opportunities.

PREREQUISITE: None

COOPERATIVE WORK EXPERIENCE

Seniors
Credit: 1.0 Pass/Fail

Cooperative education gives students the chance to attend school and perform entry level tasks in businesses within our community. Students will be required to submit an application to be considered for this class and must be in good standing with attendance, discipline and academics. All applicants will be screened by administration prior to approval. Participation in this program will be on a limited basis. Employment will be verified by the supervising teacher. The teacher, guidance counselor and employer will work together to assure student success in school and on the job. Graduation is the goal for every student so no student will be considered if they are behind in graduation requirements and credits. An orientation meetings will be held in May/September/January.

Additional Requirements:

- Application for co-op must be turned in at the end of 11th grade year to be considered for approval.
- Students will have class and remain in the building 1 day per week to work on soft skills and SEL curriculum. This will be worked out by teacher and employer.
- Assignments will be given each week and will need to be completed as per deadline given by instructor.

- Current work calendar/schedules must be turned in every two weeks or monthly.
- Students must turn in pay stubs bi-weekly
- On-site visits by teacher/guidance counselor/principal will happen at least once per 9 weeks (more frequent if necessary).
- At any time, students may be asked to return to school if teacher feels they are not upholding the established expectations.

PREREQUISITE: Recommendation of Business department teacher, counselor and principal.

SPORTS AND ENTERTAINMENT MANAGEMENT

Juniors and Seniors

Credit: 1.0

Sports and Entertainment Management is a full-year course that will enable the student to understand and apply marketing, management, and entrepreneurial principles; to make rational economic decisions; and to exhibit social responsibility in a global economy. The students will use the Virtual Business Retailing software program to create their own businesses. The student is also required to work in the Canes Corner, the student-run store. Teacher approval required. Interested students must meet with the teacher to obtain a recommendation to enter the course as an elective. Recommendations at this point are tentative, based on further review of student discipline and attendance records.

PREREQUISITE: Teacher Recommendation

EVOLUTION OF GAMES

Freshmen, Sophomores, Juniors, and Seniors

Credit: .5

Today's professional game designers re-use dynamics from many different types of games in their blockbuster hits. This course gives you the chance to explore ancient cultures, their games, and find out how they designed games using available technology and resources. You will prototype and play games as well as get hands-on experience creating your own original game. Students will study and play the games of Babylon, Egypt, Rome, Medieval Europe and India.

PREREQUISITE: None

MOBILE GAME DESIGN

Freshmen, Sophomores, Juniors, and Seniors

Credit: .5

It seems as if everyone has an idea for an "app" these days! In this course, students will use professional game design techniques to create playable mobile games that can be added to a game design portfolio. Using Gaming Software, you will learn the fundamentals of game balance, apply competition and playfulness, demonstrate a working knowledge of triangularity, and debug using iterative game design. This course should be considered by students who are interested in programming.

PREREQUISITE: Evolution of Games, Teacher Recommendation

GAME DESIGN

Freshmen, Sophomores, Juniors, and Seniors

Credit: .5

“Gaming” doesn’t only mean video games. Gamers also play board games, card games, simulations, and participate in interactive stories. This course breaks down the design process step by step. Students will learn the fundamentals through hands-on modding, prototyping, and iteration of a variety of games. The final project will include building, play testing, and revising an original game that can be played with friends and added to your game portfolio.

PREREQUISITE: Evolution of Games, Teacher Recommendation

SCREENWRITING FOR GAMERS

Sophomores, Juniors, and Seniors

Credit: .5

Why do we cry at movies? Or cheer? Why do thrillers put us on the edge of our seats? Why do we write with a particular tone and clearly define a purpose for our writing? This course will help students understand, critique, and write dramatic stories for modern media including movies, games, and television. Students will develop skills in creative writing, awareness, provisional acting, and collaborative storytelling. Additionally, this course will place an emphasis on Pennsylvania English Standards including analyzing central ideas, author's purpose, sequencing, voice, and vocabulary.

PREREQUISITE: Evolution of Games or Teacher Recommendation

3D MODELING I (Zulama)

Freshmen, Sophomores, Juniors, and Seniors

Credit: .5

In 3D Modeling I, students will learn 3D modeling techniques that professionals use. They’ll use 3DS Max to manipulate and sculpt pure imagination into substantial digital art, resulting in a portfolio of original projects that they can use when applying for an internship, higher education, or a job. Students will be interacting with digital, three-dimensional art as it is a necessary skill that is utilized in various forms of media the 21st century such as in movies, video games, architecture, commercials, etc.

PREREQUISITE: Evolution of Games

GAME MAKER PROGRAMMING

Sophomores, Juniors, and Seniors

Credit: .5

Learn the concepts taught in a college-level “Programming 101” course, but all of the projects are games! You will receive an introduction to basic programming by building two dimensional (2D) games. GameMaker: Studio, the 2D game engine you’ll be using, is based on a scripting language that builds techniques that can be transferred to any other programming language such as Python, Java and C++. You will finish complete games that can be played with friends and added to your digital portfolio.

PREREQUISITE: Evolution of Games

MARKETING & DESIGN

Juniors and Seniors

Credit: 1.0

Marketing and Design will be a collaborative class encompassing business and graphic design/arts. Students will work collaboratively with design students to use real world design/marketing skills to create Advertisements, Announcements that are given to them as “jobs” from areas throughout the district. The class will also serve as a class to design and sell apparel and accessories from the Canes Corner. Students will learn the valuable skills of business through purchasing, creating and selling student made ware. Graphic Design is a prerequisite, as students will be using previous skills to eventually screen-print to sell.

PREREQUISITE: Graphic Design and/or Teacher Recommendation

ENGLISH

ENGLISH CORE CLASSES	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	ENGLISH I	ENGLISH 2	ENGLISH 3	ENGLISH 4
				BUSINESS ENGLISH
				MYTHOLOGY
				COMMUNICATIONS
	ACCELERATED ENGLISH 1	ACCELERATED ENGLISH 2	ACCELERATED ENGLISH 3	ACCELERATED ENGLISH 4
	HONORS ENGLISH 1	HONORS ENGLISH 2	HONORS ENGLISH 3	AP ENGLISH
ELECTIVES	YEARBOOK	YEARBOOK	YEARBOOK	YEARBOOK
	PUBLIC SPEAKING	PUBLIC SPEAKING	PUBLIC SPEAKING	PUBLIC SPEAKING
		DIGITAL JOURNALISM I,II,III	DIGITAL JOURNALISM I,II,III	DIGITAL JOURNALISM I,II,III
			SAT PREP	EXPOSITORY COMP/RESEARCH
			EXPOSITORY COMP/RESEARCH	

ENGLISH LANGUAGE ARTS 7 (ELA 7)

Students in grade 7 will be enrolled in a double period ELA 7 course. ELA 7 focuses on the communication skills of reading, writing, speaking and listening. Within the course, the students will work on grammar skills such as parts of speech, sentence parts, word agreement, modifiers and punctuation. Students will also work to develop increased reading abilities and prepare for their Pennsylvania System of State Assessments (PSSAs) given in the Spring.

The literature portion of this course will include a grade level study of vocabulary, fiction, nonfiction, poetry and drama. As part of the drama unit, all 7th grade students read Charles Dickens' [A Christmas Carol](#). Throughout the school year, students may also read one or more of the following novels: [The Legend of Sleepy Hollow](#); [The Devil's Arithmetic](#); [A Tree Grows in Brooklyn](#); [Freak the Mighty](#); [Percy Jackson & the Lightning Thief](#); [Rules](#); [Inkheart](#); [Bud, Not Buddy](#); [Hatchet](#); [Pictures of Hollis Woods](#) and [Locomotion](#). Please note, the titles of the novels are subject to change.

The Sadlier School Common Core Progress English Language Arts Book and *The Sadlier School Grammar for Writing* as well as *The Prentice Hall Penguin Edition Literature Book* for 7th grade and its accompanying workbook *Prentice Hall the Reader's Journey* are the adopted textbooks for the course. In addition, students will also use materials from *The Perfection Learning Vocabulary-Lit for 7th Grade* to enhance their grade level and academic vocabulary skills. The John Collins Writing Program will be implemented to improve student's performance in writing coherent Narrative, Informational/Explanatory and Argumentative essays.

In addition, students will use existing approved literature – stories, novels, and expository texts – as the basis for engineering design challenges that help them identify problems, design realistic solutions, and engage in the Engineering Design Process while reinforcing literacy skills. Students will develop their 21st century skills (creativity, critical thinking, collaboration, and communication). Students will read and define problems, collect information, brainstorm and analyze, develop solutions, gather feedback and then improve and finalize design.

ACCELERATED ENGLISH 7

The 7th grade Accelerated English course at New Castle Area Junior High School is designed for the 7th grade student who was recommended because they achieved at an advanced level in 6th grade ELA and scored advanced on most standardized tests and other measures.

In 7th grade Accelerated English, students will take an advanced approach to English Language Arts through critical reading, writing, speaking and listening, as set forth in the Pennsylvania Core Standards. Students will read, respond, analyze, and interpret a variety of literature, including, but not limited to, works of fiction, nonfiction, drama, and poetry. Students will demonstrate their in-depth comprehension and analytical skills through a variety of written genres.

The Prentice Hall Penguin Edition Literature Book is the adopted textbook, supplemented by The Reader’s Journey Workbook. The William Sadlier School Common Core Progress English Language Arts Book and The Sadlier School Grammar for Writing. Students will also be required to complete additional outside readings, including, but not limited to, A Christmas Carol; The Legend of Sleepy Hollow; The Monkey’s Paw; The Watsons Go To Birmingham; The Devil’s Arithmetic and A Tree Grows in Brooklyn. 7th grade accelerated students will gain practical skills to better prepare them for upper-level English courses, and they will be expected to work at an accelerated pace. This course also requires a summer novel. The John Collins Writing Program will also be implemented to improve student’s performance in writing coherent Narrative, Informational/Explanatory and Argumentative Essays.

In addition, students will use existing approved literature – stories, novels, and expository texts – as the basis for engineering design challenges that help them identify problems, design realistic solutions, and engage in the Engineering Design Process while reinforcing literacy skills. Students will develop their 21st century skills (creativity, critical thinking, collaboration, and communication). Students will read and define problems, collect information, brainstorm and analyze, develop solutions, gather feedback and then improve and finalize design.

PREREQUISITE: Assessment data and placement test

ENGLISH LANGUAGE ARTS 8 (ELA 8)

Students in grade 8 will be enrolled in a double period ELA 8 course. ELA 8 focuses on applying reading, writing, listening and speaking skills in an independent manner through meaningful interdisciplinary tasks. Students will be required to write using Collins Writing; grammar is taught in relation to composition, mainly through mini-lessons. Reading comprehension is developed by learning new strategies, building vocabulary and using context clues. Oral communication and listening skills are also emphasized.

