Jersey Shore Area School District
Board of Education – Regular Meeting
Minutes of February 11, 2019

A. Opening

1. Call to Order: Mr. Craig Allen, President, called the meeting to order at 7:01 p.m.

2. Roll Call:
Members Present: Mr. Craig Allen, Mr. Harry Brungard, Mr. Christopher Fravel, Mr. John Pecchia, Mrs. Michelle Stemler, Mrs. Karen Stover, Mr. Merrill Sweitzer, Mrs. Mary Thomas, Mrs. Kelley Wasson and Dr. Jill Wenrich, Superintendent
Others Present: J. David Smith, Esq., Solicitor, Mr. Benjamin Enders, Board Secretary, Dr. Kenneth Dady, Assistant Superintendent and Gabrielle Harris and Emmilianne George, Student Representatives.

3. Pledge of Allegiance: Led by Ridge Allison, Rory Kanouff and Ellie Brooks, students representing the Senior High School CTE Childcare Program.

B. Presentations

1. Communications:

a. District has municibid items for sale, the list can be found on JSASD Facebook page and District webpage.

2. President's Report: None

3. Student Representative Report: None

4. Intermediate Unit Report: None

5. Superintendent's Report:

a. 2019-2020 Learning Pathways for Jersey Shore Area Senior High School at first reading – Steven Keen/Jill Wenrich (Attachment)
b. JSASD 2019 and beyond - Administration

C. Courtesy of the Floor on Agenda Items:

Justin Wall-Anthony Twp. – commented on the Capital Projects.

D. Personnel

1. Personnel Items:

Motion: A motion was made by John Pecchia and seconded by Kelley Wasson to approve the following Personnel items as listed on the Agenda and addendum:

a. the following Job Descriptions on second reading: (Attachments)

School Building Secretary
Classroom Paraprofessional and Learning Support or Special Education Paraprofessional

b. acceptance of a letter of resignation from Bradd Williamson, as Middle School Track and Field coach, effective February 6, 2019.

c. appointment of Devan Hensler to a part time Food Service position at the High School, $9.90 per hour, effective February 12, 2019.

d. a half day without pay for employee number 2018-19-15, on Monday, March 11, 2019.

The vote was a unanimous yes. Motion carried.

E. Curriculum and Instruction: None

F. Building and Grounds:

1. Building and Grounds Items:

Motion: A motion was made by Mary Thomas and seconded by Chris Fravel to approve the following Building and Grounds items as listed on the agenda:

a. purchase of a Trane Roof Top Unit from Trane for the Administration Building Roof Top Unit Project as recommended by the Capital Projects Committee at cost of $9,085, funds will come from the capital reserve account. (Attachment)

b. rental of a Crane from Allison Crane & Rigging for the Administration Building Roof Top Unit Project as recommended by the Capital Projects Committee at an estimate cost of $1,050 ($175/hr * 6 hours minimum), funds will come from the capital reserve account.

c. agreement with Automated Logic for the Administration Building Roof Top Unit Project as recommended by the Capital Projects Committee at cost of $9,330, funds will come from the capital reserve account. (Attachment)

d. agreement with Spencer Mechanical for the Administration Building Roof Top Unit Project as recommended by the Capital Projects Committee at cost of $5,930, funds will come from the capital reserve account. (Attachment)

e. inspection by Tiadaghton Valley Municipal Authority of the Stormwater Pipes at the Middle School as recommended by the Capital Projects Committee at an estimate cost of $1,200 ($150/hr * 8 hours), funds will come from the capital reserve account.

The vote was a unanimous Yes. Motion carried.

G. Finance: None

H. Miscellaneous:

1. Miscellaneous Item

Item a. as listed on the agenda was pulled and will be on the February 25, 2019 meeting.

a. the revision of the 2018-2019 School Year calendar.

Motion: A motion was made by Karen Stover and seconded by Mary Thomas to approve Miscellaneous item b as listed on the Agenda:

b. the proposed 2019-2020 School Year Calendar at second reading. (Attachment)

The vote was a unanimous Yes. Motion carried.

I. Old Business:

a. Graduation Policy Review

J. Courtesy of the Floor on Items not on the Agenda:

John Shireman-JS Boro – commented on Crossing Guards and radios.
Pam Garrett-JS Boro – commented on band parkas being destroyed by mold.

K. Executive Session: An executive session was held for personnel and legal issues starting at 8:18 p.m. after which no business was conducted.

Meeting resumed at 10:31 p.m.

L. Adjournment

The February 11, 2019 Regular Board Meeting was adjourned at 10:32 p.m.

Respectfully submitted,

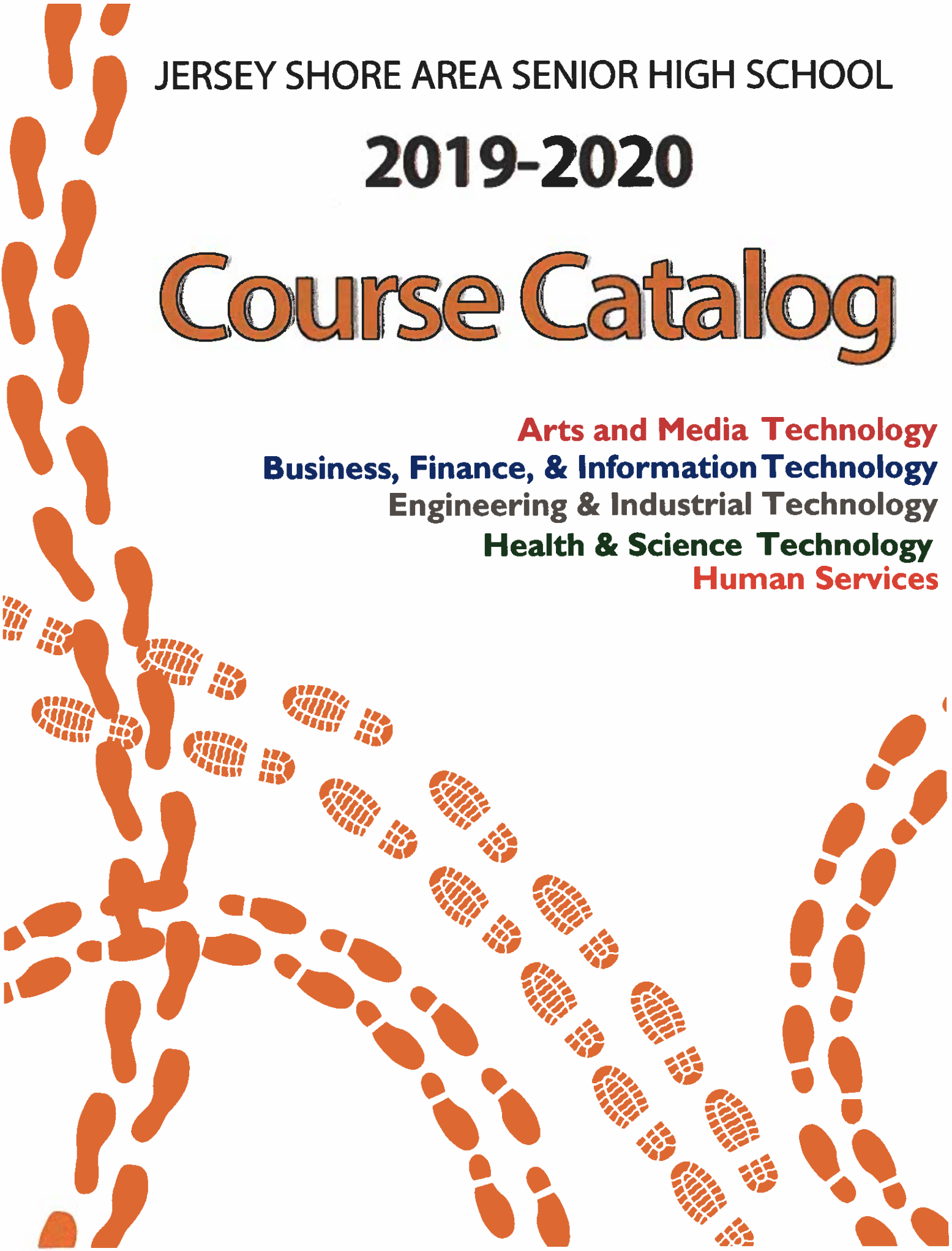
Benjamin J. Enders
Board Secretary

JERSEY SHORE AREA SENIOR HIGH SCHOOL

2019-2020

Course Catalog

Arts and Media Technology
Business, Finance, & Information Technology
Engineering & Industrial Technology
Health & Science Technology
Human Services



Learning Pathway Course Map – 9th Grade

Class	Arts and Communications	Business, Finance and Information Technology	Engineering and Industrial Technology		Health and Science Technologies	Human Services
			Electronics, Manufacturing, &Automotive	Construction, Design & Building Trades		
English (1 Credit)	English 9 or Honors English 1	English 9 or Honors English 1	English 9 or Honors English 1	English 9 or Honors English 1	English 9 or Honors English 1	English 9 or Honors English 1
Math (1 Credit)	Career / Academic Algebra or Geometry Honors	Career / Academic Algebra or Geometry Honors	Career / Academic Algebra or Geometry Honors	Career / Academic Algebra or Geometry Honors	Career / Academic Algebra or Geometry Honors	Career / Academic Algebra or Geometry Honors
Science (1 Credit)	Earth /Space and Into to Bio or *Biology 9*	Earth /Space and Into to Bio or *Biology 9*	Earth /Space and Into to Bio or *Biology 9*	Earth /Space and Into to Bio or *Biology 9*	Earth /Space and Into to Bio or *Biology 9*	Earth /Space and Into to Bio or *Biology 9*
Social Studies (1 Credit)	US History 1 or 19th Century	US History 1 or 19th Century	US History, US History 1 or 19th Century	US History, US History 1 or 19th Century	US History 1 or 19th Century	US History 1 or 19th Century
Pathway Courses *(1 Credit)*	*Multimedia Design*	Introduction to Business	*Industrial Technologies*	*Industrial Technologies*	*Health Occupations*	*Introduction to Human Services*
Required Electives	Pathway Course (1) Personal Finance (.5) Physical Education(.5)	Pathway Course (1) Personal Finance (.5) Physical Education(5)	Pathway Course (1) Personal Finance (5) Physical Education(5)	Pathway Course (1) Personal Finance (.5) Physical Education(5)	Pathway Course (1) Personal Finance (5) Physical Education(.5)	Pathway Course (1) Personal Finance (5) Physical Education(5)
Electives *(2 Credits)*	Art / Music Journalism Modern Language Technology	Art / Music Business Modern Language Technology	Art / Music Business Modern Language Technology	Art / Music Business Modern Language Technology	Art / Music Business Modern Language Technology	Art / Music Business Modern Language Technology

Learning Pathway Course Map – 10th Grade

Class	Arts and Communications	Business, Finance and Information Technology	Engineering and Industrial Technology		Health and Science Technologies	Human Services
			Electronics, Manufacturing, &Automotive	Construction, Design & Building Trades		
English (1 Credit)	Keystone English or Drama or Poetry and Sports Lit. or Fantasy Fiction or Creative Writing English Honors 2	Keystone English or Drama or Poetry and Sports Lit. or Fantasy Fiction or Creative Writing English Honors 2	Keystone English or Drama or Poetry and Sports Lit. or Fantasy Fiction or Creative Writing English Honors 2	Keystone English or Drama or Poetry and Sports Lit. or Fantasy Fiction or Creative Writing English Honors 2	Keystone English or Drama or Poetry and Sports Lit. or Fantasy Fiction or Creative Writing English Honors 2	Keystone English or Drama or Poetry and Sports Lit. or Fantasy Fiction or Creative Writing English Honors 2
Math (1 Credit)	Career Algebra2 Academic Algebra2 Honors Algebra 2	Career Algebra2 Academic Algebra2 Honors Algebra 2	Career Algebra2 Academic Algebra2 Honors Algebra 2	Career Algebra2 Academic Algebra2 Honors Algebra 2	Career Algebra2 Academic Algebra2 Honors Algebra 2	Career Algebra2 Academic Algebra2 Honors Algebra 2
Science (1 Credit)	Biology Chemistry (CHM100) Honors Physics	Biology Chemistry (CHM100) Honors Physics	Biology Chemistry (CHM100) Honors Physics	Biology Chemistry (CHM100) Honors Physics	Biology Chemistry (CHM100) Honors Physics	Biology Chemistry (CHM100) Honors Physics
Social Studies (1 Credit)	World History US History 2 20th Century History	World History US History 2 20th Century History	World History US History 2 20th Century History	World History US History 2 20th Century History	World History US History 2 20th Century History	World History US History 2 20th Century History
Pathway Course *(1 Credit)*	Pathway Courses	Pathway Courses	Pathway Courses	Pathway Courses	Pathway Courses	Pathway Courses
Required Electives	Computer Apps (.5) Physical Education(.5)	Computer Apps (.5) Physical Education(.5)	Computer Apps (.5) Physical Education(.5)	Computer Apps (.5) Physical Education(.5)	Computer Apps (.5) Physical Education(.5)	Computer Apps (.5) Physical Education(.5)
Electives *(2 Credits)*	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others

Learning Pathway Course Map – 11th Grade

Class	Arts and Communications	Business, Finance and Information Technology	Engineering and Industrial Technology		Health and Science Technologies	Human Services
			Electronics, Manufacturing, &Automotive	Construction, Design & Building Trades		
English (1 Credit)	SAT or Outdoor Lit/ or Poetry and Speech & Research Honors English 3	SAT or Outdoor Lit/ or Poetry and Speech & Research Honors English 3	SAT or Outdoor Lit/ or Poetry and Speech & Research Honors English 3	SAT or Outdoor Lit/ or Poetry and Speech & Research Honors English 3	SAT or Outdoor Lit/ or Poetry and Speech & Research Honors English 3	SAT or Outdoor Lit/ or Poetry and Speech & Research Honors English 3
Math (1 Credit)	Career Algebra 3 Academic Geometry Trig/Pre-Calc Honors Statistics	Career Algebra 3 Academic Geometry Trig/Pre-Calc Honors Statistics	Career Algebra 3 Academic Geometry Trig/Pre-Calc Honors Statistics	Career Algebra 3 Academic Geometry Trig/Pre-Calc Honors Statistics	Career Algebra 3 Academic Geometry Trig/Pre-Calc Honors Statistics	Career Algebra 3 Academic Geometry Trig/Pre-Calc Honors Statistics
Science (1 Credit)	Keystone Biology Chemistry (CHM100) Physics (Honors) AP Chem/ AP Enviro.	Keystone Biology Chemistry (CHM100) Physics (Honors) AP Chem/ AP Enviro.	Keystone Biology Chemistry (CHM100) Physics (Honors) AP Chem/ AP Enviro.	Keystone Biology Chemistry (CHM100) Physics (Honors) AP Chem/ AP Enviro.	Keystone Biology Chemistry (CHM100) Physics (Honors) AP Chem/ AP Enviro.	Keystone Biology Chemistry (CHM100) Physics (Honors) AP Chem/ AP Enviro.
Social Studies (1 Credit)	World History American Gov't / Economics AP Euro History	World History American Gov't / Economics AP Euro History	World History American Gov't / Economics AP Euro History	World History American Gov't / Economics AP Euro History	World History American Gov't / Economics AP Euro History	World History American Gov't / Economics AP Euro History
Pathway Courses *(1-3 Credit)*	CTE: Comm. Tech 1 Art / Music Courses	Business Education Courses	CTE: Manufacture CTE: Automotive CTE: Electronics	CTE: Con. Trades CTE: Build Maint.	Pathway Courses	Pathway Courses
Required Electives	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*
Electives *(2 Credits)*	Art / Music Business Journalism/Yearbook Modem Language Technology Others	Art / Music Business Journalism/Yearbook Modem Language Technology Others	Art / Music Business Journalism/Yearbook Modem Language Technology Others	Art / Music Business Journalism/Yearbook Modem Language Technology Others	Art / Music Business Journalism/Yearbook Modem Language Technology Others	Art / Music Business Journalism/Yearbook Modem Language Technology Others