The literature portion of this course includes the reading of several novels, analyzing and interpreting a variety of genres that includes Fiction, Non-fiction, Poetry, Folktales and Drama. Along with *The Prentice Hall Literature Book*, *The Reader’s Journey Workbook* and *The Perfection Learning Vocab-Lit Book* are used to supplement reading assignments. Worksheets to support literary analysis, reading skills, vocabulary builders and graphic organizers are included with each lesson. Several novels will be read and analyzed throughout the year. In the Spring, students will be reading a play, “The Diary of Anne Frank,” in which students can intensely explore and learn the events that led to the Holocaust.

The Sadlier School Common Core Progress English Language Arts Book and *The Sadlier School of Writing* are the adopted textbooks for use in this course. Both of these books are aligned with the PA Common Core Anchors for Writing. The John Collins Writing Program will also be implemented to improve student's performance through writing and thinking across the curriculum. Students will also employ the use of skills in writing coherent Narrative, Informational/Explanatory and Argumentative essays. Elements of grammar and mechanics of writing are emphasized throughout the course. **It is a must for every student to know the definitions of the Common Core terms used for PSSA testing.**

In addition, students will use existing approved literature – stories, novels, and expository texts – as the basis for engineering design challenges that help them identify problems, design realistic solutions, and engage in the Engineering Design Process while reinforcing literacy skills. Students will develop their 21st century skills (creativity, critical thinking, collaboration, and communication). Students will read and define problems, collect information, brainstorm and analyze, develop solutions, gather feedback and then improve and finalize design.

ACCELERATED ENGLISH 8

The 8th grade accelerated English course at New Castle Junior High School is designed to prepare students to meet the challenges of subsequent honors courses in the Advanced Placement Programs offered in the later grades at New Castle Senior High School. Accelerated English 8 focuses on developing critical and higher level thinking skills and deeper exploration of the course content. Students must have the ability to compose analytical responses to literature by writing multiple pieces to a variety of subjects related to the literature studied in the classroom. In addition to reading stories from *The Prentice Hall Literature Book*, *Perfection Learning Vocabu-Lit Book* and *The Reader's Journey*, students will explore nonfiction texts from other sources as well as complete independent projects. The teacher will use a variety of instructional strategies to engage advanced learners.

The John Collins Writing Program will be implemented to improve student's performance in writing coherent Narrative, Informational/Explanatory and Argumentative essays. Students must have the ability to control the elements of effective writing: grammar, sophisticated sentence structure and academic language.

Throughout the year, students may read one or more of the accompanying novels: [The Diary of Anne Frank](#); [Night](#); [The House of Dies Drear](#) and [The Pigman](#). Students will analyze to demonstrate extensive analytical reading skills. Students will also complete a summer reading assignment prior to entering 8th grade. Please note, the titles of the novels are subject to change.

In addition, students will use existing approved literature – stories, novels, and expository texts – as the basis for engineering design challenges that help them identify problems, design realistic solutions, and engage in the Engineering Design Process while reinforcing literacy skills. Students will develop their 21st century skills (creativity, critical thinking, collaboration, and communication). Students will read and define problems, collect information, brainstorm and analyze, develop solutions, gather feedback and then improve and finalize design.

PREREQUISITE: Teacher recommendation and 90% in previous English course.

GRADE 8 RESEARCH AND CAREER AWARENESS

Research and Career Awareness is a 9 week course for 8th grade students focusing on their individual strengths, goals, and interests as they relate to career planning and decision making. Students will develop skills to locate, evaluate and interpret information for relevance and credibility effectively. Research will be conducted on self-selected or assigned career topics using appropriate sources.

Research and Career Awareness is designed to guide students through the process of investigation and development of a high school, college and career achievement plan. Students will use computer software and other tools to explore valid, reliable educational and career information to learn more about themselves and their interests and abilities. Students will then connect those interests and abilities to develop career options. Students will explore a range of both traditional and nontraditional careers and the training programs that are available. Careers in the

global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. We will blend written, oral, and graphic communication into the development of a career portfolio. Included in their portfolio will be a basic first resume, cover letter, potential interview questions, personality assessment, interest survey, career cluster exploration, career research, budget sheets, and high school academic offering information.

ENGLISH I

Freshmen
Credit: 1.0

This is a literature-based course, which incorporates reading, writing, and speaking skills. Grammar and usage are taught in conjunction with the literature and writing. The literature course will introduce the student to various genres of literature through the use of short stories, poetry, plays, and one novel.

PREREQUISITE: None

ACCELERATED ENGLISH I

Freshmen
Credit: 1.0

This course is designed as a comprehensive study of literature and composition for students displaying strong reading and writing skills. Grammar and usage are taught in conjunction with more challenging text materials. Limited novel analysis is incorporated. Research is introduced in various projects.

PRE-REQUISITE: English 8, 80% and Teacher recommendation

HONORS ENGLISH I

Freshmen
Credit: 1.0

This course provides a more comprehensive study of literature and composition for students with advanced reading and writing skills. Students will read and analyze at least five novels in addition to text materials. Students will learn the basics of literary essay writing, as well as Modern Language Association formatting. Research basics are introduced. Project based assignments are also incorporated.

PREREQUISITE: Accelerated English 8, 90%

ENGLISH II

Sophomores
Credit: 1.0

This course is a literature-based course which will build reading, writing, speaking, library skills, and literary analysis. Grammar and usage will be taught in conjunction with the literature and writing. Novels will be read and analyzed. Research is introduced in various projects.

PREREQUISITE: None

ACCELERATED ENGLISH II

Sophomores

Credit: 1.0

The core of this class is a survey of American literature from the seventeenth to twentieth century. This is a literature-based course for college-bound students focusing on building reading, writing, speaking, research, and literary analysis skills. Writing includes practice in styles of narrative, informative, and persuasive writing, as well as the implementation of correct grammar, usage and mechanics. Research includes creating a works cited page, as well as utilizing in-text citations using MLA formatting standards. In addition to text book material, students will read and analyze three novels.

PREREQUISITE: Accelerated English I, 80% ; English I, 90% with recommendation

HONORS ENGLISH II

Sophomores

Credit: 1.0

The core of this class is a survey of American literature from the seventeenth to twentieth century. This is a literature-based course for college-bound students focusing on building reading, writing, speaking, research, and literary analysis skills. Students will work independently and collaboratively to comprehend, analyze, and discuss works of fiction and non-fiction. Writing includes practice in styles of narrative, informative, and persuasive writing, as well as the implementation of correct grammar, usage and mechanics. Heavy emphasis is placed on analyzing textual evidence, as well as using this evidence to demonstrate comprehension. Research includes works cited, in-text citations, and MLA formatting. In addition to textbook material, students will read and analyze six novels.

PRE-REQUISITE: Accelerated English I, 90% with teacher recommendation; Honors English I, 80%

ENGLISH III

Juniors

Credit: 1.0

This course covers selected literature of the major World Literature with a focus in British Literature times through the present time. Reading as well as four types of writings are stressed. Two novels will be read and analyzed.

PREREQUISITE: None

ACCELERATED ENGLISH III

Juniors

Credit: 1.0

This course provides college-bound students with a survey of British literature from Anglo-Saxon times through the present. Reading and speaking will be developed, and the four types of writing -description, narration,

informational, and persuasion will be stressed. In addition to the text material, students will read and analyze three novels.

PRE-REQUISITE: Accelerated English II, 80% ; English II, 90% with recommendation

HONORS ENGLISH III

Juniors

Credit: 1.0

The core of this class is an in-depth study of British literature from Anglo-Saxon times to the present. Included is the study of approximately six novels. The four types of writing – description, narration, informational, and persuasion – will be reviewed, as well as the literary analysis.

PRE-REQUISITE: Accelerated English II, 90% with recommendation; Honors English II, 80%

ENGLISH IV

Seniors

Credit: .5

The course will acquaint students with major authors and literary works representing all cultures of the world. This course concentrates on the powers of written and oral language through the process and completion of written essays and oral presentations. The course culminates with a research paper along with a presentation of the paper. The course also includes the study of a novel. *-Seniors enrolling in English IV must also select one of the following courses:*

PREREQUISITE: None

BUSINESS ENGLISH

Seniors

Credit: .5

The semester course will include focus on aspects of technical writing used in business communications. Students will compose and design cover letters, resumes, business letters, memorandums, manuscripts, and other business related communications. Emphasis will be placed on proofreading and proper paragraph composition with grammar usage applied.

PREREQUISITE: None

MYTHOLOGY

Seniors

Credit: .5

Students will explore the various legends of Greek Mythology as literary and folklore pieces. An analysis of the various myths and legends will be applied to comparison of modern day literature with analysis presented in written composition and oral demonstration of the interpretation of the mythological legends of Greek and Roman times including the Trojan War. Cover letters and resumes for senior graduation completed in this course.

PREREQUISITE: None

COMMUNICATIONS

Seniors
Credit: .5

Communication occurs every day both formally and informally in organizations, society and in personal life. Students will learn and practice skills useful in the real world such as creating and delivering effective presentations and understanding of verbal and non-verbal communication such as listening, writing, speaking and body language. The course will help students to become effective creators and conveyers of ideas, concepts, and information. Students writing and speaking skills will be enhanced through the various activities presented, including cover letters and resumes.

PREREQUISITE: None

ACCELERATED ENGLISH IV

Seniors
Credit: 1.0

This course explores various literary works of the world and the authors. College-bound seniors are exposed to more challenging material and additional novel study. Students are expected to write literary essays, cover letters, and resumes. The course culminates in a formal research paper, as well as a presentation on said research.

PREREQUISITE: Accelerated English III, 80%; English III, 90% with teacher recommendation

ADVANCED PLACEMENT ENGLISH

Seniors
Credit: 1.0

This College in High School Course is for seniors who have demonstrated advanced understanding of literature and superior writing skills in the honors program. The core is intensive study of literary works from various world cultures and additional novels listed as suggested AP reading. Interpretation and advanced analysis is stressed in literary writing and speech. A research paper and panel presentations are required along with resumes and cover letters. Students are prepared to take the College Board AP exam which may qualify them for college credit.

PREREQUISITE: Honors English III, 90%

SAT PREP

Juniors
Credit: .25

This is a 9-week course that provides the skills necessary to meet the goals of standardized tests. SAT Prep is an excellent source of preparation for the SAT. The course provides test taking strategies specific to the SAT

PREREQUISITE: Completed Accelerated or Honors English II/Teacher Recommendation

ENGLISH DEPARTMENT ELECTIVES

PUBLIC SPEAKING

Sophomores, Juniors, Seniors Meets every other day Elective

Credit: .5

This course is designed to increase student awareness of public speaking. Students will study the skills needed to become effective speakers. Students will be given several opportunities to develop their own skills as a speaker by orally interpreting a literary selection and by creating and presenting various types of speeches. Students will also work on acquiring listening skills as they critique speeches of others. College bound students will find this an excellent introduction to the basics of public speaking while general students will gain confidence in oral presentations.

PREREQUISITE: None

DIGITAL JOURNALISM I, II, III

Sophomores, Juniors, and Seniors

Credit: .5

This course meets every other day. Students learn the essentials of news reporting, ethics, and interviewing while writing various types of newspaper stories. Students will also learn basic editing, publishing and layout and design skills. The class is ultimately involved in the publication of the school newspaper entitled "The Eye of the Hurricane."

Journalism I - Students will be introduced into a real-world organizational setting. Students will participate in the publication of the schools online newspaper.

Journalism II - Students will be introduced to the planning and management skills needed to publish an online newspaper. Emphasis is placed on communication, planning and organizational dynamics in a real world setting.

Journalism III- Students will have the responsibility and title of Senior Editors. Emphasis is placed on accountability, strategic management, organizational theory and team building. Students are responsible for the overall publication of the "Eye of The Hurricane".

PREREQUISITE: Teacher Recommendation

EXPOSITORY COMPOSITION & RESEARCH

Juniors and Seniors

Credit: .5

This course meets every other day and is considered a College in High School course. Composition teaches students the basic writing skills needed for college success. Students will compose and revise expository and argumentative essays focusing on paragraph construction and organization. Research provides the informational foundation necessary for the production of collegiate level research writing. Students participate in the research of materials online and in various libraries, organization of research, formal writing of papers, and the oral presentation of findings. Students will learn and apply MLA (Modern Language Association) and APA (American Psychological Association) style citation formats as they write research papers.

PREREQUISITE: Honors English II or III, 90% ; Accelerated III, 90%

YEARBOOK

Freshman, Sophomores, Juniors, and Seniors

Credit: 1.0

The yearbook staff will tentatively consist of 10 students selected at the sole discretion of the advisors. Applications and writing samples as well as the recommendation of the current English teacher are necessary. Students are required to raise \$500.00 in business ads and fundraisers. Applicants must also be “tech savvy” since students are required to create yearbook pages on a computer website. Time outside of class will be necessary on occasion.

PREREQUISITE: Teacher recommendation

FAMILY AND CONSUMER SCIENCE

7th GRADE FAMILY AND CONSUMER SCIENCE

7th Grade
Credit: NA

This course is a 9 week rotation course for all 7th grade students. It is designed to be a brief overview of MyPlate, working in the kitchen, preparing to cook and cooking basics. This course provides many hands-on, interactive, real-life and practical experiences. As a culminating experience, the students in this class will participate in a "Chopped Challenge" similar to the episodes of Chopped on The Food Network.

PREREQUISITE: None

AN INTRODUCTION TO CHILD DEVELOPMENT

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

The content of this elective includes the importance of early childhood education for brain development, developmental theory, effective parenting, and issues surrounding teen pregnancy like child abuse. The physical, intellectual, emotional, and social development of children from birth to age five will be explored. Students will also cover real-life issues affecting parents and care giver. When possible, students will be visiting our Pre-K, Kindergarten and elementary schools to learn in a real situation.

PREREQUISITE: None

TODAY'S FOOD

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

Today's Food offers a hands-on approach to developing the skills in food preparation techniques through a variety of cooperative and independent learning activities. Students learn how to read a recipe, examine the functions of different ingredients, and apply the principles of food science, with an emphasis on food safety and sanitation. This course includes meal management and preparation, as well as the important relationship of diet to health, including factors relating to the necessity of breakfast, snack foods, and foods for celebrations. Current consumer trends are evaluated and paired with food selections to enable students to make wise choices throughout their lifetime. Science, math, and communication skills are reinforced throughout this course experience.

PREREQUISITE: None

NUTRITION AND WELLNESS

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

Nutrition and Wellness provides an investigation of the positive impact good nutritional practices have on physical and mental health, disease prevention, longevity, and optimal athletic performance. A scientific examination of the nutrients provided by the different food groups exposes the necessity of eating a variety of fresh, nutrient-dense foods that come from nature, not factories. Students develop a new perspective regarding the influence consumers, culture, the food industry, government, and technology have on our food supply and food choices. Students have the opportunity to prepare and sample a variety of healthful fresh foods, including "superfoods," in the lab portion of this course.

PREREQUISITE: None

SERVICE LEARNING

Freshmen, Sophomores, Juniors, and Seniors

Credit: .5

This class prepares students for their future as responsible, respectful, and contributing individuals. The heart of this elective is character education with a focus on service learning through creative collaboration during practical experiences in food preparation, project design, and event planning. Contributing to activities that help the community and its members gives students a valuable perspective as they enjoy the personal reward and responsibility of giving. Lessons will promote personal growth, build leadership and teamwork, and are excellent enhancements to a student's resume and college application.

PREREQUISITE: None

21st CENTURY LIVING

Freshmen, Sophomores, Juniors, and Seniors

Credit: .5

This elective prepares students to live successfully on their own. Using technology, the students will be provided opportunities for practical decision making in the areas of budgeting, major purchases financial services and taxes. The students will touch on all the PA FCS standards using computer technology and practical application will enhance their lives by developing skills needed in the 21st century world we live in.

PREREQUISITE: None

FOREIGN LANGUAGE

FOREIGN LANGUAGE	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	FRENCH I	FRENCH I	FRENCH I	FRENCH I
	FRENCH 2	FRENCH 2	FRENCH 2	FRENCH 2
	FRENCH 3	FRENCH 3	FRENCH 3	FRENCH 3
		HONORS FRENCH 4	HONORS FRENCH 4	HONORS FRENCH 4
			HONORS FRENCH 5	HONORS FRENCH 5
	ITALIAN 2	ITALIAN 2	ITALIAN 2	ITALIAN 2
	ITALIAN 3	ITALIAN 3	ITALIAN 3	ITALIAN 3
		HONORS ITALIAN 4	HONORS ITALIAN 4	HONORS ITALIAN 4
	SPANISH I	SPANISH I	SPANISH I	SPANISH I
	SPANISH 2	SPANISH 2	SPANISH 2	SPANISH 2
	SPANISH 3	SPANISH 3	SPANISH 3	SPANISH 3
		HONORS SPANISH 4	HONORS SPANISH 4	HONORS SPANISH 4
			HONORS SPANISH 5	HONORS SPANISH 5

7th & 8th GRADE SPANISH I

Students will have the opportunity to learn the basic grammatical structures of the Spanish Language. Students will complete various reading, writing, listening, and speaking activities to develop their Spanish vocabulary. Additionally, students will learn about the various cultures of the Spanish-speaking world through readings and classroom discussion. Spanish is offered to qualifying students with teacher recommendation.

7th & 8th GRADE FRENCH I

Students will have the opportunity to learn the basic grammatical structures of the French Language. Students will complete various reading, writing, listening, and speaking activities to develop their French vocabulary. Additionally, students will learn about the various cultures of the French-speaking world through readings and classroom discussions. French is offered to a qualifying student with teacher recommendation.

FRENCH I

Freshmen, Sophomores, Juniors, and Seniors
Credit: 1.0

In Level I, the emphasis of the program is oral-aural communication progressing onto the rudiments of reading and writing.

PREREQUISITE: None

FRENCH II

Honors Freshmen, Sophomores, Juniors, and Seniors

Credit: 1.0

The second year introduces a review of grammatical elements necessary for sentence composition while continuing to stress oral communication. Short readings depicting cultural aspects or materials of the language studied are offered.

PREREQUISITE: French I, grade of 70% or higher

FRENCH III

Sophomores, Junior, and Seniors

Credit: 1.0

There will be continued emphasis on teaching of the four basic skills and also incorporating the teaching of advanced grammar by means of oral and written work. Cultural aspects will be introduced through selected readings from past and contemporary literature.

PREREQUISITE: French II, grade of 70% or higher

HONORS FRENCH IV

Juniors and Seniors

Credit: 1.0

This year-long course will expand to the fullest, the four basic skills of language learning: listening, speaking, reading and writing, to meet the needs and talents of the individual student as well as the class as a whole. To meet this end, the instruction will include learning grammar and culture, and reading articles and literature. The spoken word will be the main objective of this course.

PREREQUISITE: French III, grade of 70% or higher

HONORS FRENCH V

Juniors and Seniors

Credit: 1.0

This course is designed for students who have an excellent understanding of the French language. The students will complete various reading, writing, listening, and speaking activities in order to take their language skills to that of the collegiate level. An emphasis will be on oral communication. To develop these four essential skills, the instruction will include learning grammar, discussing culture, and studying various articles and literary pieces.

PREREQUISITE: Honors French IV, grade of 80% or higher

ITALIAN II

Sophomores, Juniors, and Seniors

Credit: 1.0

The second year introduces a review of grammatical elements necessary for sentence composition while continuing to stress oral-aural communication. Short readings depicting cultural aspects or materials of the languages studied are offered.

PREREQUISITE: Italian I, grade of 70% or higher

ITALIAN III

Juniors and Seniors

Credit: 1.0

There will be continued emphasis on teaching the four basic skills and also incorporating the teaching of advanced grammar by means of oral and written work. Cultural aspects will be introduced through selected readings from past and contemporary literature.

PREREQUISITE: Italian II, grade of 70% or higher

HONORS ITALIAN IV

Seniors

Credit: 1.0

This year long course will expand to the fullest, the four basic skills of language learning: listening, speaking, reading, and writing to meet the needs and talents of the individual student as well as the class as a whole. To meet this end, the instruction will include learning grammar, culture, and studying literacy pieces. The spoken word will be the main objective of this course.

PREREQUISITE: Italian III, grade of 70% or higher

SPANISH I

Freshmen, Sophomores, Juniors, and Seniors

Credit: 1.0

In Level I, the emphasis of the program is oral-aural communication progressing onto the rudiments of reading and writing.

PREREQUISITE: None

SPANISH II

Honors Freshmen, Sophomores, Juniors, and Seniors

Credit: 1.0

The second year introduces a review of grammatical elements necessary for sentence composition while continuing to stress oral-aural communication. Short readings depicting cultural aspects or materials of the language studied are offered.

PREREQUISITE: Spanish I, grade of 70% or higher

SPANISH III

Honors Sophomores, Juniors, and Seniors
Credit: 1.0

There will be continued emphasis on teaching the four basic skills and also incorporating the teaching of advanced grammar by means of oral and written work. Cultural aspects will be introduced through selected readings from past and contemporary literature.