Learning Pathway Course Map – 12th Grade

Class	Arts and Communications	Business, Finance and Information Technology	Engineering and Industrial Technology: Electronics, Manufacturing, & Automotive	Engineering and Industrial Technology: Construction, Design & Building Trades	Health and Science Technologies	Human Services
English (1 Credit)	Biography & World Literature English 111 AP English	Biography & World Literature English 111 AP English	Biography & World Literature English 111 AP English	Biography & World Literature English 111 AP English	Biography & World Literature English 111 AP English	Biography & World Literature English 111 AP English
Math (1 Credit)	Unified Alg & Trig Acad Trig / Pre-Calc College Ready Alg Calculus/AP Calculus Business Math	Unified Alg & Trig Acad Trig / Pre-Calc College Ready Alg Calculus/AP Calculus Business Math	Unified Alg & Trig Acad Trig / Pre-Calc College Ready Alg Calculus/AP Calculus Business Math	Unified Alg & Trig Acad Trig / Pre-Calc College Ready Alg Calculus/AP Calculus Business Math	Unified Alg & Trig Acad Trig / Pre-Calc College Ready Alg Calculus/AP Calculus Business Math	Unified Alg & Trig Acad Trig / Pre-Calc College Ready Alg Calculus/AP Calculus Business Math
Science (1 Credit)	Chemistry or Physics AP Chem/AP Environ Science Elective	Chemistry or Physics AP Chem/AP Environ Science Elective	Chemistry or Physics AP Chem/AP Environ Science Elective	Chemistry or Physics AP Chem/AP Environ Science Elective	Chemistry or Physics AP Chem/AP Environ Science Elective	Chemistry or Physics AP Chem/AP Environ Science Elective
Social Studies (1 Credit)	American Gov't / Economics AP US History	American Gov't / Economics AP US History	American Gov't / Economics AP US History	American Gov't / Economics AP US History	American Gov't / Economics AP US History	American Gov't / Economics AP US History
Pathway Courses *(1-3 Credit)*	CTE: Comm. Tech 1 Art/Music Courses	CTE: Accounting CTE: Marketing CTE: Office Tech.	CTE: Manufacture CTE: Automotive CTE: Electronics	CTE: Con. Trades CTE: Build Maint	Pathway Courses	Pathway Courses
Required Electives	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*	Physical Education(.5) *FCS-Music-Art (.5)*
Electives *(2 Credits)*	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others	Art / Music Business Journalism/Yearbook Modern Language Technology Others

Curriculum Guide – Course Descriptions

Art

7000 Introduction to Art *Grade 9* **.50 credit**

Introduction to art is designed to give students a broad experience in two dimensional and three dimensional art. Students will learn and use the elements and principles of art in a variety of media (paint, pastel, colored pencil, plaster, etc.). Assignments are designed to challenge, exercise creative muscle, and broaden artistic experience. This class will give students an excellent foundation for continuing their education in the art industry or communication technology pathway. All projects must be completed in order to receive credit for this course.

7135 Sculpture *Grade 9-12* **.50 credit**

Students will create a wide range of sculptures using various materials, tools and techniques. Clay sculpting will be a large part of the class and will supplement any pottery classes that students may take. Materials will range from clay, wood, stone, plaster, and drywall. All projects must be completed in order to receive credit for this course.

7160 Commercial Art *Grade 9-12* **.50 credit**

Almost everything you see and use from your phone to your shoes has to be designed by someone. In this course you will do just that. Students will use fine art and design skills with digital art integration to create and communicate in various areas of commercial design such as product design, storyboards and illustration, fashion design, interior design, and advertising art. They will explore the creative planning involved in communicating a variety of ideas. All projects must be completed in order to receive credit for this course.

7001 Art and Design *Grade 10-12* **.50 credit**

Students will focus on the Elements and Principles of art and design to develop and understanding of the creative process involved in producing art. Projects will give the student a chance to work with various media (pastels, colored pencils, paints and ink). All projects must be completed in order to receive credit for this course.

7002 Paper Studio *Grade 10-12* **.50 credit**

Paper-scientists have studies the fabulous fiber for years. It is one of man's greatest tools. It has captured wisdom, whimsy, poetry, fact and fiction and functions in daily life in countless capacities. In the Paper Studio, the student artist interested in unique and creative compositions will have a chance to explore the interesting artistic possibilities of paper; create and decorate it, experiment with paper collage, weaving, quilting, folding and even paper jewelry. They will foster a method of thinking creatively while making art using various forms of papers, either handmade, printed, hand cast or recycled.

7003 International Arts and Crafts *Grade 10-12* **.50 credit**

This course will involve the exploration of the history and heritage of several Latin American, African, Eastern and North American cultures and the people who developed the very original and different folk arts and crafts of those societies. Students will produce arts and craft projects that will introduce them to new materials, techniques an d styles inspired by the art of these cultures while developing a global art vocabulary and an appreciation of diversity and how it has influenced the world of visual arts.

7005 Mixed Media *Grade 10-12* **.50 credit**

This hands on design course will encourage a sense of exploration and broaden thinking patterns by combining and manipulating traditional and non-traditional art materials and techniques. Projects will refine skills and stimulate the innovative use of materials such as paint, fiber, paper, dyes, wire, glass and found objects while combining them with techniques such as glazing, sponging, embossing, printing and collage. This is a course for students who enjoy the challenge of experimenting with new techniques, materials and creative compositional strategies. Students will make informed design choices and improve creative thinking skills while producing original and imaginative artwork.

7016 Stage and Set Design *Grade 10-12* **.50 credit**

This course presents the student with a variety of opportunities to learn the basics of set design for productions such as plays, video, concerts, award ceremonies, etc. Work will be done on full stage productions as well as for smaller settings. The design of props, makeup, lighting, sound effects, costumes, and special effects will also be done. The student will also have the opportunity to specialize in areas of interest. All projects must be completed in order to receive credit for this course.

7022 Fiber Crafts and Beaded Jewelry *Grade 10-12* **.50 credit**

This course explores the areas of Crafts specializing in different fibers such as papers, fabrics, plant fibers, and reeds. We will also experiment with jewelry processes that involve beads. Some of the areas the students will be working in are weaving, silk painting, book design/paper binding, paper casting, paper mache, reed and paper basketry, tie dyeing, use of memory wire, bead stringing, and making clay beads. Students will also have the opportunity to expand a project of personal interest.

7023 Glass Crafts *Grade 10-12* **.50 credit**

This course explores the areas of Crafts specializing in fabricating items out of glass. Students will learn basic glass design, cutting, soldering, and warm glass techniques as they create both 2D and 3D glass projects. Other areas the students will be working in include candle, making, fused glass, slumped glass, jewelry-making, utilizing Photoshop in design planning, and the use of recycling in art. All projects must be completed in order to receive credit for this course.

7031 Pottery 1 *Grade 10-12* **.50 credit**

This course introduces the beginning student to the basics of pottery, wheel throwing and hand building, as well as a general understanding of glazing and firing of electric kilns. All projects must be completed during the semester for credit.

7032 Pottery 2 *Grade 10-12* **.50 credit**

(Prerequisite: Pottery 1)

This course introduces the student to advanced techniques in wheel throwing and hand building. Students at this stage are encouraged to adapt projects and individualization is encouraged. All projects must be completed during the semester for credit.

7033 Pottery 3 *Grade 11-12)* **.50 credit**

(Prerequisite: Pottery 2)

This course is for the student who has a good working knowledge of wheel throwing and is interested in advanced techniques and projects on the potters' wheel. There will also be opportunities for the interested student to work in advanced sculpture and hand building problems. All projects must be completed during the semester for credit.

7100 Learning to Paint *Grade 10-12* **.50 credit**

This is an introductory painting course. Students will use water-based paints including acrylic, watercolor and tempera. Using a variety of brushes and techniques, students will create paintings that range from realistic to abstract. You must be in grades 10, 11 or 12. All projects must be completed in order to receive credit for this course.

7101 Learning to Draw *Grade 10-12* **.50 credit**

Anyone can learn how to draw. With practice and a desire to learn, students who have no drawing skills can become excellent artists. This is an introductory course on drawing. Students will start from very basic techniques and applications advancing slowly and methodically to more advanced methods. They will work from nature, still life and people in a variety of media; exploring qualities of line, texture, light and space. All grade levels are allowed to sign up for this class. All projects must be completed in order to receive credit for this course.

Business, Finance and Information Technologies

Business, Finance and Information Technologies is a path to a successful career. The demand for persons with business skills is constantly growing, especially in the accounting/finance, marketing, administrative assistant, and technology-related fields. Business and Computer Technologies allow students to do the following: (1) develop life skills needed by all consumers; (2) prepare for both college, employment, and personal finances; (3) acquire lifelong skills and habits to apply to a career; (4) broaden life-long work and study options; (5) pretest career interests before going to college; and (6) provide an opportunity to apply academic content. The courses offered by the Business and Computer Technologies Department are designed to provide the skills and competencies that will be used in a variety of careers as well as student's personal lives. ***Any student may elect business courses.***

2178 Business Math *Grade 11-12* **1.0 credit**

This course involves such concepts as interest, discounts, purchasing, selling, tax computations, commissions, insurance, investments, and financial institutions. By learning this type of material, the student will become more efficient, effective, and competent in the type of math used in the real world by both business people and consumers. This course is accepted as a math credit.

4202 Business Finance *Grade 11-12* **.50 credit**

Personal Finance and Business Applications introduces students to the business concepts and skills required in today's marketplace. Students need to have a basic understanding of business principles, computer applications, and personal finance to become productive members of the workforce. The intent of the course is to inform students of their various financial responsibilities and to provide them with opportunities for self-awareness, expression, and satisfaction in a highly technical and competitive society.

4200 Personal Finance *Grade 9* **.50 credit**

Personal Finance and Business Applications introduces students to the business concepts and skills required in today's marketplace. Students need to have a basic understanding of business principles, computer applications, and personal finance to become productive members of the workforce. The intent of the course is to inform students of their various financial responsibilities and to provide them with opportunities for self-awareness, expression, and satisfaction in a highly technical and competitive society.

0042/4210 Introduction to Business *Grade 9-12* **1.0 credit**

This course is highly recommended to all students! The course is designed as an introduction to some of the business courses offered at the high school. Students can use this course to help them find a possible career or interest area. This is a good course for those who will enter any field of business, and for everyone else who will ever have to make decisions involving money. Considerable time will also be spent in the microcomputer lab using software to supplement the regular classroom instruction. "Intro" can make the difference in your future.

4342 Accounting 1 *Grade 9-12* **1.0 credit**

This course is designed to equip the student with the professional skills that will enable him or her to work in the fields of accounting or bookkeeping. Many job opportunities exist in these fields. The student receives training in each step of the accounting cycle from journalizing through the end-of-month work, to the preparing of financial statements used by management. Accounting is the backbone of any business structure and is highly recommended for any student considering a career in the business field. Basic computerized accounting applications will now be integrated into Accounting 1. *(After this course it is recommended that you take 4341 (ACC113) followed by 4346 (ACC123) if you are interested in a business or accounting career.)*

4343 Accounting 2 *Grade 10-12* **1.0 credit**

(Prerequisite: Accounting 1) This is an advanced course primarily designed to help the student prepare for a career in the rewarding field of accounting. It includes interesting and important concepts such as depreciation, accruals, deferrals, inventory and cash control, corporate and managerial accounting, etc. Computerized accounting problems will be used as well as spreadsheet problems.

4345 Automated Accounting *Grade 12* **1.0 credit**

(Prerequisite Accounting 1 & 2)

This-individualized course is designed to teach automated accounting procedures and apply them to management reports and financial statements, budgets, forecasts, etc., as well as other reports that may be used in a financial setting. In addition, class participants will learn advanced spreadsheet techniques using Microsoft Excel.

4381 Business Leadership and Management Year *Grade 10-12* **1.0 credit**
4382 Business Leadership and Management Semester 1 **.50 credit**

This course is a self-paced, contract-based curriculum that will span the entire school year or the first term dependent upon the number of credits selected by the student. Students, working both independently and as a team, will participate in project management skills pertaining to various business and leadership topics including aspects of Career and Technical Student Organizations. Students will prepare speeches, mock interviews, and professional networking portfolios.

4420 Sports and Entertainment Marketing *Grade 10-12* **.50 credit**

Explore the intriguing world of sports and entertainment from the perspective of marketing. This course will take you on a step-by-step journey through the exciting world of sports entertainment marketing. You will learn about the key functions of marketing and how those functions are applied to the sports and entertainment industry. Guest Speakers, case studies, projects, field trips, on-line activities of owning your own professional sports team will broaden the classroom learning experience.

4422 Marketing *Grade 10-12* **1.0 credit**

Explore the intriguing world of sports and entertainment from the perspective of marketing. This course will take you on a step-by-step journey through the exciting world of sports entertainment marketing. You will learn about the key functions of marketing and how those functions are applied to the sports and entertainment industry. Guest Speakers, case studies, projects, field trips, on-line activities of owning your own professional sports team will broaden the classroom learning experience.

4421 REAL Entrepreneurship *Grade 11-12* **.50 credit**

An entrepreneur is a person who attempts to earn a profit by taking the risk of owning and operating his or her own business. Thousands of people become entrepreneurs each year. They may start their own businesses from scratch, buy existing businesses, or buy franchised businesses. The REAL (Rural Entrepreneurship through Action Learning) Entrepreneurship course will teach students the skills necessary to become a successful entrepreneur through a hands-on approach. In this course, students learn about self-employment through reading, research, and classroom activities.

4450 Computer Applications/REQUIRED COURSE *Grade 10* **.50 credit**

Computer Applications is a course that teaches students how to create, edit, and format word processing, data base, spreadsheet, and presentation files using Microsoft Office. There is a strong focus on careers and the students will take the ASVAB diagnostic test to understand career options. Introduction to the Internet and its research capabilities will be presented. Students must also complete a resume, a letter of application, other job-related materials, and digital citizenship topics.

4700 Business Law 1 *Grade 10-12* **.50 credit**

Business Law 1 is a one-semester course that involves principles of law as they apply to business and the consumer. This is an essential course for any student who is planning a career in business. It is highly recommended for business students and others who wish to elect an interesting and enjoyable course. Basic principles of law will be discussed with emphasis being placed on the following: the individual and his/her relationship with the law; our legal system; contract law; marriage, divorce and its legal consequences; and bailments. Current legal cases that relate to the course will also be discussed. Law is an instrument of social control which affects everyone. Business is the medium through which most of the necessities of life are provided to everyone. These two comprehensive and profoundly important fields of interest are ambitiously combined in the text and course on business law. Most colleges require students majoring in business to take at least two semesters of business law.

4701 Business Law 2 *Grade 10-12* **.50 credit**

Business Law 2 is a one-semester course that will cover the following topics: job and agency contracts; buying on credit; insurance (including automobile insurance); buying and renting of real property; consumer law; commercial paper (checks and promissory notes); and detailed study of various forms of business ownership. **Business Law 1 is not required to enroll in Business Law 2.**

♦♦ 4482 (CSC124) Information, Technology, and Society *Grade 10-12* **1.0 credit 3.0 college credits**

This course is weighted 1.1

Introduction to the basic concepts and applications of computer and Internet-related information technology and its impacts on individual users, businesses, groups, organizations, and society. Topics include access, evaluation, and use of digital information, ethical and security implications of information use and storage; human-computer interactions; social aspects of information systems; economic and legal issues; and professional presentation and communication of information. Information literacy skills that promote lifelong learning are developed through exposure to various existing and emerging technologies, including information resources, communication methods and technology. (Formerly CSC 110) **Any 10th grade student selecting this course must have administrative approval. Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam and purchase the book for this course. With successful completion, students will receive 3 credits for the CSC 124 course through Pennsylvania College of Technology.**

♦♦ 4341 (ACC113) Introduction to Financial Accounting/College Accounting *Grade 11-12* **1.0 credit 3.0 college credits**

This course is weighted 1.1

Basic principles of financial accounting for business and non-business students who need to understand and interpret accounting and financial information. Emphasis on using principles learned to make rational, reasoned, and intelligent decisions in a business environment. Many job opportunities exist in these fields. The student receives training in each step of the accounting cycle from journalizing through the end-of-month work, to the preparing of financial statements used by management. Accounting is the backbone of any business structure and is highly recommended for any student considering a career in the business field. Basic computerized accounting applications will now be integrated into Accounting ACC113. **Any student selecting this course must have administrative approval. Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam and purchase the book for this course. With successful completion, students will receive 3 credits for the ACC113 course through Pennsylvania College of Technology. Tenth graders will be considered by filing a waiver.**

♦♦ 4346 (ACC123) **Introduction to Managerial Accounting/College Accounting** *Grade 11-12* **1.0 credit 3.0 college credits**

This course is weighted 1.1
(Prerequisite ACC113)

Theory and application of the analytic skills necessary to make decisions based on financial information. Emphasis on the organization of data for decisions, development of sound measurements, and the use of accounting for control and evaluation of economic activity; de-emphasizes the transaction recording process. Requires a thorough knowledge of accounting principles in order to analyze financial summarizations. **Any student selecting this course must have administrative approval. Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam and purchase the book for this course. With successful completion, students will receive 3 credits for the ACC123 course through Pennsylvania College of Technology.**

Career and Technical Education Programs

In today's challenging job environment, it is more critical than ever before that our young people complete their high school education with strong academic and technical skills that prepare them for college-level studies and successful careers. We believe this foundation will allow students to succeed personally and also make a valuable contribution to an innovative and competitive Pennsylvania economy. Building this foundation is what Career and Technical Education (CTE) is all about. CTE programs at Jersey Shore Area Senior High School (JSASH) are designed to meet a dual mission -- developing students with College Readiness skills AND a Career Path. CTE is no longer an either/or choice, but a "BOTH/AND" opportunity for student success

0044 / 9776 Industrial Technologies Pathway *Grade 9* **1.0 credit**

This course is the gateway class for the Career and Technical Education (CTE) Engineering and Industrial Trades-Technologies Pathway: Industrial Technologies is a four (4) part rotation course consisting of Automotive Technology, Construction Trades, Electronics, and Manufacturing programs. Students will learn basic skills in electrical, programming, engines, prints, schematics, measurements, basic tools, units, welding, and machinery. This course provides the fundamental foundation skills necessary for the various CTE programs.

0045/9026 Introduction to Human Services *Grade 9* **1.0 credit**

This course will enable students to investigate careers in the human services career fields including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers. In addition, this course focuses on personal development, interpersonal relationships, effective individual and family functioning, and career preparation – all within a changing society.

6035 Foundations of Engineering *Grade 9-10* **.50 credit**

This course fosters a learning environment in which students are guided to produce original, objects and structures according to certain specifications using concepts and skills from math, science, and technology. This interdisciplinary approach to learning gives students a chance to find solutions to real world problems with an emphasis on project based learning. The focus of the class will be project-based inquiry learning which develops a student's ability to adapt to modern day work force skills. Students will be required to evaluate and share their work. Students must be comfortable with working independently and in groups to complete in-class activities and projects, including quarterly portfolio assessments and reflections on their learning.

6040 3-D Modeling and Manufacturing *Grade 10* **.50 credit**

This course will provide students with a background in the field of automated drawing in both 2-D and 3-D formats, Computer Numerical Control (CNC) programming, laser engraving, 3-D printing and plastic modeling. Students will design and manufacture items using various software, automated NC machines, and 3-D printers, as well as producing items using laser cutting and engraving techniques. This is a pathway course designed to introduce students to careers in places, automated design, and manufacturing.

Automotive Technology

9825 Introduction to Automotive Technology *Grade 10-12* **.50 credit**

(Preference given to 10th grade)

Students choosing this course will learn the fundamentals necessary for Automotive Technology 1. An overview of the automotive industry, safety, basic engine repair, and electrical fundamentals will be covered. This will give students the opportunity to explore this field without making a 3 credit commitment.

9800 Automotive Technology 1 *Grade 11-12* **3.0 credits**

(Prerequisite: Introduction to Automotive Technology is strongly recommended)

(Preference given to 11th grade)

Students enrolled in this program study all aspects of automotive brake systems (to include anti-lock brakes), steering systems, suspension systems, wheel alignment, and electrical/electronic systems. The application of technological and scientific principles, functional design, operation, and diagnostic tests will be covered throughout the course. The program is industry certified and uses up-to-date repair and diagnostic test equipment.

9810 Automotive Technology 2 *Grade 12* **3.0 credits**

(Prerequisite: Automotive Technology 1)

This course will be a continuation of Automotive Technology 1. Students will study engine operation, design, diagnostics, and repair. A major focus will be on advanced engine diagnostics and repair to include electronic ignition systems, fuel systems, computerized engine control, and emissions systems. Students will also have the opportunity to earn a Pennsylvania Certified Safety Inspector License. The program is industry certified and uses up-to-date repair and diagnostic test equipment.

Building Property Maintenance

9782 Intro to Building Maintenance *Grade 9-10* **.50 credit**

Introduction to Building Maintenance is an introductory course for student interested in the Building Maintenance and Construction Trades pathway. This course will provide an overview of the Construction Trades pathway by introducing the student to residential carpentry, electrical and plumbing systems, as well as landscaping and various maintenance related tasks.

9779 Introduction to Woodworking *Grade 9-10* **.50 credit**

Introduction to Woodworking is designed as an introductory woodworking course. Students will learn basic woodworking skills while completing a teacher lead project. The students will experience the use of all available hand tools, machinery and operations. This course will serve as a foundation course for students who are interested in the Construction Trades pathway and also Engineering Technologies pathway.

9780 Building Maintenance 1 *Grade 11-12* **2.0 credits**

(Preference given to 11th grade)

This program is designed to introduce students to the skills necessary for success in a career in building maintenance. Students will be instructed in, and exposed to, building maintenance and trades skills at the basic, intermediate and advanced levels, based on their needs and abilities. These skills will include: basic safety (which includes personal protective equipment, performance safety, and what to do if an accident occurs); communication and human relations skills; and hands-on experiences (which provide exposure and practice in each of the building maintenance areas). Students will work boots and may need to purchase a uniform.

9781 Building Maintenance 2 *Grade 12* **2.0 credits**

(Prerequisite: Building Maintenance 1)

This program is designed to fine tune students to the skills necessary for success in a career in building maintenance. Students will be instructed in, and exposed to, building maintenance and trades skills at the basic, intermediate and advanced levels, based on their needs and abilities. The program continues to build upon skills learned in level 1.

Child Care

9025 **ABC's of Child Care** *Grade 10-12* **.50 credit**

(Preference given to 10th grade)

This introductory course provides the basic knowledge and skills related to child growth and development. It will help you form positive relationships with children and develop effective parenting and caregiver skills. Participation in this course may also help one determine a career goal of working with children.

♦♦ 9030 (EDU100) **Child Development** *Grade 11-12* **1.0 credit 3.0 college credits**

This course is weighted 1.1

Overview of typical growth and development of young children from birth to age eight. Cognitive, language, physical growth, gross and fine motor, emotional and social developmental milestones are the focus of this course, with a special emphasis on the implications they have for the care and education of young children. Other topics include an introduction to the basic concepts of major developmental theories; principles of learning and development; and developmentally appropriate practice. A strong focus on a family-centered approach is integrated through the course. **Students who enroll in this course with the intent to receive college credit must be proficient in Reading or pass the Penn College Placement exam and purchase the book for this course. With successful completion, students will receive 3 credits for the EDU 100 course through Pennsylvania College of Technology.**

9000 **Child Care Services 1** *Grade 11-12* **3.0 credits**

(Preference given to 11th grade)

Students enrolled in the Child Care Services program learn and practice the skills necessary to improve the quality of care and education provided for young children. In this course students begin the process of becoming a Child Development Associate (CDA). They develop skills in storytelling; implement art, music, movement, math and science activities for groups of children; create, plan and write weekly lesson plans; design bulletin boards, newsletters and other teaching tools; plan and prepare nutritional food for children. Students will also operate a laboratory school for 3-5 year olds, using positive guidance methods. Students will be prepared to pursue post-secondary education. Students will be required to purchase a shirt to be worn when

9010 **Child Care Services 2** *Grade 12* **3.0 credits**

(Prerequisite: Child Care Services 1)

Students will continue to build upon the foundation established in Child Care Services 1, continuing to accumulate time and experience towards the process of becoming a **Child Development Associate (CDA)**. Students will be given more responsibility in the development and preparations of the laboratory school.

Communications Technology

0041/6021 Multimedia Design *Grade 9-10* **1.0 credit**

This course is a 9th grade gateway course to expose students to the Design (Web and Print) courses as well as the Digital Imaging & Photography courses offered through Technology Education and CTE.

Students will study various aspects of the design process such as layout design, resolution/printing, and color theory. Concepts that will be explored include planning procedures, creating thumbnail sketches, creating digital wireframes, final design creation, and publication. Students will be expected to use math skills to calculate image size, resolution, document layout/positioning, etc. Each project is designed to develop problem solving skills, encourage collaboration as well as project-oriented research.

Students will also be introduced to basic camera aspects such as sensors, lens systems, mode controls, various camera formats, etc. Additionally, students will be introduced to manual exposure controls such as Aperture, Shutter Speed, and ISO, and their effects on exposure quality. Photographic composition concepts such as The Rule of Thirds, Perspective, Low/High Angle shots, and Depth of Field will be explored and experimented with real world subjects/scenes. This course will also serve to introduce students to the fundamentals of post-production work utilizing Adobe Photoshop. Students will experience much of the post-production workflow including transferring files, color correcting, tonal correction, resizing, and publishing to the web/or print. This course is to serve as an introduction to the higher level course offerings in Communications and Digital Photography through the CTE department here at the high school

6025 Introduction to Website Design & Development *Grade 10* **.50 credit**

This course examines the fundamental basics of HTML and CSS in accordance to current internet standards. Students will explore the entire website design process from layout/conceptualization, to publication, while utilizing various HTML tags, CSS structuring, etc. Concepts covered within this course include Site Mock-ups, Digital "Sketching," HTML Structure, Tag Formatting, CSS Fundamentals, Image Insertion, Link Creation, and various other concepts relating to the creation/publication process. Additionally, students will be expected to use digital rulers to make measurements and layout various components of a website. Basic math calculations are necessary for image optimization, content placement, and specific units of measure (borders, padding, and margins). The final cumulating project will involve designing and building a multi-page website.

9140 Digital Photography and Videography *Grade 10-12* **.5-1.0 credit**

Students will learn the art of taking photographs and video using the camera and computer as the primary tools for editing, processing and composing. After basic instruction in photography, artistic expression and experimentation with image form, portrait and small-product photography will be studied. In the video component of this class, students will develop skills related to commercial video production, art and experimental video, interactive multimedia production, web-based production and other newly emerging forms. Students who decide to enter post-secondary education will be better prepared for future studies in advertising, marketing, broadcast communications, computer information systems, mass communications, journalism, performing arts, office information systems and video production. **Tenth grade students must have a good scholastic record, must demonstrated the ability to work well with others and have good time management skills.**

9180 Yearbook Publications *Grade 10-12* **1.0 credit**

(Prerequisite: Students must have a good scholastic record, faculty recommendations, demonstrated ability to work well with others and good time management skills. Students interested in being on staff must meet a strict application process and have the approval of the yearbook advisors.)

The publication of the school yearbook, the Orange and Black, is carried out each year by students dedicated in producing the best yearbook ever. If you like dealing with people, accepting responsibility and you don't mind hard work, and then this course is designed for you. In this course you will: participate in the designing, planning and layout of the yearbook, be responsible for specific yearbook pages, organize photo assignments, select topics and generate written copy for your assigned pages, participate in business activities such as marketing, selling, handling money and maintaining accurate records.

9145 Communications Technology 1 *Grade 11-12* **1.0-2.0 Credits**

(Preference given to 11th grade)

There are numerous careers available in the Communications Technology area. Communication technology specialists provide services in a variety of areas associated with typography, web and graphic design, video, audio, television production, animation and photography. Students in this program will be exposed to a variety of skill areas in order to specialize in a related career.
Instruction in this program includes, but is not limited to, computer system setup and maintenance, basic computer and communication operations and applications, design and layout of graphic and multimedia images, photography, website, video and/or audio design and production, project management and social media. The Adobe Creative Suite will be taught throughout the program including, Photoshop, Illustrator, In Design, Premiere, After Effects & Audition.
Industry Certifications: NOCTI Communications Technology and Adobe Certified Associate - Visual Communication

9146 Communications Technology 2 *Grade 12* **1.0-2.0 Credits**

(Prerequisite: Communications Tech 1)

Students will continue to build upon the foundation established in Communications Technology One to a more advanced skill set. At the completion of the course, students will take two industry recognized tests.

Computer Systems & Networking

Electronics and Computer Engineering courses provides students with a foundation in circuits, analog and digital electronics, automation using PLCs and Robotics, control systems, electronic communications, embedded systems, telecommunications, networking, and optics. These courses address the need for women and men with practical skills who are ready to continue their study at the college level, enter the military, or enter the workplace.