PREREQUISITE: Spanish II, grade of 70% or higher

HONORS SPANISH IV

Juniors, Seniors
Credit: 1.0

This year-long course will expand to the fullest, the four basic skills of language learning: listening, speaking, reading, and writing, to meet the needs and talents of the individual student as well as the class as a whole. To meet this end, the instruction will include learning grammar and culture, and reading various articles and literary pieces. The spoken word will be the main objective of this course.

PREREQUISITE: Spanish III, grade of 70% or higher

HONORS SPANISH V

This course is designed for students who have an excellent understanding of the Spanish language. The students will complete various reading, writing, listening and speaking activities in order to take their language skills to that of the collegiate level. An emphasis will be on oral communication. To develop these four essential skills, the instruction will include learning grammar, discussing culture, and studying various articles and literary pieces.

PREREQUISITE: Honors Spanish IV, grade of 80% or higher

HEALTH, PHYSICAL ED., SAFETY ED.

HEALTH	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	PHYS ED 9	PHYS ED 10	PHYSICAL EDUCATION	PHYSICAL EDUCATION
	HEALTH ED	SAFETY ED		

GENERAL INFORMATION

- Grading will be based on effort, participation and progress toward personal physical activity and fitness goals. Grades will be issued at the end of each semester
- Required dress and actively participate **3 points each class**
- Required dress and not fully participating **2 points each class**
- Not in required dress/limited participation **1 point each class**
- **Not in required dress- did not participate 0 points**
- Refuse to participate **0 points each class** (student will be sent to ISS; parent contacted)
- Doctor excuse -Students must return the “Can Do” list from their doctor and pick up a form from the nurse or your teacher
- Pennsylvania Academic Standards for Physical Education, Health and Safety Education will be met
- These courses are required for graduation

7th & 8th GRADE PHYSICAL EDUCATION

This course is required for each 7th & 8th grade student and is offered every other day all year. Grading will be based on effort, participation and progress toward personal physical activity and fitness goals. Grades will be issued at the end of each semester. All Physical Education classes will operate under the PE4life approach which combines today’s best practices in physical education to inspire and educate all students about the vital importance of lifetime physical activity and fitness. Both grade levels will incorporate cardiovascular fitness, muscular and strength endurance, exercise, wellness, nutrition, and a wide variety of lifetime sports and fitness activities to promote an active and healthy lifestyle.

PHYSICAL EDUCATION 9

Freshmen
Credit: .5

All Physical Education classes will operate under the PE4life approach which combines today’s best practices in physical education to inspire and educate all students about the vital importance of lifetime physical activity and fitness. All grade levels will incorporate cardiovascular fitness, muscular and strength endurance, exercise, wellness, and nutrition, and a wide variety of lifetime sports and fitness activities to promote an active and healthy lifestyle. Technology will be incorporated to assess students on their personal progress toward fitness and activity goals.

PREREQUISITE: None

PHYSICAL EDUCATION 10

Sophomores
Credit: .25

All Physical Education classes will operate under the PE4life approach which combines today's best practices in physical education to inspire and educate all students about the vital importance of lifetime physical activity and fitness. All grade levels will incorporate cardiovascular fitness, muscular and strength endurance, exercise, wellness and nutrition, and a wide variety of lifetime sports and fitness activities to promote an active and healthy lifestyle. Technology will be incorporated to assess students on their personal progress toward fitness and activity goals.

PREREQUISITE: None

SAFETY EDUCATION

Sophomores
Credit: .25

Students will engage in activities that enhance techniques needed to drive more efficiently and also prepare them to develop attitudes that will lead to safe and courteous driving. The range of content will include highway transportation system responsibilities, Pennsylvania traffic laws, basic vehicle controls and operations, perceptual skills development, decision-making/risk reduction, handling complex driving environments, emergency situations, defensive driving processes, influences on driver performance, and consumer considerations. This course will satisfy the theory phase (30 hours of instruction) required for behind-the-wheel instruction. BTW instruction (6 hours) is available outside of school.

PREREQUISITE: None

PHYSICAL EDUCATION

Juniors and Seniors
Credit: .5

This course is required course for juniors and an elective course for seniors. All Physical Education classes will operate under the PE4life approach which combines today's best practices in physical education to inspire and educate all students about the vital importance of lifetime physical activity and fitness. All grade levels will incorporate cardiovascular fitness, muscular and strength endurance, exercise, wellness and nutrition, and a wide variety of lifetime sports and fitness activities to promote an active and healthy lifestyle. Technology will be incorporated to assess students on their personal progress toward fitness and activity goals.

PREREQUISITE: None

HEALTH EDUCATION

Freshmen
Credit: .5

High school is a time of many changes and decisions. This course is designed to help students learn about their changing bodies, to help them sort out emotions and personal values, to aid them in maintaining optimum health as a lifelong process, and to show students how to take responsibility for making healthy decisions. Instruction will include units within the physical, mental, social and emotional dimensions of health including stress management, nutrition, drugs and alcohol, infectious diseases, lifestyle diseases, healthy relationships, and self-esteem.

PREREQUISITE: None

MATHEMATICS

MATH	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	ALGEBRA A	ALGEBRA B	ALGEBRA II	BUSINESS MATH
			GEOMETRY	STATISTICS
				ALGEBRA III/Trig
				PRE-CALCULUS
	ALGEBRA I	ALGEBRA II	GEOMETRY	STATISTICS
			STATISTICS	PRE-CALCULUS
			PRE-CALCULUS	HONORS CALCULUS
				ALGEBRA III/TRIG
	HONORS GEOMETRY	HONORS ALGEBRA II	HONORS PRE-CALCULUS	AP CALCULUS
				HONORS CALCULUS
				ALGEBRA III/TRIG
				STATISTICS

PRE-ALGEBRA 7

The purpose of this course is to provide the foundation for algebra and to develop concepts and processes needed to solve and apply mathematical problems. The Pre-Algebra course emphasizes the language of algebra and solving problems using various approaches including algebra, number theory, fractions, ratios, proportions, equations, inequalities, statistics, probability, exponents, and graphing. Calculators and computers will be integrated as tools of instruction throughout the course. Students taking this course should be highly motivated, goal-oriented, and willing to devote an appropriate amount of time to mathematics. Students will be involved in PBL (Project Based Learning) throughout the context of the Math Curriculum. This hands on, realistic approach will help bring meaning to the concepts. This is a 7th grade course that is aligned to both the seventh and eighth grade standards, anchors, and other grade level eligible content items. All 7th grade material will be completed prior to the PSSA test assuring student for success.

PREREQUISITE: Assessment Data and Comprehensive Entry Exam

MATH 7

Instruction and areas addressed during the class period are properly aligned to the Pennsylvania Grade 7 mathematics standards, anchors, and eligible content material for the PSSA (Pennsylvania System of School Assessment) exam. Emphasis is placed on the following topics: number system, multiplying and dividing integers, rational integers, expressions and equations, and inequalities. Technology, including the use of computers and calculators, will be used as tools of instruction. PSSA assessment readiness workbooks, along with multiple interactive computer resources, will be used to ensure student comprehension and preparation for future growth. Students will be involved in PBL (Project Based Learning) throughout the context of the Math Curriculum. This hands on, realistic approach will help bring meaning to the concepts.

MATH 8

Instruction and areas addressed during the class period are properly aligned to the Pennsylvania Grade 8 mathematics standards, anchors, and eligible content material for the PSSA (Pennsylvania System of School Assessment) exam. Content discussed throughout the year include: real numbers, exponents and scientific notation, proportional and non proportional relationships, writing and solving linear equations, functions, solving systems of equations, scatter plots, and two-way tables. Technology, including the use of computers and calculators, will be used as tools of instruction. PSSA assessment readiness workbooks, along with multiple interactive computer resources, will be used to ensure student comprehension and preparation for future growth. Students will be involved in PBL (Project Based Learning) throughout the context of the Math Curriculum. This hands on, realistic approach will help bring meaning to the concepts.

ALGEBRA A

Freshmen
Credit: 1.0

The purpose of this course is to build upon the algebra concepts learned in Math 8 and to develop concepts related to Module 1 of the Algebra 1 Keystone Exam. The Algebra A course emphasis is on operations and linear equations and inequalities. Operation topics include representing numbers in equivalent forms, applying number theory concepts, using exponents and roots, estimating, and simplifying polynomials. Linear equations and inequalities topics include being able to write, solve, and graph equations, inequalities, and systems of inequalities by variety of methods.

PREREQUISITE: None

ALGEBRA B

Sophomores
Credit: 1.0

The purpose of this course is to focus on Module 2 and reiterate algebra concepts learned in Math 8 and Algebra A. The Algebra B course will be taken by all students that have completed Math 8 and Algebra A and have yet to pass the Algebra 1 Keystone Exam. Topics including linear functions, data distribution, operations, linear equations and inequalities, that have been previously discussed in Math 8 and Algebra A will be remediated and expanded upon.

PREREQUISITE: Math 8 and Algebra A and Assessment data

ALGEBRA I

8th Grade and Freshmen

Credit: 1.0

This course is organized around families of functions, with special emphasis on linear and quadratic functions. During the course students will learn to represent families of functions as verbal descriptions, equations, tables, and graphs. In addition to its algebra content, the course will include lessons on probability, data analysis, and geometry. Students will be involved in PBL (Project Based Learning) throughout the context of the Math Curriculum. This hands on, realistic approach will help bring meaning to the concepts.

PREREQUISITE: 7th grade-Assessment Data and Comprehensive Entry Exam; 8th grade-Assessment Data or Pre-Algebra grade of 80% or higher; 9th grade-Assessment Data and an averaged math grade of 80% or higher.

HONORS ALGEBRA II

Freshmen and Sophomores

Credit: 1.0

This course is organized around families of functions, including linear, quadratic, exponential, logarithmic, radical, and rational functions. During the course students will learn to represent families of functions as verbal descriptions, equations, tables, graphs, and matrices. In addition to its algebra content, the course will include lessons on discrete math, data analysis, probability. As this course is an honors level course it will move at a fast pace and students will be challenged accordingly.

PREREQUISITE: Honors Geometry, grade of 80% or higher

ALGEBRA II

Freshman, Sophomores, and Juniors

Credit: 1.0

This course is organized around families of functions, including linear, quadratic, exponential, logarithmic, radical, and rational functions. During the course students will learn to represent families of functions as verbal descriptions, equations, tables, and graphs. In addition to its algebra content, the course will include lessons on probability, data analysis.