6015 **Principles of Electronics** ***Grade 10*** **.50 credit**

In Principles of Electronics students are introduced to various concepts and topics in electronics technology such as electricity fundamentals, basic circuit design, electrical component installation/function, multi-meter use, principles of automation, and principles of data communication. The course is setup as partial theory and partial hands-on lab work. Students will apply math skills to verify circuit operation. It is expected that students have a basic understanding of algebra. This course can be used as a building block into CTE courses in Electronics, Information Technology, and Automotive. This course meets the graduation requirement of .5 credits in Technology Education.

6017 **Principles of Computer Programming** ***Grade 10*** **.50 credit**

Principles of Computer Programming provides and introduction to programming basics that can be used with any computer language. Concepts covered include: User Input, Output, Data Types and Variables, decision statements, looping, functions or methods, and arrays. Properties of algorithms, languages, and notations for describing algorithms, applications of a procedure-oriented language to problem solving are also covered. These concepts will be covered in a modern, high level, object oriented, open source (free) language such as Python. This course can be used as a building block into CTE courses in Electronics and Information Technology. This course meets the graduation requirement of .5 credits in Technology Education.

♦♦ 9301 (EET124) **Introduction to Networking** (Engineering, Technology, and Society) ***Grade 10-12*** **1.0 credit 3.00 college credits**

This course is weighted 1.1

This course meets Pennsylvania College of Technologies Computing Literacy graduation requirement for all majors.

Introduction to the basic concepts and applications of computer and engineering technologies and the effects on professional and casual users, their employers and employees, and society. Applied skills include the use of current computer technology for data/information collection and organization; visualization, analysis, and interpretation of numeric computations; and the dissemination and presentation of solutions to engineering technology problems.

Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam and purchase the book for this course. With successful completion, students will receive 3 credits for the EET124 course through Pennsylvania College of Technology.

♦♦ 9310 (EET145) **Networking 1** *Grade 11-12* **2.0 credits 3.0 college credits**

This course is weighted 1.1

This course will introduce networking topologies, connector termination techniques, basic hardware components and various operating systems, as well as current and emerging technologies. Topics covered include computer construction, operating system installation and management, TCP/IP, security concepts, wireless networks, virtualization, DHCP, DNS, file sharing, proxy services, active directory, network printing, and web servers. At the end of this course students may take the Computer Technology Industry Association (CompTIA) A+ and/or the Network+ certification Exam. **Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam and purchase the book for this course. With successful completion, students will receive 3 credits for the EET 145 course through Pennsylvania College of Technology.**

9311 **Networking 2** *Grade 12* **2.0 credits**

(Prerequisite: Networking 1)

This course will build upon the foundation developed in Level 1. It will give the student the opportunity to specialize or concentrate in their area of interest.

9345 **Introduction to Gaming and Simulation** *Grade 11-12* **1.0 credit**

(Recommended Prerequisite: CSC124)

Introductory topics include gaming industry history, game development processes, game genres, storyboarding, game environment, character design, interface design, game play, AI, the psychology of game design, and professionalism. Study provides overall view of the gaming and simulation components. Practical hands-on application includes using a simple game design environment to design and write simple games as well as an introduction to basic programming using a high-level language.

Students may be enrolled in EITHER Intro to Gaming or Intro to Programming. They CANNOT take both classes at the same time.

9346 **Introduction to Programming** *Grade 12* **1.0 credit**

(Recommended Prerequisite: CSC124)

Introduction to problem-solving techniques, elementary programming, and the application of these techniques in developing structured programs. A current high-level language is used to illustrate the implementation phase of program development. Students may be enrolled in either Introduction to Programming or Introduction to Gaming and Simulation, but not both classes at the same time.

Students may be enrolled in EITHER Intro to Gaming or Intro to Programming. They CANNOT take both classes at the same time.

Construction Technology

9425 **Introduction to Construction Technology** *Grade 10-12* **.50 credit**

(Preference given to 10th grade)

Students selecting this course will receive instruction in basic skills required in the construction industry including safety, measurement, use of hand tools and portable power tools, and building materials. Through construction theory, students will learn the technical knowledge and problem solving skills necessary to complete assigned projects. This class fulfills the required 0.5 Technology Ed credits for graduation.

♦♦ 9426 (BCT103) **Construction Hand and Power Tools** *Grade 10-12* **.50 credit 1.0 college credit**

This course is weighted 1.1

Survey of hand and power tools typically used to perform construction work. Emphasis on the development of skills needed to effectively perform layout, measurement, cutting, fastening, and finishing operations. Study also includes maintenance of tools and equipment, safe use of hand and power tools, and emerging tool technology. This class fulfills the required 0.5 Technology Ed credits for graduation. **Students who enroll in this course with the intent to receive college credit must pass the Penn College Reading Placement exam and purchase. With successful completion, students will receive 1 credit for the BC103 course through Pennsylvania College of Technology.**

9400 **Construction Technology 1** *Grade 11-12* **2.0 credits**

(Preference given to 11th Grade)

Students enrolled in this program are involved in many different kinds of construction activity. Students learn about carpentry, plumbing, masonry, and electrical. Students will participate in classroom theory and hands-on construction projects with industry standard equipment and machines. Units on CDLs and heavy equipment will be included.

9410 **Construction Technology 2** *Grade 12* **3.0 credits**

(Prerequisite: Construction Technology 1)

Students enrolled in this program will receive instruction in advanced skills required in the construction industry which build upon competencies acquired in Construction Technology 1.

Culinary Arts

9600 CTE Culinary Arts 1 *Grade 11-12* **3.0 credits**

(Preference given to 11th grade)

The curriculum in culinary arts prepares students for employment related to commercial food services. Specialized learning units include theory and work experience in the major areas of cooking, including: baking, meat cookery, soup preparation, desserts, sanitation, food purchasing, and many more. Experience is also gained in front-of-house skills including waiting on tables and cashiering, care and use of kitchen equipment, and sanitation in food handling in a commercial and institutional setting. Emphasis can be placed on learning specialty cooking. Students will be required to purchase a full chef uniform and participate in a minimum of two caterings functions beyond the school day each semester.

9610 CTE Culinary Arts 2 *Grade 12* **3.0 credits**

(Prerequisite: CTE Culinary Arts 1)

The students in this course will work to broaden their experience in commercial food service. Each will take on greater responsibilities in the planning, purchasing, and billing of events. A commitment to learn new skills to achieve quality and excellence in the field of culinary arts is mandatory. Students will be required to purchase a full chef uniform and participate in a minimum of two caterings functions beyond the school day each semester.

9620 Introduction to Baking and Pastries *Grade 10-12* **.50 credit**

This elective is for anyone interested in pursuing a career in Baking and Pastry Arts or Culinary Arts. This course will introduce the fundamentals used in the bakeshop. In addition, a better understanding of food terminology and advanced cooking will be mastered. The student will learn various techniques including bread baking, cookie making, sweet dough production, and much

9630 Advanced Baking and Pastries *Grade 10-12* **.50 credit**

(Prerequisite: Introduction to Baking and Pastries)

This elective is for anyone interested in pursuing a career in Baking and Pastry Arts. This course will introduce the fundamentals used in the bakeshop. In addition, a better understanding of food terminology and advanced cooking will be mastered. The student will learn various techniques including bread baking, cookie making, sweet dough production, and much more.

Manufacturing Technology

9700 **Introduction to Manufacturing Engineering Technology** *Grade 10-12* **.50 credit**

(Preference given to 10th grade)

This course provides students with the opportunity for hands-on experience in the computer-enhanced manufacturing process. Students will acquire skills in Measurement, Machining, Welding, Computer Aided Design (CAD), Computer Numeric Control (CNC) programming, automated applications and tool technology. This course is intended to teach the basic skills that allow you to enter the vast area of manufacturing engineering or prepare you to further your education in post-secondary schools. This class fulfills the required 0.5 Technology Ed credits for graduation.

♦♦ 9705 (PPT115) **The Plastics Industry** *Grade 10-12* **.50 credit 2.0 college credits**

This course is weighted 1.1

Overview of the plastics industry, including materials, resin codes and mold processes. Topics include the many types of career opportunities in the industry, local industry, thermoforming, blow molding, and injection molding. Discussion also covers the nature of plastic product manufacturers, work environment, and current market research. This course fulfills the required 0.5 Technology Ed credits for graduation. **Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam. With successful completion, students will receive 2 credits for the PPT115 course through Pennsylvania College of Technology.**

9710 **Manufacturing Engineering Technology 1** *Grade 11-12* **2.0 credits**

(Preference given to 11th grade)

Manufacturing Technology is a hands-on course that will explore various areas of manufacturing and the supporting elements of manufacturing processes. Students will learn fundamental skills in areas such as: Print Reading, Machining, Welding, CNC(Computer Numerical Control), Material Layout, CAD(Computer Aided Drawing), CAM (Computer Aided Manufacturing), Measurement, Fluid Power, Mechanical Drives, Electricity and Automation. This course will have an emphasis on theory as well as practical hands- on skills. This course, will allow students to gain the proficient knowledge to step into the higher level manufacturing courses.

9720 **Manufacturing Engineering Technology 2** *Grade 12* **3.0 credits**

(Prerequisite: Manufacturing Engineering Technology 1)

Manufacturing/ Engineering Technology 2 is an advanced level course that will utilize advanced, tools, materials, and techniques to design and manufacture several products. This will allow the students to apply their skills and problem-solving abilities to overcome a number of design and fabrication problems that would be similar to the problems found in any industrial setting if they were manufacturing a product. Students will focus heavily in areas such as: Print Reading, Machining, Welding, CNC(Computer Numerical Control), PLC (Programmable Logic Controllers), Gears/Pulleys, Material Layout, CAD(Computer Aided Drawing), CAM (Computer Aided Manufacturing), Measurement, Fluid Power, Mechanical Drives, Electricity and Automation. Students will prepare for the Manufacturing (NOCTI) National Occupational Competency Testing Institute.

9770 Computer Numeric Control (CNC) *Grade 11-12* **1.0 credit**

(Prerequisite: Introduction to Manufacturing, Robotic Engineering I, Design in Manufacturing/Transportation or The Plastics Industry)

In Computer Numeric Control (CNC)/ Automated Manufacturing, students will learn the fundamentals and theory of the application of computers to machining. Students will learn how to use manual part programming techniques to design programs to machine parts from engineering drawings. Applications will require the proper setup and operation of the Haas Intuitive Programing, CNC milling machine. Basic fundamentals of Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) will also be applied with fabrication of projects. Other areas will be emphasized such as: proper use of tooling, fixtures and inspection gages. This course will be project based, and there will be some utilization of the manual tools. Students will manipulate a variety of metallic materials as well as plastics material.

Other Electives

0610 Career Readiness *Grade 10-11* **.50 credit**

This course will meet every other day for 1 semester. Students will be expected to work independently to successfully complete the course. Career Readiness will introduce students to career development strategies within a *Learn & Apply* format that facilitates skill development and application. In this course students will identify their interests and research career paths that match those interests. Students will develop a career portfolio, participate in mock interviews, demonstrate employability skills and produce collaborative presentations.

9930 Co-operative Education Experience *Grade 12* **up to 4.0 credits**

The Co-operative Education experience allows students to gain school-to-work skills through work-based placement opportunities for CTE students who are enrolled in a Career and Technical Education Program. Students who meet the requirements of basic trade and technical training, good attendance, a good attitude and work habits, are recommended to the employer for on-the-job training. The Cooperative Education experience translates to a student grade and credit is granted towards graduation. Students can earn up to four (4) elective credits through a Cooperative Education experience.

English

*Students are required to earn **a minimum of four (4) English credits for graduation**, pass the English 9 course, score proficient or advanced on the Keystone Literature Exam and, pass the Public Speaking/ Research course in order to graduate. Students who do not pass the Keystone Exam will be required to take the Keystone English course in 10th Grade. Students must take at least* .50 credits *in English their senior year.*

Career or College Pathway-English

(Workforce, technical, 2 year associates degree 4 year college degree pathway)

0120 English 9 *Grade 9* **1.0 credit**

The required course of study includes a variety of literature including Shakespeare's *Romeo and Juliet,* Homer's *The Odyssey* as well as a number of novels, short stories, and poems. The course is designed to prepare students to take the Keystone Exam in May. Research and documentation methods are crucial components of the course in ninth grade English. Students will master benchmark research skills. Word studies are conducted as well as taking words in context from literature. This course will prepare students to take the Keystone Literature Exam which will be taken in May of the freshman year.

0223 Keystone English *Grade10* **.50 credit**

(Required→Gr 10 students who do not score proficient or advanced on Keystone in Gr 9)

This semester course is designed to reiterate basic literary and composition skills. Students will read selections of American literature from all genres encompassing early American history to modern times, and complete writing assignments to correlate and complement each unit. Students will also learn valuable studying and test-taking strategies to assist in assessment proficiency.

0530 Dramatic Literature (Spring Semester) *Grade 10* **.50 credit**

In Drama I, students focus on the collaborative art of theatre, concentrating on the evolution of theatre from dramatic ritual to dramatic literature. Improvisation, creative dramatics, and beginning scene work will be used to introduce students to acting and character development.

0535 Sports Literature *Grade 10* **.50 credit**

This course will examine biographies and other types of literature which take an "inside look" at players and coaches thoughts both on and off the field of competition. Students will then be given the opportunity to explore their own thoughts through writing or another medium which expresses their views on similar topics.

0550 Fantasy Fiction *Grade 10* **.50 credit**

This course will read an assortment of myths and stories from cultures around the world, including Greek, Roman, Norse, Celtic, Eastern Europe/Russia, Native American, as well as local myths and folklore, and identifying their influence on modern-day literature. Activities will include discussions, projects, essays, and research.

0520 Creative Writing *Grade 10* **.50 credit**

Students in the Creative Writing courses will experiment with several creative genres – fiction, poetry, playwriting, and short stories – as a means of developing different imaginative approaches to experiences. The emphasis will be on gaining familiarity with different writing techniques and styles, while delving into usage of literary enhancement like perspective, dialogue, imagery, and allusion.

0323 Public Speaking/Research *Grade 11* **.50 credit**

(Required→Gr 11 Students not enrolled in Honors 3)

This course includes a combination of research skills and public speaking. Composition instruction stresses the writing process with precise techniques for writing the multi-paragraph expository theme. Several 2-4 page research papers, focusing on research skills and MLA format (or APA Format), must be satisfactorily completed to receive course credit. Fundamentals of public speaking will focus on organizing the essential parts of a speech, with emphasis given to integration of a visual aid.

0515 Poetry *Grade 11* **.50 credit**

Students will read, write and recite poetry of all kinds in an effort to increase appreciation of its complexity. Course will work towards participation in a local *Poetry Aloud* competition held in January each year.

0560 Outdoor Literature *Grade 11* **.50 credit**

This course will allow students to explore a variety of literature about an assortment of outdoor activities including but not limited to hunting, fishing, and motor sports. Students will then work together to compose an outdoor publication.

0545 SAT and College Readiness (Fall only) *Grade 11* **.50 credit**

This course will work to develop skills necessary to increase verbal SAT scores. It will also assist in completing college applications, writing college and job essays and increasing. The course will only be offered in the fall and is suggested for juniors or seniors.

0555 World Literature *Grade 12* **.50 credit**

This course will include a survey of literature and related vocabulary from various parts of the world from the beginning of recorded history to the present. Emphasis will be placed on the cultural connection between a society and its writings. Activities will include discussions, projects, essays, and research.

0423 Biography *Grade 12* **.50 credit**

This course will explore and read different examples of biographies and analyze the common components to a "quality" biography". Students will then write and complete their own biographies in the form of a senior memory book, containing chapters about their life experiences.

♦♦ 0424 (ENL111) **English Composition 1** *Grade 12* **1.0 credit 3.0 college credits**

This course is weighted 1.1

Fundamental writing and research skills with an emphasis on expository writing. Emphasis on analysis, discussion and practice of writing that explores, explains, and argues. Course work includes a significant research component. **Any student selecting this course must have administrative approval. Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam and purchase the book for this course. With successful completion, students will receive 3 credits for the ENL111 course through Pennsylvania College of Technology.**

Honors Pathway-English

(4 year college degree pathway)

0130 **English Honors 1** *Grade 9* **1.0 credit**

The course of study includes a variety of literature similar to that of English 9 Academic. A study of the history of the background of the author and period is included to provide insight into the piece of literature. Grammar is taught in correlation with writing and vocabulary. Sentence structure and more advanced grammar concepts are fine-tuned from basic knowledge. Particular writing methods are taught, including formal research, expository, comparison and contrast, and persuasive. Developmental vocabulary is continued through vocabulary texts, context of literature, and word lists that accompany pieces of literature. Independent reading and Study Island are used to enhance standardized test scores. Research skills are taught and applied to a research unit. This course will prepare students to take the Keystone Literature Exam, which is required of all students in the 2017 graduation class and beyond.

0230 **English Honors 2** *Grade 10* **1.0 credit**

(Student must have earned a 90% in Honors 1 and scored proficient or advanced on the Keystone Exams)

Students will complete a rigorous academic course that focuses on classic literature, poetry, writing, non-fiction, drama, and cinema. In addition, the course stresses reading outside of class and project-based learning. The writing in the course will focus on analyzing multiple texts from multiple genres in coherent and well-organized essays which use MLA format. The course will explore and focus on primarily American Literature and the historical context that impacts writing. This course is recommended for 10th graders on who are planning on taking AP English senior year.

0330 **English Honors 3** *Grade 11* **1.0 credit**

(Student must have earned a 90% in Honors 2 and scored proficient or advanced on the Keystone Exams)

The advanced level of junior English helps the talented student to grow in analytical and interpretive thinking and challenges his creativity. The core content of the course is a study of English literature, conducted both thematically and chronologically. British novels and plays incorporated in the course are pieces that also appear on AP exam reading lists. At least one Shakespeare play will be read and analyzed. The methodology and vocabulary of literary criticism are applied in writing assignments and individual projects. Instruction in the conduct and writing of research is provided. Grammar and vocabulary studies focus on skills required for colleges, as well as for College Board and AP exams. Analytical skills are developed in readiness for the literature portion of the AP exam.

0545 SAT and College Readiness (Fall only) *Grade 11* **.50 credit**

This course will work to develop skills necessary to increase verbal SAT scores. It will also assist in completing college applications, writing college and job essays and increasing. The course will only be offered in the fall and is suggested for juniors or seniors.

0450 Advanced Placement English 12 *Grade 12* **1.0 credit**

This course is weighted 1.1

(Prerequisite: 90% or higher in English Honors)

The Advanced Placement course prepares the student for college-level English courses and for the nation-wide Advanced Placement Exam in May of the current school year. Students who are successful with the AP exam may be granted college credit by the academic institution they choose to enter after high school. The reading, writing, and thinking requirements are formidable, requiring – among other writing assignments – a 20-page research paper in the second semester, which is a required component of the course. Instruction focuses on note-taking; class discussion encourages differences of opinion; essay exams emphasize supporting one's interpretation with specific details from the readings; and writing assignments stress coherency and the mechanics of writing: i.e., grammar, punctuation, and spelling. Close reading is given to an extensive series of classics, great novels, plays, poems, essays, and stories. In addition to the intensive research paper, a 7-10 minute speech, based on that research paper, is required at the end of the year; it counts as the final exam for the course.

♦♦ 0424 (ENL111) English Composition 1 *Grade 12* **1.0 credit 3.0 college credits**

This course is weighted 1.1

Fundamental writing and research skills with an emphasis on expository writing. Emphasis on analysis, discussion and practice of writing that explores, explains, and argues. Course work includes a significant research component. **Any student selecting this course must have administrative approval. Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam and purchase the book for this course. With successful completion, students will receive 3 credits for the ENL111 course through Pennsylvania College of Technology.**

The Following Elective Courses

Will NOT Count for English Credit

0500 Introduction to Journalism *Grade 9-12* **.50 credit**

Students will learn skills in reporting, interviewing, writing the article, editing, making layouts, and using desktop publishing software on the computer. Students will also have the opportunity to write articles to be published in the school newspaper, *The Paw Print*. Students wishing to take Advanced Journalism must successfully complete this course. This is an elective credit not an English credit.

0501 Advanced Journalism *Grade 10-12* **1.0 credit**

(Prerequisite: Introduction to Journalism)

The chief activity in the advanced course is the production of the school newspaper, The Paw Print, and the school TV broadcast, Bulldog News. Students will continue practicing and refining skills in reporting, interviewing, writing the article, editing, making layouts, using desktop publishing software on the computer, and distributing the paper. Methods of the modern daily newsroom are simulated. Enthusiastic journalists are invited to provide the editorial leadership for the production staff. Students may repeat the course the following year. This is an elective credit not an English credit.

Mathematics

Upon completion of 8th grade, all students will need to choose a math pathway for the high school. A score of Proficient or Advanced on the Keystone Algebra 1 exam in 8th grade is a prerequisite for the Honors Pathway.

Career or Academic Pathway-Mathematics

(Workforce, technical or 2 year associates degree pathway)

With teacher recommendation

2120 Career Algebra 1 *Grade 9* **1.0 credit**

The study of Algebra lays the foundation for mathematics, sciences, and technical courses a student will be taking in the future. Students learn to express relationships verbally, pictorially, graphically, and symbolically. Equations are solved graphically prior to solving them symbolically. Emphasis is on connections to the real world and to various mathematical strands. Geometric models are used to connect the visual and the symbolic. Use of scientific and graphing calculators is encouraged throughout the course. The emphasis in this course is on the concrete applications and concept. (Not a Keystone Exam trigger course)

2148 Career Algebra 2 *Grade 10* **1.0 credit**

This course is a continuation of topics covered in Career Algebra 1. Various topics are introduced such as functions, polynomials, series, sequences, and conic sections. Emphasis is placed on fundamental algebra skills such as factoring and solving linear systems. Use of a graphing calculator is essential throughout the course. (All students who have not scored proficient or advanced on the Keystone Algebra I Exam must take the exam at the middle and/or end of the course)

2154 Career Algebra 3 *Grade 11* **1.0 credit**

This course is a continuation of topics covered in Career Algebra 2. Various topics are introduced such as functions, polynomials, series, sequences, and conic sections. Emphasis is placed on fundamental algebra skills; radical, rational, exponential, and logarithmic functions; and probability and statistics. Use of a graphing calculator is essential throughout the course.

2150 Unified Algebra and Trig *Grade 12* **1.0 credit**

(Prerequisite: Career Algebra 3 or Geometry)

This course is a continuation of topics covered in Algebra 2. Functions and polynomials are continued with the introduction of trigonometric functions. Transformations of parent functions are extended from Algebra 2. Circular functions are introduced through the rectangular coordinate system. Use of a graphing calculator is essential throughout the course.

2178 Business Math *Grade 12* **1.0 credit**

This course involves such concepts as interest, discounts, purchasing, selling, tax computations, commissions, insurance investments, and financial institutions. By learning this type of material, the student will become more efficient, effective, and competent in the type of math used in the real world by both business people and consumers.

Academic Pathway-Mathematics

(2 year associates or 4 year college degree pathway)

2122 Academic Algebra 1 *Grade 9* **1.0 credit**

The study of Algebra lays the foundation for mathematics, sciences, and technical courses a student will be taking in the future. Students learn to express relationships verbally, pictorially, graphically, and symbolically. Equations are solved graphically prior to solving them symbolically. Emphasis is on connections to the real world and to various mathematical strands. Geometric models are used to connect the visual and the symbolic. Use of scientific and graphing calculators is encouraged throughout the course. This course covers the same materials as #2120 but with more emphasis on the abstract applications and concepts and prepares the student to take the Keystone Exam at the end of the course. All students must take the Keystone Exam for Algebra 1.

2126 Keystone Algebra 1 Remediation *Grade 10 and 11* **.50 credit**

This course will target and reinforce basic information specifically related to the student performance on the Keystone Algebra 1 Exam. Students will complete assignments related to and correlated to each unit of study identified by the Keystone Anchors addressed in the Keystone Algebra 1 Exam. Students will learn studying and test-taking strategies designed to assist them in attaining proficiency on the Keystone Algebra 1 Exam.

2142 Academic Algebra 2 *Grade 10 or 11* **1.0 credit**

(Prerequisite: Algebra 1 with a recommended minimum grade of 80%)

The study of Academic Algebra 2 continues to build on sequential approaches as in Academic Algebra 1. The sequence from variable to relationships to functions is extended to include using functions as models for applied settings. Algebraic and geometric concepts are connected to topics in probability, statistics, trigonometry, and discrete mathematics. Functions are developed through tabular and graphical approaches aided by technology. A special emphasis is given to the concept of change as embodied in linear, polynomial, exponential functions. Included are important topics for today's technical world---paths and circuits, and optimization. Use of a graphing calculator is essential throughout the course.

2132 Academic Geometry *Grade 10 or 11* **1.0 credit**

(Prerequisite: Algebra 1 with a recommended minimum grade of 80%)

In the study of geometry, students use inductive reasoning to identify patterns, and make conjectures---apply deductive reasoning to confirm conjectures through proof. The course begins with a strong development of visualizations and drawing skills. Algebraic and geometric models are used throughout to model a variety of real world situations. Proof is developed carefully throughout the text with an emphasis on understanding. Various proof formats are compared and used when appropriate---paragraph, flow-chart, and two column. The use of synthetic, coordinate, transformation, and vector approaches are promoted to help students understand the big ideas. Coordinate and transformation techniques are introduced early and used when appropriate. The use of manipulatives and constructions are integrated throughout to promote active involvement. This course emphasis is on the abstract applications and concepts.

2152 Academic Trig/Pre-Calculus *Grade 12* **1.0 credit**

(Prerequisite: Geometry and Algebra 2 with a minimum grade of 80 %)

The study of Pre-Calculus begins with a thorough review of the advanced topics of Algebra. The circular functions are introduced through the rectangular coordinate system which integrates the algebraic functions with the transcendental functions. Use of a graphing calculator is essential throughout the course.

2146 College Readiness Algebra *Grade 12* **1.0 credit**

This course is designed for seniors who will attend college after graduation and will need to be proficient on placement tests. This is not for students pursuing a math or science field. Topics include real numbers, variable expressions, linear equations in one and two variables, inequalities, exponents and scientific notation, polynomial operations, and application problems, systems of linear equations, polynomial division and special products, factoring, rational expressions, radical expressions, quadratic equations, functions and application problems. Emphasis on math study skills. Technology is used to enhance thinking and understanding, to solve problems, and to judge/verify results. Verbal, numerical, graphical and symbolic approaches assist in the discovery and communication of mathematical concepts.

Honors Pathway-Mathematics

(4 year college degree pathway)

2133 Geometry Honors *Grade 9* **1.0 credit**

(Prerequisite: Algebra 8 with a recommended minimum 90% average and Proficient or higher on the Keystone Algebra 1 exam in 8th grade)

This is the accelerated Geometry for the 9th grade. The same material as course #2132 is covered with a few additional topic with a stronger emphasis on proofs and theory.

2143 Algebra 2 Honors *Grade 10* **1.0 credit**

(Prerequisite: Geometry Honors with a recommended minimum 86% average)

This course is the accelerated Algebra II for tenth graders covering the same material as course #2142 with a few additional topics.

2153 Trig/Pre-Calculus Honors *Grade 11* **1.0 credit**

(Prerequisite: Algebra 2 Honors with a recommended minimum grade of 86%)

This course is the accelerated Pre-Calculus for the 11th grade. The same material as course #2152 is covered with a few additional topics.

2146 College Readiness Algebra *Grade 12* **1.0 credit**

This course is designed for seniors who will attend college after graduation and will need to be proficient on placement tests. This is not for students pursuing a math or science field. Topics include real numbers, variable expressions, linear equations in one and two variables, inequalities, exponents and scientific notation, polynomial operations, and application problems, systems of linear equations, polynomial division and special products, factoring, rational expressions, radical expressions, quadratic equations, functions and application problems. Emphasis on math study skills. Technology is used to enhance thinking and understanding, to solve problems, and to judge/verify results. Verbal, numerical, graphical and symbolic approaches assist in the discovery and communication of mathematical concepts.

2162 Calculus *Grade 12* **1.0 credit**

(Prerequisite: Trig/Pre-Calculus or Trig/Pre-Calculus Honors with a recommended minimum grade of 80%)

Calculus is offered to the student who excels in mathematics. Topics include analytic geometry, limits and continuity, derivatives, and integration. The approach to this course integrates the use of numerical, graphical, and algebraic techniques.

2163 Calculus-Advanced Placement *Grade 12* **1.0 credit**

Prerequisite: Trig/Pre-Calculus Honors with a recommended minimum grade of 86%.
This course is weighted 1.1

This course is offered to the senior student who excels in Mathematics. It prepares the student to take the nationwide Advanced Placement Exam in May of the current school year. Students who are successful with that exam may be granted college credit by the academic institute they choose to enter after high school. This course covers topics above and beyond the regular Calculus course with a strong emphasis on past Advanced Placement exams. It is a demanding course and will require the student to do Chapter 1 over the summer so that it is possible to cover all necessary topics by the beginning of May, prior to the exam.

Mathematic Electives

(will count as a math credit)

2170 **Statistics** ***Grade 11-12*** **1.0 credit**

(Prerequisite: Academic Algebra 1 and Academic Geometry)

This year long course is designed to show students how statistics are used to picture and describe the world and make informed decisions. The course is designed not to produce statisticians but to produce informed consumers of statistical reports. Students will be required to provide written explanation, find patterns, and make decisions. This course is recommended for any college bound student.

2172 **AP Statistics** ***Grade 12*** **1.0 credit**

(Prerequisite: Academic Algebra 2)
This course is weighted 1.1

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data.