PREREQUISITE: Algebra I or Algebra B

ALGEBRA III/TRIGONOMETRY

Juniors and Seniors

Credit: 1.0

This course is set up as a college preparedness class. This course reinforces the concepts learned in Algebra I, Geometry, and Algebra II. In addition, this course will emphasize trigonometric functions and applications to promote conceptual reasoning.

PREREQUISITE: Algebra II

HONORS GEOMETRY

Freshmen
Credit: 1.0

This course develops reasoning and problem solving skills in topics such as congruence and similarity, and applies properties of lines, triangles, quadrilaterals, and circles. In addition to its geometry content, the course will include lessons on probability, data analysis, and algebra. As this course is an honors level course it will move at a fast pace, and students will be challenged accordingly.

PREREQUISITE: Algebra I in 8th grade with a grade of 80% or higher

GEOMETRY

Sophomores and Juniors
Credit: 1.0

This course develops reasoning and problem solving skills in topics such as congruence and similarity, and applies properties of lines, triangles, quadrilaterals, and circles. In addition to its geometry content, the course will include lessons on probability, data analysis, and algebra.

PREREQUISITE: Algebra II

PRE-CALCULUS

Juniors and Seniors
Credit: 1.0

The primary goal of this course is to develop, refine, and apply skills learned in the study of previous math courses. This course will serve as a foundation for further study in calculus. During this course students will review functions with an emphasis on linear, quadratic, polynomial, radical, trigonometric and logarithmic functions. The students will use the TI-83+ graphing calculators for much of their problem solving, emphasizing real-world applications.

PREREQUISITE: Algebra II, grade of 70% or higher

HONORS PRE-CALCULUS

Juniors and Sophomores
Credit: 1.0

The primary goal of this course is to refine, develop, and apply skills learned in the study of previous math courses. This course will serve as a foundation for further study in calculus. During this course students will review functions with an emphasis on linear, quadratic, polynomial, radical, rational, trigonometric and logarithmic functions. This course will also study conic sections, analytical trigonometry, polar coordinates, and parametric-equations. The student will use the TI-83 graphing calculator for much of their problem solving, emphasizing real-world applications. As this course is an honors level course, it will move at a fast pace and students will be challenged accordingly.

PREREQUISITE: Honors Algebra II, grade of 80% or higher

HONORS CALCULUS

Seniors
Credit: 1.0

Honors Calculus involves the continued study of functions, rates, and accumulation. This course is appropriate for students who have completed Algebra 1, Algebra 2, Geometry, and Pre-calculus and do not want to take AP Calculus. In particular, students must be familiar with the properties of functions, the algebra of functions, the graphs of functions and trigonometric functions. Students must also understand the language of various functions (e.g., domain and range, odd and even, periodic, symmetry, zeros, intercepts). Honors Calculus is not as rigorous as AP Calculus, but does count as an honors credit.

PREREQUISITE: Pre-Calc, grade of 80% or better; Honors Pre-Calc, grade of 70% or better; Teacher recommendation

ADVANCED PLACEMENT CALCULUS AB

Juniors and Seniors
Credit: 1.0

The AP Calculus is a College in High School course designed to present an enriched course in an early transcendental, differential and integral calculus. Included in the course are studies on limits, continuity, differentiation, differentials, Mean value Theorem, applications of derivatives, integration, hyperbolic differentiation the definite integral, and applications of integration.

PREREQUISITE: Teacher recommendation

STATISTICS

Juniors and Seniors
Credit: 1.0

Elementary Statistics is a beginning statistics course for students with a basic algebra background. It will follow a non-theoretical approach without formal proofs, explaining concepts intuitively and supporting them with many examples. The applications span a broad range of topics including: business, sports, health, architecture, education, entertainment, political science, psychology, history, and many more.

PREREQUISITE: Algebra II

BUSINESS MATH

Seniors
Credit: 1.0

The course will cover personal money records, special consumer purchasing problems and wage problems as they relate to family and business organizations. It will cover problems relating to commission income, personal finance, savings, investments, and taxes in relation to family and business organizations.

PREREQUISITE: None

MUSIC

MUSIC	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	HURRICANE BAND	HURRICANE BAND	HURRICANE BAND	HURRICANE BAND
	GUITAR	GUITAR	GUITAR	GUITAR
	ROCK MUSIC STYLES	ROCK MUSIC STYLES	ROCK MUSIC STYLES	HONORS CONCERT BAND
	VOCAL MUSIC MIXED CHORUS	MUSIC THEORY I	MUSIC THEORY I	ROCK MUSIC STYLES
	SHOW CHOIR	VOCAL MUSIC MIXED CHORUS	MUSIC THEORY II	MUSIC THEORY I
		CONCERT CHOIR	VOCAL MUSIC MIXED CHORUS	MUSIC THEORY II
		STAGE LIGHTING AND SET DESIGN	CONCERT CHOIR	VOCAL MUSIC MIXED CHORUS
			STAGE LIGHTING AND SET DESIGN	CONCERT CHOIR
				STAGE LIGHTING AND SET DESIGN

7th GRADE GENERAL MUSIC

This is a required class for all 7th grade students who do not participate in band or choir. This class meets on a day 1/day 2 schedule. This class is a music appreciation/music history course covering music from the classical period to the rock and roll era.

8th GRADE GENERAL MUSIC

This is a required class for students who do not choose to take band or choir. It meets every other day during the school year. Students will listen to and discuss various aspects of music, what culture it came from, and its historical significance. Students will be able to read, write, and play basic rhythm patterns.

7th & 8th GRADE CHOIR

7th & 8th Grade Choir is a performing group. **They are required to perform up to three concerts throughout the year.** The objective of the group is to broaden the knowledge and skills of the students in the area of performance. There is a limited number of students. Attendance at all scheduled performances and after school activities is mandatory. Students must maintain an 80% to continue in the Choral Program.

PREREQUISITE: An audition and director approval is required.

7th & 8th GRADE BAND

7th & 8th Grade Band is a performing group that meets every day. The students are recommended by their elementary instrumental music teacher. All others must audition for the band director before gaining entrance. **This group is required to perform twice a year, Winter and Spring. 8TH grade band members are required to participate in marching band. (Band Camp in August, all football games, festivals & parades)**

INSTRUMENTAL MUSIC MARCHING BAND REQUIREMENT

The New Castle Marching Band consists of all instrumental music students in grades 8 through 12 and students in grades 10 through 12 at the Lawrence County Career & Technical Center. Since band is a full year course, **a band member must participate in Ninth Grade Band, Hurricane Band, and Concert Band** unless a schedule problem emerges. A schedule problem must be discussed with the director before the scheduling process begins at the High School. No student will be permitted to schedule band without participating in Marching Band with the following exceptions: Football Players, Cheerleaders, Candy Canes, Flag line or Majorette. The Marching Band performs at all football games, parades, and various special events. In order to schedule an instrumental music course, the student must participate in Band Camp which meets prior to the start of school, otherwise a schedule change must occur. The grade for Marching Band is incorporated into the student's concert band grade.

HURRICANE BAND

Sophomores, Juniors, and Seniors
Credit: 1.0

This course is to broaden the knowledge and experience of performing good quality music through the development of good practice, performance, and attendance at all times. It will also continue to develop performance skills such as posture, tone, intonation, breathing, embouchure, fingering, rhythm, articulation, and scales. These skills will be used in the performance of a wide variety of music. **Attendance at all scheduled performances after school activities is mandatory. If the student does not perform in the concert, they will be given a final grade of 0%.**

PREREQUISITE: An audition by the high school band director for placement or permission to enroll.

HONORS HURRICANE BAND

Seniors
Credit: 1.0

This course is to enable students to stay in concert band for four years. This course will help seniors who cannot take other weighted classes due to band. All Honors Concert Band students must participate in all required activities including Marching Band. Academic assignments will also be required. A written paper is required for the first and third nine weeks. A written test will be given for the second and fourth nine weeks.

This course is to broaden the knowledge and experience of performing good quality music through the development of good practice, performance, and attendance at all times. It will also continue to develop performance skills such as posture, tone, intonation, breathing, embouchure, fingering, rhythm, articulation, and scales. These skills will be used in the performance of a wide variety of music. **Attendance at all scheduled performances and after school activities is mandatory. If the student does not perform in the concert, they will be given a final exam grade of 0%.** A final project will be required for each student enrolled in Honors Concert Band.

PREREQUISITE: Three prior years of band participation.

GUITAR

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

This is a one-semester course for students who wish to know how to play the six-string guitar. Students will receive a basic knowledge of how to read music. Students will also learn how to play chords, rhythms, and melodies. The goal of this class is to build a working vocabulary and be able to play a collection of songs. Guitars are provided.

PREREQUISITE: None

ROCK MUSIC STYLES

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

The course will survey American Popular music to include the most current music. An historical overview of American popular music will be discussed along with current trends including heavy metal, rap, and New Age music. This course meets every day for one semester.

PREREQUISITE: None

MUSIC THEORY I

Sophomores, Juniors, and Seniors
Credit: .5

Music Theory I is a course designed to develop listening and compositional skills to help in understanding different musical styles. Students will be able to identify certain intervals, chords, and scales in musical examples.

PREREQUISITE: None

MUSIC THEORY II

Juniors and Seniors
Credit: .5

Music Theory II is an extension of Music Theory I. Fundamentals of music theory will be reviewed while further advancing musical skills such as chord analysis and melodic/rhythmic dictation.

PREREQUISITE: Music Theory I.

VOCAL MUSIC MIXED CHORUS

Freshmen, Sophomores, Juniors, and Seniors
Credit: 1.0

This course includes learning choral repertoire for school performances. It is also to develop and broaden the skills necessary for three part singing learned at the Junior High Choir level. This course meets every day for a full year and is worth one credit. **Attendance at all scheduled performances and after school activities is mandatory. If the students do not perform in the concert, they will be given a final grade of 0%.** A minimum grade of 80% must be achieved to remain in Choir.

PREREQUISITE: An audition by the high school choir director for placement or permission to enroll. Open to all high school students, freshmen through senior year.

CONCERT CHOIR

Sophomores, Juniors, and Seniors
Credit: 1.0

This course includes learning choral repertoire for school and public performances. It is also to develop and broaden the skills necessary for three to four part singing learned at the Mixed Choir level. Also, improvement of the finer points of the technique of choral singing is stressed. The choir performs for many school and public programs. This course meets every day for a full year and is worth one credit. **Attendance at all scheduled performances and after school activities is mandatory. If the student does not perform in the concert, they will be given a final grade of 0%.** A minimum grade of 90% must be achieved to remain in Concert Choir.

PREREQUISITE: An audition by the high school choir director for placement or permission to enroll. Only sophomore, junior, and senior students are permitted to enroll in the course and they must have performed with the Mixed Choir for a year before being eligible to audition for Concert Choir.