Students are exposed to four broad conceptual themes. First, Exploring Data: Describing patterns and departures from patterns. Second, Sampling and Experimentation: Planning and conducting a study. Third, Anticipating Patterns: Exploring random phenomena using probability and simulation. Fourth, Statistical Inference: Estimating population parameters and testing hypotheses. Students who successfully complete the course and exam may receive credit, advanced placement or both for a one-

2174 **SAT Math** -- *Every Day for a Semester* ***Grade 11 Honors - Grade 12 Academic*** **.50 credit**

SAT Math is offered to provide any student with skills for improving or preparing for the SAT exam. This one semester course allows students to review such topics as arithmetic, algebra and geometry in a mock testing environment. *Recommended for College Bound Juniors.*

♦♦ 2147
MTH 124/125 **Technical Algebra and Trigonometry I and II** ***Grade 12*** **1.0 credit**
6.00 college credits

(Highly recommended prerequisite: Course 2152--Academic Trig / Pre-Calculus)

This course is weighted 1.1

Study of intermediate algebra and trigonometry designed to prepare students for course work in their technical majors. Topics include algebraic expressions, linear equations, systems of equations, right triangle trigonometry, functions, graphs, geometry, ratio and proportion, variation, factoring, algebraic fractions and equations, quadratic equations, trigonometric functions and graphs, radicals, complex numbers. Exponential and logarithmic functions and graphs, nonlinear systems, and inequalities. Emphasis on problem solving and technical applications as well as the use of technology. Not designed to prepare students for calculus. **Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam. With successful completion, students will receive 6 credits for the MTH 124 and MTH 125 courses through Pennsylvania College of Technology.**

Modern Language

Modern Language can be the key to a successful future in both school and business. More than 70% of U.S. firms report that knowledge of a second language is an important consideration for successful employment. They seek employees with functional language skills as well as sensitivity to social and cultural differences. Speakers of a foreign language are greatly valued by international business firms as well as social services, law enforcement, manufacturers, health service providers, and local employers. Most universities recommend foreign language study as both an admission and graduation requirement. Students who study a foreign language demonstrate a better understanding of other cultures in addition to their own. Combining foreign language skills with almost any other career pathway makes the student more desirable in the field of future employment.

5140 Spanish 1 *Grade 9-12* **1.0 credit**

This course is an introduction to the language and culture of societies with different speech and lifestyles. The initial stages of language learning include mastery of a new sound system through oral repetition and practice of pronunciation, vocabulary, phrases, and, eventually, conversations. Reading and writing in the language will be studied. The student will be introduced to the new culture throughout the year through use of books and other visuals, foods, native speakers, magazines, etc. as available. The culture--that is, the behavior, beliefs, and values--of the people studied is an integral part of this course. Evaluation is based on oral class participation, completion of homework assignments, projects, oral and written quizzes, and unit tests. Students will be expected to complete assignments in a self-disciplined, self-motivated manner.

5240 Spanish 2 *Grade 9-12* **1.0 credit**

(Prerequisite: Successful completion of Spanish 1 with a minimum 86% average)

Level 2 stresses the continued use of the spoken language in the classroom. Students will continue grammar studies related to development of aural, oral, reading, and writing skills. Culture will be presented as an integral part of the course. Emphasis will be placed on the benefits of language study, both in the social and the business world. Evaluation will be based on oral participation, completion of homework assignments, projects, quizzes, and chapter test scores. Self-motivation and self-discipline are important for a successful language study.

5340 Spanish 3 *Grade 10-12* **1.0 credit**

(Prerequisite: Successful completion of Spanish 2 with a minimum 86% average)

At the third level, past grammar concepts will be reviewed, and by the end of the year, most basic grammar concepts will have been introduced. The student will be required to speak in the foreign language as much as possible, and original written work will be stressed. Study will also center on culture and current events; emphasis will be placed on foreign language as an asset to any chosen career. Evaluation will be based on class participation, completion of homework assignments, quizzes, tests, and composition work. Attitude and effort are also considered in student evaluation.

5341 Spanish 3 Honors (Pre-AP Spanish) *Grade 10-12* **1.0 credit**

(Prerequisite: Successful completion of Spanish 2 with a minimum 90% average)

This course is designed for students who plan to elect Spanish AP, with the intent of taking the AP exam. The pace of the class as well as the expectation of student performance will distinguish this course from Spanish 3. Students will be expected to speak Spanish in class, complete all homework assignments which will average 2-3 hours per week. There will be written activities and oral presentations assigned as well as additional readings and essays.

5440 Spanish 4 *Grade 11-12* **1.0 credit**

(Prerequisite: Successful completion of Spanish 3 or Spanish 3 Honors with a minimum 86% average)

Teacher recommendation advised

Level 4 of language study is a refinement of concepts mastered at the preceding levels through continued practice of the basic skills. Cultural aspects and literature of the language will be explored with stress on reading and conversation skills. There will be continued emphasis on the benefit of foreign language to any chosen career. Evaluation will be based on oral participation, completion of homework assignments, individual and group projects, compositions, quizzes, and chapter tests. Consideration is given to student attitude and effort toward learning.

5540 Spanish--Advanced Placement *Grade 11-12* **1.0 credit**

(Prerequisite: An average of 90% or higher in Spanish 3 Honors)

Teacher recommendation advised

This course is weighted 1.1

AP Spanish will offer students with a 90% average or better in Spanish III Honors the opportunity to improve their skill level in the areas of listening, writing, reading, and speaking. This intensive preparation will enable independently motivated students to prepare for the AP exam thereby getting college credit and/or exemption from beginning levels of Spanish in college. Students should expect at least one hour of work per school night. The course will be conducted in Spanish, and students will be expected to have daily assignments prepared before coming to class, so that class time itself is best utilized for practice and discussion.

Students will be expected to take the AP Spanish Language and Culture exam.

5120 German 1 *Grade 9-12* **1.0 credit**

A beginners course in German. No prior knowledge of German is required. Students will learn how to communicate effectively in German at a beginners level. Students will also gain an in-depth understanding of German culture. The *Komm Mit!* Level 1 textbook is used for German 1, which includes 12 chapters. The abilities of students who complete German 1 will measure at the *Novice High* level according to the ACTFL Proficiency Guidelines.

5220 German 2 *Grade 10-12* **1.0 credit**

(Prerequisite: Successful completion of German 1 with a minimum 86% average)

A beginner/intermediate course in German. It is assumed that students have taken a German 1 course and have learned how to communicate effectively in German at a beginners level. Students continue to learn how to communicate effectively in German at a beginner-intermediate level. Students will continue to gain an in-depth understanding of German culture. The *Komm Mit!* Level 2 textbook is used for German 2, which includes 12 chapters. The abilities of students who complete German 2 will measure at the *Intermediate High* level according to the ACTFL Proficiency Guidelines.

5320 German 3 *Grade 11-12* **1.0 credit**

(Prerequisite: Successful completion of German 2 with a minimum 86% average)

An intermediate/advanced course in German. It is assumed that students have taken a German 2 course and have learned how to communicate effectively in German at an beginner-intermediate level. Students continue to learn how to communicate effectively in German at an intermediate-advanced level. Students will continue to gain an in-depth understanding of German culture. The *Komm Mit!* Level 3 textbook is used for German 3, which includes 12 chapters. The abilities of students who complete German 3 will measure at the *Advanced High* level according to the ACTFL Proficiency Guidelines.

5420 German 4 *Grade 12* **1.0 credit**

(Prerequisite: Successful completion of German 3 with a minimum 86% average)

An advanced course in German. It is assumed that students have taken a German 3 course and have learned how to communicate effectively in German at an intermediate-advanced level. Students continue to learn how to communicate effectively in German at an advanced level. Students will continue to gain an in-depth understanding of German culture. The *Dreimal Deutsch* textbook is used for German 4. The abilities of students who complete German 4 will measure at the *Advanced High* level according to the ACTFL Proficiency Guidelines.

5421 German 5 *Grade 12* **1.0 credit**

(Prerequisite: Successful completion of German 4 with a minimum 86% average)

An advanced course in German. It is assumed that students have taken a German 4 course and have learned how to communicate effectively in German at an advanced level. Students continue to learn how to communicate effectively in German at an advanced level. Students will continue to gain an in-depth understanding of German culture. A multitude of advanced textbooks are used for German 5. The abilities of students who complete German 5 will measure at the *Superior* (possibly *Distinguished*) level according to the ACTFL Proficiency Guidelines.

Music

5600 Concert Band *Grade 9-12* **.50 credit**

The Concert Band is a high school performing ensemble which rehearses every other day. Participants include students who have been involved in the music program since elementary and middle school. The Band performs for evening concerts and other special events throughout the year. Repertoire includes music from various periods of music history as well as contemporary wind ensemble literature and marches. Band members, *in good standing*, will have the opportunity to audition for LCBDA/PMEA county/district/region/state festivals. Opportunity for solo and small ensemble concerts may also present themselves throughout the year. Previous experience playing an instrument in the district's music program is highly encouraged, although not necessarily required. **Students without previous playing experience must meet with the director for permission to schedule this course.**

Extra-Curricular – Marching Band *Grade 9-12* **No credit**

The Bulldog Marching Band is an extra-curricular activity that meets entirely outside of the school day. Students do not need to participate in Concert Band in order to be a member. The marching band provides entertainment to the community through parades and football games. This ensemble also participates in local marching band competitions as well as the Lycoming County Band Director's Marching Exhibition. The Bulldog Marching Band begins each season over the summer and continues through the end of Marking Period 1. Repertoire includes serious works for marching band as well as contemporary and popular music. *Prior experience with color guard is NOT required as students will be taught by a color guard instructor.*

5601 Concert Choir *Grade 9-12* **.50 credit**

The Concert Choir is a high school performing ensemble which rehearses every other day. The Concert Choir performs at school concerts and special events throughout the year. Repertoire includes music from various periods of history, as well as world and American music, folk and contemporary. The Concert Choir members, *in good standing,* may audition for PMEA district/region/state festivals and other select ensembles. Other performance opportunities may become available to perform in solo and ensemble concerts throughout the year.

Additional Ensembles/Activities - Co-Curricular *Grade 9-12* **No credit**

Students involved in the music program will also have the opportunity to participate in smaller, seasonal activities at the Jersey Shore Area Senior High School. *Possible* groups include: jazz band, wind ensemble, percussion ensemble, quartets, quintets, pep band, and various select vocal ensembles. Students are chosen by auditions for certain groups

5607 Song Writing *Grade 11-12* **.50 credit**

This course explores how to write, record, and publish new songs. This class begins with a brief introduction to basic music theory and song structure before diving into composition. Throughout the course, students will have the opportunity to compose short songs, write their own lyrics, and study the characteristics of popular genres. There will be frequent projects and opportunities to write new songs alone and with partners. This course concludes with units on recording and editing music, as well as units on copyright laws and resources for publishing your music!

5606 Stage Technology *Grade 11-12* **.50 credit**

This course dives into the processes involved with theatrical production. Topics include elements of physical theatre, safety practices, directing, scenic design, lights, sound, and career application. During this class, students will be prepared to produce a play or musical with the theatre department (Middle and/or High School).

*Students who take this class are required to be involved with an extra-curricular theatre production including rehearsals after school hours and on weekends as needed.

5700 Music Theory 1 *Grade 10-12* **.50 credit**

(Prerequisite: Previous knowledge of how to read music is required)

The purpose of this course is to explore the basic elements of Music Theory and how music is composed. Students will learn how to write their own music by learning the rules of music composition and applying those rules using Sibelius music writing software. Students will be required to compose pieces based on compositional techniques learned in class. This semester course is open to all students who have an interest in the way music is composed or would like to learn the rules of music composition and how they are utilized today using the latest music writing software.

5701 Music Theory 2 *Grade 10-12* **.50 credit**

(Prerequisite: Completion of Music Theory I with a passing grade)

The purpose of this course is to continue the study of Music Theory at a higher level. Students will apply the basic elements from Music Theory I to write their own music, but add more complex concepts of music composition. Students will be required to use Sibelius music writing software to compose pieces based on compositional techniques learned in class. In addition to the written theory portion of the course, students will also receive aural theory training which will aid in their ability to sight read and sight sing more accurately. This semester course is open to all students who wish to continue their Music Theory studies, explore the way music is composed, further understand the rules of music composition, and experience how they are utilized today using the latest music writing software.

5705 Music History *Grade 9-12* **.50 credit**

This course is designed to help students understand how music has progressed throughout history and the stylistic changes music endured during different eras. In this class, students will listen to various styles of sacred and secular music from various countries as well as music by well-known composers. Students should be prepared to take notes and keep a detailed notebook. In addition, students will be required, on occasion, to write short papers/essays and give oral presentations. This semester course is open to all students who have an interest in the history of music. *Previous knowledge of how to read music is not required, but would be helpful.*

5710 History of Rock and Roll *Grade 9-12* **.50credit**

This semester course was created to fulfill the art/music/fcs component of the graduation requirements. It is designed to help students understand what constitutes the idea of "rock and roll" and it's progression from the early 1950's through current trends. In this class, students will listen to examples of music from various artists/groups from the various time periods. In particular, considerable time is spent on music of the 1950's, 1960's, 1970's, and 1980's. If time permits, discussion also includes music of the 1990's to the present. Students should be prepared to take notes and keep a notebook for the class. In addition to quizzes/tests, students may be required to prepare an oral group presentation and an individual project.

5715 American Musical Theatre 1 *Grade 10-12* **.50 credit**

The majority of the class work will be the study of 20th Century musical plays and musical comedies, and the interaction of plot, dialogue, and character as they serve as the framework for songs, dances, routines, and humorous episodes. Students will study excerpts from land mark musicals from the 1920's to the 1960's, as well as present day excerpts during their 'Clip of the Day.' Students will study famous composers, producers, librettists, choreographers, singers, dancers, and actors who were a part of this century's most successful productions on and off-Broadway. In addition, students will be learning how the elements of costume design, stage set, and lighting contribute to the overall musical production. This class will also develop an understanding of performance and students will demonstrate through performance: basic acting and singing skills. Students will be expected to try all basic performance skills as a part of this course.

5716 American Musical Theatre 2 *Grade 10-12* **.50 credit**

(Prerequisite: Completion of American Musical Theatre 1 with a passing grade)

This class is an extension of American Musical Theatre I. The majority of the class work will be the continuation of study of 20th Century musical plays and musical comedies, and the interaction of plot, dialogue and character as they serve as the framework for songs, dances, routines and humorous episodes. Students will study full-length productions as well as excerpts from landmark musicals from the 1960's to present, including film adaptations of Broadway musical stage plays, as well as present day excerpts during their 'Clip of the Day.' Students will study famous composers, producers, librettists, choreographers, singers, dancers, and actors who were a part of this century's most successful productions on and off-Broadway. In addition, students will be learning how the elements of costume design, stage set, and lighting contribute to the overall musical production. This class will also develop an understanding of performance and students will demonstrate through performance: basic acting and dancing skills. Students will be expected to try all basic performance skills as a part of this course.

5720 Voice Class *Grade 10-12* **.50 credit**

(Prerequisite: Concurrently registered in 5601 Concert Choir)

This semester course was created to foster good vocal health and technique. Goals of the course are as follows: to improve technique, quality, and artistry of individual voices; and to focus class attention on common vocal problems and their remediation. Students will study three different genres of music including folk, classical, and musical theatre to perform in this class. In addition to performance, students will take an in-depth look at famous musicians from the 20th Century including the genres of folk, classical, and musical theatre. This course is performance based and all students are required to sing.

Physical Education/Health

8000/8010 Physical Education *Grade 9-12* **.50 credit**

The physical education program will provide a wide variety of activities to meet the mental, physical, social, and emotional needs, as well as the interests and abilities, of all students. The activities are designed to develop interpersonal skills, positive attitudes, a desire to participate, physical fitness, and an appreciation of lifetime and individual sports. The activities are offered to each student in a co-educational, modified elective program. Students will have the opportunity to develop proficiency in movement forms. This proficiency involves the ability to demonstrate a degree of consistency and skillfulness in the execution of basic as well as advanced skills in offered activities.