STAGE LIGHTING & SOUND DESIGN

Sophomores, Juniors, and Seniors
Credit: 1.0

This course will enable students to learn all facets of stage lighting, sound, and stage rigging. This course will enable the student to master the task of using the equipment and also to design their own plots for stage productions and other media programs in the schools. These students will also be able to work all the equipment in the auditorium for any school or community function. Part of the evaluation for this course is to participate in some aspect of working a school performance or a community function using the equipment in the auditorium. Experience in this course can lead to a career in multi-media production for stage, radio, and television. Teacher will provide and make necessary contacts for clinics. These clinics will be held on lighting, sound, and staging with professionals conducting these clinics.

PREREQUISITE: None

SCIENCE

SCIENCE	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	INTEGRATED SCIENCE	BIOLOGY	APPLIED CHEMISTRY	APPLIED CHEMISTRY
		CHEMISTRY (L)	CHEMISTRY (L)	CHEMISTRY (L)
			EXP. SCIENCE METEOROLOGY	EXP. SCIENCE METEOROLOGY
			EXP. SCIENCE ASTRONOMY	EXP. SCIENCE ASTRONOMY
			FORENSICS	FORENSICS
	HONORS BIOLOGY	HONORS CHEMISTRY (L)	AP PHYSICS (L)	AP PHYSICS (L)
			AP BIOLOGY (L)	AP BIOLOGY (L)
			AP CHEMISTRY (L)	AP CHEMISTRY (L)
			MATERIALS SCIENCE	ANATOMY & PHYSIOLOGY
				MATERIALS SCIENCE

ELECTIVES	COMPUTER SCIENCE ESSENTIALS	COMPUTER SCIENCE ESSENTIALS	COMPUTER SCIENCE ESSENTIALS	COMPUTER SCIENCE ESSENTIALS
		AP COMPUTER SCIENCE PRINCIPLES	AP COMPUTER SCIENCE PRINCIPLES	AP COMPUTER SCIENCE PRINCIPLES
		INTRO TO ELECTRONICS	INTRO TO ELECTRONICS	INTRO TO ELECTRONICS

SCIENCE 7

The 7th grade science course is designed for all students entering the 7th grade. It is a comprehensive study of the state standards. Students will work on enhancing academic skills to be used in future science and other courses. Students will participate in lab activities, classroom activities, classroom demonstrations, and 21st century skills. Evaluation methods may include, but are not limited to, objective testing, essay writing, research projects, informal observation, and return demonstrations. Concepts involving physical science, earth & space science, and life science will be covered throughout the year.

SCIENCE 8

The 8th grade Science course is designed for those students who are enrolled in eighth grade. It is a comprehensive study of the state standards. Students will work on enhancing academic skills to be used in future science and other courses. Students will participate in lab activities, classroom activities, classroom demonstrations, and 21st century skills. Evaluation methods may include, but are not limited to, objective testing, essay writing, research projects, informal observation, and return demonstrations. Concepts involving physical science, earth & space science, and life science will be covered throughout the year.

INTEGRATED SCIENCE

8th Graders and Freshmen
Credit: 1.0

This course is a comprehensive study of the state standards and is a precursor to the required Biology course that is to be taken by Sophomores. Major concepts include: scientific thinking, the chemistry of life, principles of evolution, ecology, interactions of ecosystems, and earth and human impact on earth's processes. The course is designed to teach students to think scientifically and solve problems through the use of the scientific method, process skills, inquiry, and technology. The latest technology is also used including: virtual labs and activities, online assessments, and online textbooks. In addition to the advanced pace and information learned, 8th grade students enrolled in Integrated Science **must design, test and complete a project for PJAS, Pennsylvania Junior Academy of Science**. This is an independent project, highly guided by the teacher, performed in the home environment.

PREREQUISITE: 8th graders with recommendation and 90% in previous science course

BIOLOGY

Sophomores
Credit: 1.0

This course is a comprehensive study of biology and life science. Students will be expected to participate in group activities, including dissections. Concepts include: cells, cell division, mitosis, DNA, kingdoms, evolution, abiotic/biotic factors, respiration and photosynthesis. Students will be required to complete the PA Keystone Exam upon Completion of course.

PREREQUISITE: Integrated Science

HONORS BIOLOGY WITH LAB

Freshmen
Credit: 1.0

This advanced level biology course covers the same concepts as Biology, but on a faster pace. The material in this course is challenging. Each student will be required to design and present an independent science project and participate in the local science competitions including: PJAS, Envirothon, Enviroquest. Students who do not complete the project will receive a failing grade.

PREREQUISITE: Students should have earned at least a 90% in Integrated Science and teacher recommendation.

APPLIED CHEMISTRY

Juniors and Seniors
Credit: 1.0

This full-year chemistry course integrates labs and activities in a one period class. The topics are aligned with science standards and cover a practical application of chemistry in everyday life. Concepts include: atoms, molecules, compounds, chemistry of food, water, periodic table, bonding, and chemical reactions.

PREREQUISITE: None

CHEMISTRY - WITH LAB

Juniors and Seniors
Credit: 1.5

Students will be expected to participate in group activities and labs. Lab time is scheduled with this course. This course meets for a double period every other day. Concepts include: atoms, molecules, compounds periodic table, atomic structure, ionization energy chemical reactions, energy bonding atomic structure.

PREREQUISITE: 70% or higher in Biology or Honors Biology, Algebra II or higher

HONORS CHEMISTRY WITH LAB

Sophomores
Credit: 1.5

This lab-oriented course meets for two periods, every other day. It meets for one period on the opposite day. This advanced level chemistry course covers the same concepts as chemistry, however, in more depth. Students are expected to participate in group activities and write formal lab reports.

PREREQUISITE: 80% or higher in Honors Geometry, teacher recommendation

CO-PREQUISITE: Honors Algebra II or higher, 80% or higher in Honors Biology

AP PHYSICS WITH LAB

Junior and Seniors
Credit: 1.5

This lab-oriented course meets for two periods, every other day. It meets for one period on the opposite day. This course is recommended for anyone considering a major in science or engineering. Students are expected to participate in group activities and write lab reports. Concepts include: Newton's Law waves, sound, light, simple harmonic motion, electricity and magnetism, conservation of momentum and conservation of energy. These concepts will be covered at a fast and challenging pace.

PREREQUISITE: Algebra II or higher

ADVANCED PLACEMENT BIOLOGY

Juniors and Seniors
Credit: 1.5

This advanced placement course meets the objectives of general biology I and II and general biology I lab courses on the college level. This is also a College in High School Course. Students will conduct laboratory experiments (some recommended by the advanced placement program) that are designed to be comparable to those at the college level. Concepts covered throughout the year include: themes in the study of life, the cell, the cell membrane and transport, the cell cycle, classification, the diversity of life (bacteria, archaea, protists, plants, invertebrates, and vertebrates), botany, and ecology.

PREREQUISITE: 80% or higher in Honors Biology; 80% or higher in Honors Chemistry; 80% or higher in AP Physics; Teacher recommendation

ADVANCED PLACEMENT CHEMISTRY

Seniors

Credit: 1.5

This year-long advanced placement course/ College in High School Course meets for two periods every other day. It meets for one period on the opposite day, and covers all major areas of chemistry. In the laboratory portion of the class, students will perform required experiments and complete formal lab reports. The course will culminate with the AP Chemistry Exam in the spring for college credit (not required). Major Concepts include: nomenclature, stoichiometry, periodicity acid-base, solubility kinetic-molecular theory, gas laws organic chemistry chemical bonding, electron structure current topics thermodynamics.

PREREQUISITE: 80% or higher in Honors Algebra II; 85% or higher in Honors Chemistry; 85% or higher in Honors Geometry; Teacher recommendation

ANATOMY & PHYSIOLOGY

Seniors

Credit: 1.0

An elective lab course for Seniors. Students must participate in mandatory dissections and group lab activities. This course is designed to:

- Give background for students entering the health field or medical careers.
- Prepare students for college level Biology courses.
- Develop an interest concerning the intricacies of the human body. Concepts include:
- Structure and function of the human body parts, system by system. (Skeletal, Muscular, Sensory, Circulatory, Respiratory, Digestive)
- Immunity, cancer, and causes of disease
- Human reproduction
- Dissection/laboratory techniques

PREREQUISITE: 70 % or higher in Biology I

INTRODUCTION TO ELECTRONICS

Sophomores, Juniors, and Seniors

Credit: 1.0

Electricity and electronic systems are explored through the study of DC and AC circuits. Practical experience in parallel and series circuit analysis is gained through hands-on activities and labs. Credit will be offered through Pittsburgh Technical College as their ELT115 Electricity course, which is part of their Electronics Engineering Technology, Industrial Instrumental, and Smart Building Technology degree programs once course is successfully completed and test passed.

PREREQUISITE: None

FORENSICS

Juniors and Seniors

Credit: .5

This lab course is a half credit course that meets every day for one semester. It is an elective course designed to expose students to the biological, chemical and physical science involved with investigating crime scene and analyzing the forensic data. Student must participate in group activities and labs. The course is designed to:

- Encourage critical thinking and reasoning skills.
- Develop an interest concerning forensic details and criminology.
- Prepare students for future college or technical classes. Concepts include:
- Valid evidence collection Document forgery
- Fingerprint analysis DNA typing
- Trace evidence; Hair and Fiber analysis Firearms & Ballistics
- Blood typing and blood spatters Skeletal & Dental evidence
- Impression evidence; tires, shoeprints Pathology & Toxicology
- Criminal profiling
- Careers in Forensics

PREREQUISITE: None

COMPUTER SCIENCE ESSENTIALS

Freshmen, Sophomores, Juniors, and Seniors

Credit: 1.0

Computer Science Essentials is a full-year course that is an excellent entry point for new high school computer science learners. No previous programming experience is required, but students who have prior computer science experience, have many opportunities to build upon their prior knowledge and skills. All students will have many opportunities for creative expression and exploration in topics of personal interest, through app development, web design, and connecting computing with the physical world. Students will learn both MIT's App Inventor and the Python programming language.

PREREQUISITE: None

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

Sophomores, Juniors, and Seniors

Credit: 1.0

Computer Science Principles is a full year course offered to students who have successfully completed Computer Science Essentials. Using Python as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cyber security, and simulation. The course is designed to cover all learning objectives in College Board's **AP CS Principles** framework and to prepare students to do well on the AP assessment. In specific CSP projects and problems, students create artifacts and associated writing as practice for the AP CS Principles Performance Tasks that can be submitted to the College Board.

PREREQUISITE: Computer Science Essentials

EXPLORATORY SCIENCE - METEOROLOGY

Juniors and Seniors

Credit: .5

This weather studies semester course integrates labs and activities, aligned with current science standards and their practical application in everyday life. This course is a half credit course. Meteorology is a one semester of the course designed for student who investigation of natural atmospheric phenomena. Weather forecasting will be an integral part of the course. Extensive use of “Weather Bug” will enhance student learning. Concepts include: atmospheric energy light, color & optics, thunderstorms, seasons humidity, condensation tornadoes, hurricanes air pressure, clouds, wind, and fronts.

PREREQUISITE: Teacher recommendation

EXPLORATORY SCIENCE - ASTRONOMY

Juniors and Seniors

Credit: .5

Astronomy is designed for the student to explore the study of the universe and space. This course is a half credit course that meets every day for one semester. Concepts include: stars, planets, galaxies, history and development of astronomy, cosmology, stellar evolution, classification, Kepler & Newton’s Laws, and current topics in astronomy & planet research.

PREREQUISITE: Biology

MATERIALS SCIENCE

Juniors and Seniors

Credit: .5

This one semester course is a contextual, hands-on laboratory course that integrates science and technology. Materials science is a multidisciplinary approach to science that involves designing, choosing, and using three major classes of materials—metals, ceramics, and polymers (plastics). Materials science combines many areas of science. Because of the interdisciplinary nature of materials science, it can be used both as an introductory course to interest students in science and engineering and also as an additional course to expand the horizons of students already taking science and mathematics courses. This course integrates all of the STEM areas as well as has a hands-on, project-based approach to learning.

PREREQUISITE: Biology

SOCIAL STUDIES

SOCIAL STUDIES	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	CIVICS/LAW	U.S. HISTORY	WORLD CULTURES	SOCIOLOGY
		HONORS WORLD CULTURES	AP US HISTORY	PRINCIPLES OF DEMOCRACY
				ECONOMICS
				AP ECONOMICS
ELECTIVES		REASON/LOGIC	REASON/LOGIC	REASON/LOGIC
		INTRO TO PSYCHOLOGY	INTRO TO PSYCHOLOGY	INTRO TO PSYCHOLOGY

WORLD CULTURES -7

Events that happened hundreds of years ago, or thousands of miles away, can have a powerful impact on our lives. Ancient Greeks pioneered democratic ideas that influenced the framers of our Constitution. American rock n’ roll grew out of the music brought to North America by Africans in the time of slavery. Today, decisions made by a Brazilian planter, a Saudi Arabian oil minister, or a Japanese manufacturer can have a direct impact on our daily lives. Throughout this school year we will look into how today’s complex world came to be.

Throughout this course and our studies, we will focus on the following nine themes that have had a direct impact on our World’s History: continuity and change, geography and history, political and social systems, religion, value, systems, economics, technology, and diversity impact of the individual global interaction.

U.S. HISTORY – 8

Students will learn about cultural, economic, and political aspects of our early history. Students will learn how our forefathers adjusted to their new geographical environment, how their European ways were modified as they became Americans, and how they established an independent nation. Students will learn how our country grew, how commerce, transportation, industry developed, and the geographic history of our nation.

Content to be used:

- Unit I – Events in Europe that lead to period of exploration and discovery.
- Unit II – The Colonization of the Western Hemisphere by the nations of Europe and the conflict that arose between these nations over control of the New World.
- Unit III – Covers period after French & Indian War during which problems developed between England and her American Colonies; culminating in the American War of Independence.
- Unit IV – Discusses the problems of creating a new nation after the War of Independence and expansion westward across the Appalachian Mountains and on to the Rocky Mountains.

- Unit V – Explains how sectional difference start to divide the new nation. Discussion of the industrial Revolution in America and the growth of the Social Reform movement that spawned as a result of the great changes brought about by the Industrial Revolution.
- Unit VI – Territory expansion west of the Rocky and into the Southwest Region. Events leading to the separation of our nation and the ensuing struggle to reunify the nation.

ACCELERATED U.S. HISTORY 8

Students will learn about cultural, economic, and political aspects of our early history. Students will learn how our forefathers adjusted to their new geographical environment, how their European ways were modified as they grew into Americans, and how they established an independent nation. Students will examine how our young nation thru the development of trade, commerce, transportation, industry, and political treaties developed into a major world power. CONTENT AREA: European exploration thru the Civil War. Students will learn about the people and events that have shaped our country and made it a land of opportunity and a leader among nations of the world. Students will examine the foundations of our society and identify the responsibilities of citizens in a free and independent nation. Students will develop skills in the use of maps, graphs, charts, time lines, computers, internet, power point, text books, and reference materials. Students will delve deeper into normal course material and will be asked to think critically as well as analyze the importance of historical documents and artifacts.

PREREQUISITES: 90% or higher in 7th grade World Cultures; Teacher recommendation from 7th grade World Cultures Teacher

CIVICS

Freshmen
Credit: .5

Civics is a one semester course. This is a required Social Studies Course for all students. Civics will be taken opposite of Law during the student's 9th grade year. Students will study the structure and purpose of America's Government. Students will examine citizens commitment to the nation as a part of our Democracy. Students will analyze political, social, religious and economic changes that have and will continue to influence the United States, Students will learn how the United States Constitution protects our fundamental rights and liberties. Students will learn how citizens must fulfill their civic duties and responsibilities for our government to be effective.

PREREQUISITE: None

LAW

Freshmen
Credit: .5

This required course involves the principles of law in the United States. It includes a study of the roots of law in our society. Also, it examines the lawmaking process at the federal, state and local levels. This includes the actions of the three branches of government as well as the activities of citizens. Last the course examines the court system as it applies to Civil and Criminal Law. Classroom activities include Reading Apprenticeship of the text and discussions of current events as they apply to the law. These activities and objective tests constitute the basis for evaluation.

PREREQUISITE: None

U.S. HISTORY

Sophomores and Juniors
Credit: 1.0

This class covers U.S. History from 1865(Reconstruction) through our present time. The emphasis will be on domestic affairs, foreign policy, and military conflicts as well as social, political, economic, and cultural changes. Course topics include: Reconstruction, Industrial Revolution, World War I, The Roaring Twenties, the Great Depression, the New Deal, World War II, the Baby Boom, the Cold War, the Korean War, the Civil Rights Movement, the Vietnam War, the Persian, Gulf War, 9/11 Attacks, the Iraq War, and America's aging population. Students will continue to examine the foundations of our society and identify the responsibilities of citizens in a free and independent state. Students will also develop skills in the use of maps, graphs, charts, timelines, computers and cell phones (BYOD), internet, power point, text books, and reference materials.

PREREQUISITE: None

ADVANCED PLACEMENT U.S. HISTORY

Juniors
Credit: 1.0

Advanced Placement U.S. History is a survey course covering the time period from the discovery of America to the present. It is designed to provide students with factual knowledge and the analytic skills necessary to deal critically with problems and materials in U.S. History. Students should be able to arrive at conclusions on the basis of an informed judgment. The Advanced Placement Exam should be taken in or order to receive college credit.

PREREQUISITE: None

WORLD CULTURES

Juniors
Credit: 1.0

In this required course, students will study the history of the modern world from the Renaissance through the Cold War to the present. The focus will be on the development of Western Civilization and its impact on the rest of the world.

PREREQUISITE: None

HONORS WORLD CULTURES

Sophomores
Credit: 1.0

Honors World Cultures is designed to increase a deeper awareness and understanding of global history. The course will emphasize modern world history from the "Renaissance" through the "Cold War." Honors students will also be required to answer essay questions on tests, take part in group activities, make an oral presentation, and/or complete a research project paper each semester.

PREREQUISITE: None

REASON & LOGIC / ARGUMENT MOCK TRIAL

Sophomores, Juniors, and Seniors
Credit: .5

This elective course meets every-other day and is designed to enhance critical thinking, research, and communication skills. Combining reason and logic, students will learn to develop argument technique by constructing, presenting, defending, and critiquing arguments. The focal point of the class is to prepare students to participate in the statewide Mock Trial competition. Over 250 high school student teams from across the state compete on a county level. County winners go on to compete for the state championship. Students will have the opportunity to work closely with local attorneys, learning the “art” of legal arguments in preparation for the tournament. This course is designed to produce teams that engage in competition; therefore, student participation is absolutely mandatory in class mock trials, University of Pittsburgh’s Mock Trial tournament, and the State competition.

PREREQUISITE: None

ADVANCED PLACEMENT ECONOMICS

Seniors
Credit: 1.0

Advanced Placement Economics is a full-year course taught at the college level. It is a microeconomics course designed to teach students about the economic decisions of households and firms. Students will study the impact that individuals and firms have on the economy and will be able to apply the economic principles learned in class to everyday life. Every student is encouraged to take the AP Microeconomics Exam and college credits are available from Seton Hill University.

PREREQUISITE: None

PRINCIPLES OF DEMOCRACY

Seniors
Credit: .5

This required course focuses on American government and is designed to help students better understand how government works, how it is a dynamic, exciting process, and how it impacts them. The course emphasizes key government concepts. Included among these are: constitutional rights and responsibilities, cultural pluralism, civic participation and the political process, free enterprise, comparative governments, and global perspective.

PREREQUISITE: None (*Note: Seniors select one of the following in addition to Principles of Democracy*)

PRINCIPLES OF ECONOMICS

Seniors
Credit: .5

Principles of Economics is a semester course designed to introduce students to economic principles and practices. Students will learn about individual decision making and how it impacts the overall economy.

PREREQUISITE: None

SOCIOLOGY

Seniors
Credit: .5

Sociology, a one-semester Social Studies course designed for high school seniors, is the study of society and groups within a society. Students will learn about the causes and effects of contemporary social matters confronting society. Through discussions of basic sociological concepts, students will see how human beings become social creatures and how they establish patterns of behavior that make society work.

PREREQUISITE: None

INTRODUCTION TO PSYCHOLOGY

Sophomores, Juniors, and Seniors
Credit: .5

Psychology is the systematic study of individual human behavior and experience. The purpose of this course is to introduce students to the content, terminology, methodology, and application of the discipline. This survey course contains an introduction followed by four units based on the physiological, cognitive, behavioral, and affective domains of psychology.