Included in the program is a wide variety of activities, such as, basic swimming, disc golf, soccer, pickle ball, volleyball, softball, basketball, badminton, recreational games, square dancing, aerobics, yoga, floor hockey, aquatic fitness, fitness walking, lacrosse, and kayaking, canoeing, snorkeling and a variety of aquatic games. The students will have use of the "fitness center" which includes: cardio equipment, hammer strength training, and a variety of circuit training will be available to all students. Furthermore all ninth grade students and "new" students to the district will be certified in the technique, safety, care, handling of equipment and procedures of the fitness center.

8049 Health & Wellness *Grade 9 (Required)* **.50 credit**

This course is based off of the Pennsylvania State Standards for Health, Physical Education, Safety, Recreation, and Dance, as well as, the National Health Education Standards. The goals of this course are to introduce and explain the concept of wellness; provide current information on health issues; assist the student in developing a balanced lifestyle through understanding of the inter-relatedness of the physical, mental and emotional realms in making a healthy individual; provide an opportunity for students to examine and evaluate their personal relationships; and provide opportunities for the development of decision-making and critical-thinking skills.

8050 Health *Grade 11 (Required)* **.50 credit**

This course provides units that enable students to develop knowledge, attitudes, and practices necessary for promoting individual and family health. The course also promotes continued learning with an emphasis on life time wellness. The students are called upon to work cooperatively and collaboratively to: (1) gain an understanding of health promotion and disease prevention concepts; (2) learn how to access valid health information, products, and services; (3) develop positive health behaviors through goal setting and decision making. Topics included are: career focus, first aid and safety, family life, and drug/alcohol awareness, nutrition, organ/tissue donor awareness, consumer and community health, injury prevention and safety.

8100 Physical Education Sem 1 Elective **.25 credits**
8110 Physical Education Sem 2 Elective **.25 credits**

This elective is for students who would like to have more physical activity in their schedule. It will be with regular physical education classes and will only be placed in your schedule if there is room in the class.

0046/8114 Health Occupations *Grade 9* **.50 credit**

The Health Occupations course will enable students to engage in a more thorough understanding of the various occupations available in the Health field. Students will be provided information on: job descriptions, job responsibilities, including the negative and positive aspects of the jobs, training and educational requirements, salary/benefits, working environments, advancement opportunities, job security and retirement incentives through instruction, research and personal experiences with guest speakers. The course is an excellent way for students to become better prepared for making career decisions in Health related fields.

8115 Safety Concepts & First Aid (Health Elective) *Grade 10-12* **.50 credit**

In this course, students will examine fundamental attitudes, knowledge and skills to prepare for further study in career pathways in health, recreation, and community services. Concepts related to the field of health and wellness, health care, basic principles of anatomy, physiology and disease, medical terminology, organ and tissue donation, patient care, and basic safety and reporting protocols for providing care to individuals. Students will also obtain First Aid/CPR/AED certification upon passing skills and written exams with a minimum of 80%.

8116 Introduction to Health Careers *Grade 10-12* **.50 credit**

Examination of health majors and careers, including an evaluation of personalities in relation to career interests and values needed for success and satisfaction in the health care professions. Topics include discussion of requirements, daily roles, employment opportunities, and projections for the future in each of the selected health care fields. 2 Credits (2 Lecture). ,

♦♦8117 Medical Terminology Survey *Grade 10-12* **.50 credit**

(MTR 100) **2 College Credits**

Introduction to the basic structures and rules of interpreting medical terminology, designed to develop the ability to read, understand, and write the medical language. 1 Credit (1 Lecture),

♦♦8118 Basics of Medical Terminology *Grade 11-12* **.50 credit**

(MTR 104) **3 College Credits**

Foundation for the use of the language of medicine, with emphasis on correct pronunciation and spelling, various word parts, abbreviations and symbols, and terms pertaining to body systems. Etiology, symptomatology, pathology, and diagnostic procedures for identifying various disease processes provide an increased understanding of medically related conditions and procedures. 3 Credits (3 Lecture)

Science

Students are required to earn a minimum of three (3) Science credits and score proficient or advanced on the Keystone Biology Exam to meet graduation requirements. Students who do not pass the Keystone Exam after the full year biology course, may be required to take the Keystone Biology Remediation course the following school year and will take the Keystone Biology Exam a second time.

Upon completion of 8th grade, students must choose a science pathway for the high school. A score of Advanced on the Keystone Algebra exam in 8th grade and a recommendation is a prerequisite for the Honors Pathway.

Career Pathway-Science

(Workforce, technical or 2 year associates degree pathway)

3122 Earth and Space Science *Grade 9* **.50 credit**

This course will provide students with an understanding and knowledge of the Earth and the Earth's place in the Universe. The following topics will be covered: Astronomy- the Earth in the Universe, Meteorology-the atmosphere of the Earth, and Geology-the solid part of the Earth. The students will develop proficiency in basic laboratory process skills such as measurement, data collection, organization, analysis, and forming conclusions.

3125 Introduction to Biology *Grade 9* **.50 credit**

This course is intended to introduce students to core concepts in Biology including: basic biological principles, structure and function at various levels of biological organization, cell growth and reproduction, genetics, evolution and ecology.

3220 Biology / REQUIRED Course *Grade 10* **1.0 credit**

Biology is the Keystone science trigger course for the high school. A score of proficient or above must be earned on the Keystone Biology Exam in order to meet graduation requirements. The biology course has been designed to enhance student understanding of the structure and function of all living things, the student's place in this community of life and to provide each student the tools required to be successful on the Keystone Biology exam. Topics include: the cell, cell division, the cell's role in the establishment and maintenance of homeostasis, bioenergetics, ecology, genetics, and evolution.

3222 Keystone Biology Remediation *Grade 11* **.50 credit**

This course will target and reinforce basic information specifically related to the student performance on the Keystone Biology Exam. Students will complete assignments related to and correlated to each unit of study identified by the Keystone Anchors addressed in the Keystone Exam. Students will learn studying and test-taking strategies designed to assist them in attaining proficiency on the Keystone Exam.

3480 Chemistry *Grade 11-12* **1.0 credit**

(Prerequisite: Biology. Prerequisite or concurrent: Algebra 1)

This Chemistry course is intended to introduce the high school student to chemical science. Topics studied include: measurement, matter and energy, atomic structure, the periodic table, and chemical bonding, chemical reactions, the mole, stoichiometric relationships, and solutions and concentration. The approach in the course emphasizes conceptual understanding and mastery of key concepts. The pace of the course is slower and the emphasis is less on mathematical problem solving than in the honors chemistry course. Hands-on laboratory work is an important component of the course. **This course is intended for students who are entering the workforce or a 2 year degree program after high school.** Students planning to attend a four-year college after high school should take CHM 100 – Fundamentals of Chemistry.

3531 Physics *Grade 11-12* **1.0 credit**

(Prerequisite: Algebra 1)

Physics is a course that enables students to discover how things work. Physics is all around us and we investigate force, work, and rate in mechanical, fluid, electrical, and thermal systems. Experiments and projects are integral parts of the class. Common objects and applications are stressed and discussed in their relation to force, work, and rates. The student will also investigate resistance, energy, power, and force transformers within the mechanical, fluid, electrical, and thermal systems. Investigating drag, ohm's law, and measuring the resistance of thermal insulation are just a few examples of experiments that are done in the resistance unit. Power and force transformers units include reading watt-hour meters and working with simple machines. This course should be considered by students planning on entering the workforce, or pursuing an Associate's Degree after high school or students planning on a four year degree in a non-science field. **Students planning on attending a four year college program in a science, engineering, medical or technology related program should consider Honors Physics. This course is not an option if you have passed Honors Physics.**

Grade 12

The electives listed at the end of the science section are available for all pathways in grade 12. Electives may be scheduled on a case by case basis depending upon the student pathway, grade level and prerequisites necessary.

Academic Pathway-Science

(2 year associates or 4 year college degree pathway)

3122 Earth and Space Science *Grade 9* **.50 credit**

This course will provide students with an understanding and knowledge of the Earth and the Earth's place in the Universe. The following topics will be covered: Astronomy- the Earth in the Universe, Meteorology-the atmosphere of the Earth, and Geology-the solid part of the Earth. The students will develop proficiency in basic laboratory process skills such as measurement, data collection, organization, analysis, and forming conclusions.

3125 Introduction to Biology *Grade 9* **.50 credit**

This course is intended to introduce students to core concepts in Biology including: basic biological principles, structure and function at various levels of biological organization, cell growth and reproduction, genetics, evolution and ecology.

3220 Biology / REQUIRED Course *Grade 10* **1.0 credit**

Biology is the Keystone science trigger course for the high school. A score of proficient or above must be earned on the Keystone Biology Exam in order to meet graduation requirements. The biology course has been designed to enhance student understanding of the structure and function of all living things, the student's place in this community of life and to provide each student the tools required to be successful on the Keystone Biology exam. Topics include: the cell, cell division, the cell's role in the establishment and maintenance of homeostasis, bioenergetics, ecology, genetics, and evolution.

3222 Keystone Biology Remediation *Grade 11* **.50 credit**

(Prerequisite: Students who have not scored proficient or advanced on the Biology Keystone Exam will be automatically enrolled in this course.)

This course will target and reinforce basic information specifically related to the student performance on the Keystone Biology Exam. Students will complete assignments related to and correlated to each unit of study identified by the Keystone Anchors addressed in the Keystone Exam. Students will learn studying and test-taking strategies designed to assist them in attaining proficiency on the Keystone Exam.

♦♦ 3500 (CHM100) Fundamentals of Chemistry *Grade 11-12* **1.50 credits 4.00 college credits**

(Prerequisite: Must have passed the Keystone Algebra Exam and take the Penn College Placement Exam This course CAN be taken after passing Chemistry, but a prior Chemistry course is not a prerequisite)

This course is weighted 1.1

Basic principles of chemistry and its practice in laboratory. Emphasis on the underlying structure of matter (atoms, ions, molecules) and how structure determines properties. Designed to teach chemistry terminology and symbols, as well as to develop analytical and critical thinking skills. This course is intended for students planning to attend Penn College as a non-science major. Future Penn College students can complete a required science course for their degree program by completion of this course. **Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam. With successful completion, students will receive 4 credits for the CHM100 course through Pennsylvania College of Technology.**

3530 Honors Physics *Grade 11-12* **1.0 credit**

Prerequisite: Algebra 2 with at least 86% average

Honors Physics is an academic course dealing with the relation between matter and energy, beginning with measurement and continuing with force and motion, vectors, momentum, work energy and power, wave transfer of energy, light and optics, direct current electricity, circuits, magnetic applications of electric and magnetic fields, and nuclear energy. High emphasis is placed on laboratory work and problem solving. Honors Physics is ***STRONGLY*** recommended for students planning on pursuing a four-year degree in an engineering, medical, technology, or science field.

Grade 12

The electives listed at the end of the science section are available for all pathways in grade 12. Electives may be scheduled on a case-by-case basis depending upon the student pathway, grade level and prerequisites.

Honors Pathway-Science

(4 year college degree pathway)

3219 **Biology 9 / REQUIRED Course** *Grade 9* **1.0 credit**

(Prerequisite: Must have scored advanced on the Keystone Algebra Exam and the PSSA Reading Exam and must have a teacher recommendation.)

Biology is the Keystone science trigger course for the high school. A score of proficient or above must be earned on the Keystone Biology Exam in order to meet graduation requirements. The biology course has been designed to enhance student understanding of the structure and function of all living things, the student's place in this community of life and to provide each student the tools required to be successful on the Keystone Biology exam. Topics include: the cell, cell division, the cell's role in the establishment and maintenance of homeostasis, bioenergetics, ecology, genetics, and evolution.

♦♦ 3500 CHM 100 **Fundamentals of Chemistry** *Grade 10-11* **1.50 credits 4.00 college credits**

Prerequisite: Must have passed the Keystone Algebra Exam and take the Penn College Placement Exam
This course CAN be taken after passing Chemistry, but a prior Chemistry course is not a prerequisite

This course is weighted 1.1

Basic principles of chemistry and its practice in laboratory. Emphasis on the underlying structure of matter (atoms, ions, molecules) and how structure determines properties. Designed to teach chemistry terminology and symbols, as well as to develop analytical and critical thinking skills. This course is intended for students planning to attend Penn College as a non-science major. Future Penn College students can complete a required science course for their degree program by completion of this course. **Students who enroll in this course with the intent to receive college credit must pass the Penn College Placement exam. With successful completion, students will receive 4 credits for the CHM100 course through Pennsylvania College of Technology.**

3530 **Honors Physics** *Grade 10-11* **1.0 credit**

(Prerequisite: Algebra 2 with at least 86% average)

Honors Physics is an academic course dealing with the relation between matter and energy, beginning with measurement and continuing with force and motion, vectors, momentum, work energy and power, wave transfer of energy, light and optics, direct current electricity, circuits, magnetic applications of electric and magnetic fields, and nuclear energy. High emphasis is placed on laboratory work and problem solving. Honors Physics is ***STRONGLY*** recommended for students planning to pursue a four-year degree in an engineering, medical, technology, or science field.

3471 Advanced Placement (A.P.) Chemistry *Grade 11-12* **1.50 credits**

This course is weighted 1.1

(Prerequisite - Must have a 90 or above average in both CHM 100 and in Algebra II)

Advanced placement chemistry is a college level course designed to prepare a high school student for higher education in science or a medical field. The A.P. Chemistry course is designed as an equivalent to a college level general chemistry class. The goal of the course is to prepare students to successfully complete the College Board's Advanced Placement Test in Chemistry. Passing the A.P. Chemistry test will enable students to take second year chemistry courses in their college freshman year or exempt them from science as a general elective. Students enrolling in AP Chemistry must have achieved a 90 average in Honors Chemistry and in Algebra II. The topics covered are those required by the College Board for the course and include: Structure of matter, states of matter, reactions, periodic trends, intro to organic chemistry, and laboratory techniques.

3401 Advanced Placement Environmental Science *Grade 11-12* **1.5 credits**

(Prerequisites – Biology Prerequisite or concurrent with Honors Chemistry or Honors Physics with course grades of 90 or above.) This course is weighted 1.1

The Advanced Placement Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. The goal of the course is to prepare students to successfully complete the College Board's Advanced Placement Test in Environmental Science.

Science - Electives

The following electives are available for all pathways in grade 12. Electives may be scheduled on a case by case basis depending upon the student pathway, grade level and prerequisites necessary.

3481 Analytical Chemistry *Grade 12* **.50 credit**

Analytical chemistry is a course intended for those interested in going into ~~an~~ engineering, crime scene investigation (CSI), or other chemistry-related field. The application of the class can also be used for those interested in going into medical research. The course includes the theory and applications of analytical chemistry including: Laboratory emphasis on obtaining and interpreting quantitative data, Statistical data analysis, equilibrium expressions, pH, volumetric and gravimetric analysis, fundamentals of spectroscopy, and analytical separations. Laboratory experiments include acid-base behavior, spectroscopy (UV-visible and atomic absorption), and chromatography.