PREREQUISITE: None

TECHNOLOGY EDUCATION DEPARTMENT

TECH ED	GRADE 9	GRADE 10	GRADE 11	GRADE 12
	INTRO TO STEAM	INTRO TO STEAM	CAD I - FUNDAMENTALS	CAD I - FUNDAMENTALS
	INTRO TO ENGINEERING	CAD I - FUNDAMENTALS	CAD 2 - 3D MODELING	CAD 2 - 3D MODELING
	APPLIED ROBOTICS	CAD 2 - 3D MODELING	CAD 3-FABRICATIONS	CAD 3-FABRICATIONS
	CAD I - FUNDAMENTALS	CAD 3-FABRICATIONS	INTRO TO ENGINEERING	INTRO TO ENGINEERING
		INTRO TO ENGINEERING	PRINCIPLES OF ENGINEERING	PRINCIPLES OF ENGINEERING
		PRINCIPLES OF ENGINEERING	APPLIED ROBOTICS	APPLIED ROBOTICS
		APPLIED ROBOTICS	COMPETITIVE ROBOTICS	COMPETITIVE ROBOTICS
		COMPETITIVE ROBOTICS	VIDEO PRODUCTION	VIDEO PRODUCTION
		VIDEO PRODUCTION		

7th GRADE DESIGN AND MODELING (PLTW)

Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

7th GRADE TECHNOLOGY AND GAMING

In 7th grade Gaming and Technology students will explore the principles of gaming. Through the use of Zulama, students will investigate how games were created and innovated starting in the 18th Century through modern times. Students will get an opportunity to innovate old game design and “mod” new games. Through the use of computers students will get an opportunity to code and create games. Students will also learn basic 3d Modeling using Computer Aided Drafting software to design pawns and characters for their games.

8th GRADE AUTOMATION AND ROBOTICS (PLTW)

Students trace the history development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

8th GRADE COMPUTER SCIENCE (PLTW)

Freshmen
Credit: .5

Computer science for innovators and makers will allow students to discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects. Throughout the unit, students will learn about programming for the physical world by blending hardware design and software development. They will design and develop a physical computing device, interactive art installation, or wearable, and plan and develop code for microcontrollers that bring their physical designs to life.

INTRO TO STEAM

Freshmen
Credit: .5

Introduction to STEAM is a semester course on Graphic Design, Computer Aided Design (CAD), Robotics, and Engineering. During the semester, students will spend one 9 weeks learning about Graphics & CAD, and one 9 weeks learning about Robotics and Engineering. Throughout the Graphics & CAD segment, students will learn how to use Graphics and CAD software. Students will first be introduced to the Elements and Principles of Design while using Graphics Software. Students then will be introduced to CAD, where they will use software to Design 3D models and use the 3D Printer. The 2nd 9 weeks will consist of introducing students to the Basics of Engineering and Robotics. Students will build a ClawBOT as a Team and be exposed to an introduction to programming. Once Students complete the INTRO TO STEAM Course, they may choose to go into any of our STEAM PATHWAYS, including: GRAPHICS, CAD, ROBOTICS, and ENGINEERING

PREREQUISITE: None

CAD I - FUNDAMENTALS

Sophomores, Juniors, and Seniors
Credit: .5

CAD I, is a one semester course on Computer Aided Design (CAD). The majority of student projects will be completed by learning how to use a CAD software called AutoCAD. While learning how to operate AutoCAD, students will understand how drafting is applied to communicate design ideas using the universal language of dimensioning. Students will learn how to read and create dimensions. Throughout the course, students will learn that all drawings are made from basic geometric shapes using geometry, measurement, and scale. Once students master isometric drawings, they will become skilled at creating multi-view drawings/orthographic projections and dimensioning. By the end of the course students will be able to complete a capstone project implementing everything they learned to create an orthographic drawing detailed with an Isometric drawing that has sectioned and hatched views.

PREREQUISITE: Intro to STEAM, Grade of 70% or better

CAD II - 3D MODELING

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

CAD II, is a one semester course on Computer Aided Design which will build off of what students learned in CAD I. Students should have a concrete understanding, and feel very comfortable with geometric constructions, Isometric drawings, orthographic projections, and dimensioning. With this foundation, students will move forward with learning a new AutoDesk Software called Inventor Professional. Inventor Professional is a Solid Modeling Design Software used for creating 3D digital Prototypes in the design, visualizations, and simulation of products. Students will learn how to use Inventor to design parts and then assemble parts to create a final product. Once students are comfortable creating parts and assemblies they will begin learning about drafting documents. Students will learn how to compile drafting documents with orthographic projections, isometric views, section views, dimensions, and notes on the product designed. Once students have mastered the use of AutoDesk Inventor, they will choose a R&D capstone project. In their capstone project, students will research their product and redesign it to make improvements to that product. By the end of the course students will be able to describe various architectural and engineering design career paths as well as other opportunities related to the field of drafting.

PREREQUISITE: CAD I, Grade of 80% or better

CAD III – FABRICATIONS

Sophomores, Juniors, and Seniors
Credit: .5

CAD III Fabrication is a one semester course on Computer Aided Design which will build off of what students learned in CAD II. Students will learn how to use the advanced features of three dimensional solid modeling concepts. Students will apply their CAD knowledge to real industry applications by mastering complex mechanical modeling, surface modeling, along with rendering and animation. Students will calculate how their assembled designs will react in the real world before creating a prototype. Throughout the Fabrication process, students will design complex parts and create prototypes with the use of 3D printers and CNC machines. By the end of the course students should have a complete Portfolio of their entire design process for each item they created.

PREREQUISITE: CAD II, Grade of 80% or better.

INTRO TO ENGINEERING DESIGN (PLTW)

Freshmen, Sophomores, Juniors, and Seniors
Credit: 1.0

Introduction to Engineering Design is a one year course. Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work.

PREREQUISITE: Algebra I, Grade of 90% or better; Math teacher recommendation.

PRINCIPLES OF ENGINEERING (PLTW)

Sophomores, Juniors, and Seniors
Credit: 1.0

Principles of Engineering is a one year elective course. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

PREREQUISITE: Intro to Engineering Design, Grade of 80% or better

ENGINEERING DESIGN AND DEVELOPMENT (PLTW)

Juniors and Seniors
Credit: 1.0

In this course, students apply skills they have learned in IED and POE courses. They will identify a real-world challenge and then research, design, and test a solution, ultimately presenting their unique solutions to a panel of engineers. The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.

PREREQUISITE: Principles of Engineering (POE), Grade of 80% or better, or Teacher Recommendation

APPLIED ROBOTICS

Freshmen, Sophomores, Juniors, and Seniors
Credit: .5

Applied Robotics is a one semester course. Using robots we will cover the fundamentals of problem solving, program design, algorithms and programming using a high-level language. A robot is an embedded system of software and hardware. Programming and building robots applies science, technology, engineering and math (STEM) concepts. This course introduces the fundamental concepts of programming and robotics.

PREREQUISITE: Intro to STEAM with a 70% or better; or Teacher recommendation.

COMPETITIVE ROBOTICS

Sophomores, Juniors, and Seniors
Credit: 1.0

VEX Robotics Competition (VRC) is an international program for middle and high school students that has as its goal to engage student participants in the study of science, technology, engineering, and math (STEM) through a competition. Each year, an engineering challenge is presented in the form of a game. Students will build innovative robots designed to score the most points possible in qualification matches, elimination matches and Skills

Challenges. Beyond science and engineering principles, a VEX Robotics project encourages teamwork, leadership and problem solving among groups. In addition to having a great time and building amazing robots, through their participation in the VEX Robotics Competition and their work within their team, students will learn many academic and life skills.

PREREQUISITE: Applied Robotics 70% or better; or Teacher recommendation

BASIC VIDEO PRODUCTION

Sophomores, Juniors, and Seniors

Credit: 1.0

This course is designed to expose students to the operating of camcorders and other video production equipment. Students will write, shoot, and edit a variety of video productions and projects. Instruction will include lab activities and skill development projects. Students will also learn shot sequencing and cinema graphic techniques. Skills developed in this class will prepare students to generate video projects for other courses. Assessments will include projects, portfolio pieces, tests, and quizzes. Teacher approval required. Interested students must meet with the teacher to obtain a recommendation to enter the course as an elective. Recommendations at this point are tentative, based on further review of student discipline and attendance records.

LAWRENCE COUNTY CAREER & TECHNICAL CENTER'S

ACADEMIC COURSES OFFERINGS

(All courses listed are 1 credit courses with the exception of Elective Course Offerings).

English Course Offerings:

English 10
College Prep English 10
English 11
College Prep English 11
English 12
College Prep English 12
Dual Enrollment - Speech

Science Course Offerings:

Applied Physics
Biology 1 with Lab
Advanced Biology 2 with Lab
Biology 2 with Lab
Chemistry with Lab
Physics with Lab

Math Course Offerings:

Algebra 1
Algebra 2
Advanced Algebra 2
Business Math
Calculus
Geometry
Pre Calculus
Trigonometry

History Course Offerings:

World History
United States History
American Government
Dual Enrollment - Ancient History

Elective Course Offerings:

Physical Education - Required
Health - Required
Current Issues
Financial Literacy
Introduction to Psychology

Basic Course Offerings:

Intro to Algebra (A&B)
Consumer Math
Essential English (Levels 1, 2 &3)
Academic Support

CAREER & TECHNICAL OFFERINGS

NEAREST RELATED PROGRAM

(An aide to help you select second choice)

1. AUTO TECHNOLOGY
2. COLLISION REPAIR
3. COMMERCIAL ART
4. COMPUTER AND OFFICE
5. CONSTRUCTION TRADES
6. COSMETOLOGY
7. ELECTRICAL OCCUPATIONS
8. HEALTH ASSISTANT
9. MACHINE TOOL TECHNOLOGY
10. MASONRY
11. OIL AND GAS TECH
12. RESTAURANT TRADES
13. VETERINARY ASSISTANT
14. WELDING

An Equal Rights and Opportunities Area Career & Technical Center

Cooperative Education – “CO-OP”

Cooperative Education is a method of instruction for 12th grade LCCTC students, who receive instruction on-the-job related to their Career & Technical program.

- Senior students who meet attendance and grade requirements are matched with a training station (job site) that meets their career objective.
- Students alternate between study at LCCTC and their co-op job. For example, a student may spend the morning at LCCTC for academic classes and the afternoon at their co-op job.
- Co-op is a paid work experience program.
- Successful co-op students may be retained by employers after graduation.

How to Apply to LCCTC

Acceptance for admission to the Lawrence County Career and Technical Center is based on the following criteria:

- **Submission of “Application for Admission”** – Applications may be obtained at your Guidance Office or by calling the LCCTC Guidance Office at 724 658-3583, ext. 7104
- **Accumulation of a Minimum of Four (4) Full Credits***
 - 1 *Full* Credit in English – passing grade
 - 1 *Full* Credit in Math – passing grade
 - 2 *Full* Credits in 2 other subjects
 - A Good Attendance Record
 - A Good Discipline Record
- **Parent/Guardian Signature on Application**

** If you do not have these credit requirements you should attend Lawrence County CTC Summer School or your Home District Summer School. You will not be admitted without them.*