3420 Organic Chemistry *Grade 12* **.50 credit**

(Prerequisites- A course grade of a B+ or higher in CHM 100.) (Can be taken concurrently with AP Chem).

Organic chemistry is a sub discipline of chemistry that is prevalent in every person's life. Organic chemistry is the study of carbon containing compounds and their uses, reactions, functions, and application to life. The use of math in organic chemistry is very limited due to the nature of study and is very different from general chemistry. The student will study organic compounds, functional groups, basic organic reactions, synthesis pathways, and proper organic laboratory techniques. This course is designed for any student interested in any field of study involving chemistry, biology, certain engineering fields, or the medical field.

♦♦3555 (BIO 103) **Human Anatomy and Physiology Survey** *Grade 12* **1.50 credits 4.00 college Credits**

(If the student takes more than one science class in the 11th grade academic year)

(Prerequisite: Biology and CHM 100)

This course is weighted 1.1

Overview of human anatomy and physiology. Emphasis on the relationships between the structures and functions in each body system as well as the interrelationships among all body systems in the maintenance of homeostasis. Laboratory work complements and reinforces lecture materials. Qualifying score on math placement exam required. Recommended corequisite: ENL111.

3400 **Environmental Science** *Grade 12* **.50 credit**

Prerequisite: Successful completion of Biology & Algebra

Environmental Science emphasizes global environmental concepts as they relate to local issues. Students will perform case study analysis, problem-solving, project creation and development, computer and internet use, oral reports/discussions, laboratory measurement, data collection and analysis, along with other activities utilized to promote student-centered learning.

3410 **Astronomy** *Grade 12* **.50 credit**

A survey of modern astronomy introducing topics from our solar system and other planetary systems, galaxies, the evolution of stars, and the methods and technology used to explore planetary and stellar processes. Included with this course is a lab that introduces the student to astronomical observations with the use of a series of telescopes and lab exercises.

3330 **Genetics and Microbiology** *Grade 12* **1.0 credit**

(Prerequisite: Successful completion of Biology)

Genetics requires a more detailed examination of the subject and will emphasize problem solving, decision-making, critical thinking, applied learning, and knowledge. The topics covered in this course will range from Mendelian genetics to current genetics technologies and discoveries as well as their practical and ethical implications. Microbiology is a course with a major focus on the role of microorganisms such as bacteria and viruses in diseases. Other topics included in this course are some of the positive roles of microorganisms in areas such as food production, ecology and future technology. Laboratory work is stressed. This course will help prepare you to continue your Science education at the college level to prepare for careers in medical and health related fields.

Social Studies

The high school social studies program is designed to impart critical and analytical thinking skills to all students. As students explore history and are introduced to disciplines within the social sciences, they will also refine their written and oral communication skills. All students are expected to read assignments critically and participate actively in class discussions and activities.

PA School Code requires all students to be enrolled in the following history courses during their high school career:

- **United States History**
- **World History**
- **American Government**
- **Economics**

Career Pathway-Social Studies

(Workforce, technical or 2 year associates degree pathway)

1123 United States History ***Grade 9*** **1.0 credit**

This course is designed to give career pathway students a broad background in the social, political, and economic development of the United States from 1815 to the present. Topics include, but are not limited to, westward expansion, and causes of the Civil War, Reconstruction, the Gilded Age, Populism, Progressivism, American Expansionism, New Deal Liberalism, World Wars I and II, the Cold War, the Civil Rights Movement, the Vietnam War, 1960's Liberalism, and Neo-Conservatism.

1320 World History ***Grade 10*** **1.0 credit**

This introductory course records the contributions of individuals as it chronicles the development of world societies from the Renaissance to the present. Students will examine the conflict and cooperation between societies as they analyze political and social systems, economic and technological advances, world religions, cultural diffusion, and globalization. Special emphasis will be placed on the way geography has impacted human development. Considerable attention will also be given to developing historical thinking and communication skills.

1420 American Government* ***Grade 11-12*** **.50 credit**

The purpose of the course American Government is to help students gain an understanding of how our nation's government is organized and operates. Students will also learn about the rights and responsibilities of the citizen in government. Students will be exposed to the process by which public policy is shaped in order to prepare them to make informed, discriminating judgments on questions that will affect the future of the nation and the world. ****This is a required course for graduation****

1421 Economics* ***Grade 11-12*** **.50 credit**

The study of economics will introduce students to the foundations and operations of the American free enterprise system and acquaint the students with other economic systems in the world. The theory of the market economy and the modifications that have been made to it will also be studied. Students will examine domestic and international challenges to the economy of the United States and analyze complex global economic issues. By providing the students with economic knowledge and critical thinking skills, this course ensures that each student will be prepared to participate actively and intelligently in civic issues.

Academic Pathway-Social Studies

(2 year associates or 4 year college degree pathway)

1120 United States History 1 ***Grade 9*** **1.0 credit**

This course is designed to give all students a broad background in the social, political, and economic development of the United States from the French and Indian War to the end of the Reconstruction era. Topics include, but are not limited to, the American Revolution, formation of a republican form of government, the birth of political parties, westward expansion, and causes of the Civil War. United States geography will also be an integral part of the course.

1220 United States History 2 ***Grade 10*** **1.0 credit**

This is a chronological survey of the major political, economic, and social developments in United States history since the Civil War. Topics will include, but are not limited to Reconstruction, the Gilded Age, Populism, Progressivism, American Expansionism, New Deal Liberalism, World Wars I and II, the Cold War, the Civil Rights Movement, the Vietnam War, 1960's Liberalism, and Neo-Conservatism. As students learn about our nation's history, they will have the opportunity to improve their historical thinking and communication skills.

1320 World History **(Gr 11)** **1.0 credit**

This introductory course records the contributions of individuals as it chronicles the development of world societies from the Renaissance to the present. Students will examine the conflict and cooperation between societies as they analyze political and social systems, economic and technological advances, world religions, cultural diffusion, and globalization. Special emphasis will be placed on the way geography has impacted human development. Considerable attention will also be given to developing historical thinking and communication skills.

1420 American Government ***Grade 12*** **.50 credit**

The purpose of the course American Government is to help students gain an understanding of how our nation's government is organized and operates. Students will also learn about the rights and responsibilities of the citizen in government. Students will be exposed to the process by which public policy is shaped in order to prepare them to make informed, discriminating judgments on questions that will affect the future of the nation and the world. ****This is a required course for graduation****

1421 Economics ***Grade 12*** **.50 credit**

The study of economics will introduce students to the foundations and operations of the American free enterprise system and acquaint the students with other economic systems in the world. The theory of the market economy and the modifications that have been made to it will also be studied. Students will examine domestic and international challenges to the economy of the United States and analyze complex global economic issues. By providing the students with economic knowledge and critical thinking skills, this course ensures that each student will be prepared to participate actively and intelligently in civic issues.

Honors Pathway-Social Studies

(4 year college degree pathway)

1130 19th Century History Honors *Grade 9* **1.0 credit**

This college preparatory course will help students develop critical thinking and writing skills that they will use throughout high school and college. It will help students learn to think historically as they compare economic, political, intellectual, and social developments in Europe and the United States from the Seven Years' War to the end of the nineteenth century. Topics include, but are not limited to, the Enlightenment, American Revolution, French Revolution and Napoleon, Early American Republic, Jacksonian Democracy, the American Civil War, and European Imperialism. Students will be expected to read and write about challenging primary and secondary source materials. Since this course is also designed to prepare students for future Advanced Placement (AP) coursework in European and United States history, special emphasis will be placed on the critical thinking skills needed to complete the multiple choice and free response portions of the AP exam as well as methods to analyze primary documents. **Note: All students who score at the advanced level on the reading portion of 8th Grade PSSA Exam will automatically be enrolled in this course as it will help to expand and refine their abilities to interpret, analyze and evaluate non-fiction.**

1230 20th Century History Honors *Grade 10* **1.0 credit**

(Prerequisite: Students must have at least a 90% in 19th Century History Honors or a 94% in Academic United States History from 1764 to 1877and a score of Proficient or better on the Keystone Literature test)

This introductory course is designed to prepare advanced history students for future Advanced Placement (AP) coursework in European and American history. This course will help students learn to think historically as they compare economic, political, intellectual, and social developments in Europe and the United States from end of the nineteenth century until the turn of the twenty-first century. Emphasis will be placed on how liberalism, conservatism, and radicalism evolved in Europe and the United States throughout the twentieth century. Topics include, but are not limited to, American and European Imperialism, Populism, Progressivism, World War I, the Russian Revolution, the Great Depression, the Rise of Fascism, New Deal Liberalism, World War II, the Cold War, McCarthyism, the Civil Rights Movement, the Vietnam War, and the Reagan Revolution. Students will be expected to read and write about challenging primary and secondary source materials. Special emphasis will be placed on learning how to write Document-Based Questions (DBQs) for the AP exam. Considerable attention will also be given to the development of the critical thinking and communication skills necessary for success on the multiple choice and free response portions of the AP exam.

1350 European History – Advanced Placement *Grade 11* **1.0 credit**

(Prerequisite: It is required that students have obtained at least a 90% average in 20th Century History Honors)

This course is weighted 1.1

Advanced Placement European History is a challenging course designed to be the equivalent of a college or university level Western Civilization survey course. The course examines the political, social, economic, intellectual, and cultural history of Europe from the Renaissance to the 21st Century. Students should possess strong reading and writing skills and be willing to devote substantial time to the completion of class assignments. Emphasis is placed on analytical writing, class discussion, primary source interpretation, and critical reading of secondary sources. Students who enroll in this course will be expected to read and write at the college level. They must be prepared to dedicate substantial time outside of the normal school day to the study of history, and need to be committed to taking the Advanced Placement history exam offered in early May each year. This course is designed for 11th grade advanced students.

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JERSEY SHORE AREA SCHOOL DISTRICT
Job Description

Title: School Building Secretary

Scope: The position of School Building Secretary is to assure the smooth and efficient operation of the school office, provide clerical support to the building staff and maintain school records. This person is highly confidential in all internal and external matters.

Certifications: None

Qualifications: High School Diploma, proficiency in keyboarding, organizational and communication skills. Proficient in productivity software, ex. Microsoft Office Suite and common office equipment and machines operation.

Responsible To: Building Principal

Supervisory Function: Students sent to office, waiting to see Principal, Assistant Principal or to be picked up by parent/guardian.

Classification: Non-Exempt

Position Objective: To provide clerical support to building staff.

Responsibilities:

- Answer and transfer all telephone calls or record messages.
- Oversees the admittance of school visitors and maintains records as required.
- Maintain absentee records for building staff and ensure substitutes have been secured.
- Assist and orient substitute teachers.
- Maintain permanent school records and files and complete file requests.
- Prepare and distribute a daily attendance record.
- Maintain student attendance records in MMS, including tardies and early dismissals, mailing letters to parents per Board policy.
- Maintain inventory of supplies in the office.
- Assist the school nurse when necessary.
- Serve as PTO contact.
- Other duties as assigned.

Placement: Classified Staff

Terms of Employment: 10 or 12 months (specified upon hire)

Evaluation: Annually by Building Principal

Date Approved:

JERSEY SHORE AREA SCHOOL DISTRICT
Job Description

Title: Classroom Paraprofessional and Learning Support or Special Education Paraprofessional

Scope: To assist, support and work with regular education and special education teachers, administrators and other team members in providing educational benefit for students.

Certifications: 20 hours of Professional Development annually.

Qualifications: High School Diploma and/or appropriate educational level for the position, experience in working with children, effective written and oral expression, ability to operate office machines. Ability to reach above the head and below the waist, ability to use fingers to pick, feel, and grasp objects, some stooping, bending, and twisting of the body required. Ability to lift and/or carry supplies and/or papers weighing no more than 20 lbs, ability to physically lift and/or assist any student as required by student needs, participate in training and assist in student restraint, if needed, as warranted by position. Ability to sit, stand, walk, or move throughout the building and/or office, often for extended periods of the workday. Must possess excellent interpersonal skills, be able to work in an environment with frequent interruptions and able to make appropriate decisions and work under high level of stress. Ability to communicate effectively, ability to organize tasks, ability to handle multiple tasks and ability to exercise good judgment.

Responsible To: Regular Education or Special Education Teacher, Principal/Supervisor and Special Education Administrator

Supervisory Function: None

Classification: Non-Exempt

Position Objective: To provide educational support for students.

Responsibilities:

Essentials Duties and Responsibilities:

1. Supervises regular and learning support students in teacher-planned activities and assists teacher in monitoring student progress.
2. Assists students in orderly, safe, and efficient transition between activities with attention to students' individual needs.
3. Provides teachers with timely feedback concerning student progress, student behavior, and incidents which affect student well-being.
4. Assists the teacher with classroom management when required (i.e. teacher's schedule is interrupted by a parent, supervisor, or an emergency).
5. Monitors field trips, playground activities, testing situations, and pupil activities during periods of free, independent study, or seatwork.
6. Assists with record keeping.
7. Operates classroom and office equipment when required.
8. Assists in beginning and end of year preparation and organization of classrooms and materials.
9. Arrives at the designated job site according to the established work schedule.

10. Physically lifts and/or assists any student as required by student needs.
11. Participates in training and assists in student restraint, if needed, as warranted by position.
12. Attends and participates in meetings as required.
13. Develops rapport with students and responds to individual needs.
14. Responds positively to supervision and suggestions for improvement.
15. Assists the substitute teacher when the teacher is absent.
16. Completes required paraprofessional training hours annually to maintain highly qualified paraprofessional status. Additional trainings beyond the scope of the school year need to be submitted to the building principal before signing up for the course. If the proper chain of command is not followed, the credit hours will not be honored and credited towards the highly qualified status.
17. All other duties as assigned.

Placement: Classified Staff

Terms of Employment: 10 months

Evaluation: Annually by the Building Principal in accordance with the district's performance appraisal form.

Date Approved:

Proposal

(Valid for 30 days from Proposal date)

Prepared For: Jersey Shore Area School District
ATTN: Mark Wall

Date: January 30, 2019

Proposal Number: 110218PD ***COSTARS contract # 008-274***

Job Name: Jersey Shore SD Repl RTUs

Delivery Terms:
Freight Allowed and Prepaid - F.O.B. Factory

Payment Terms:
Net 30 Days

Tag Data - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop (Qty: 1)

Item	Tag(s)	Qty	Description	Model Number
A1	Unit#2 REPL	1	7.5 Ton R410A PKGD Unitary Gas/Electric	YSC092H3RHA

Product Data - 3-10 Ton R410A PKGD Unitary Gas/Electric Rooftop

Item: A1 Qty: 1 Tag(s): Unit#2 REPL

DX cooling, gas heat
Standard efficiency
Convertible configuration
7.5 Ton Dual compressor
208-230/60/3
Microprocessor controls
High gas heat
Economizer Dry Bulb 0-100% with Barometric Relief
Standard condenser coil w/hail guard
Through the base electrical
Non-fused disconnect
Return Air Smoke Detector
1st Year Parts & Labor warranty
5 Year Heat Exchanger and Compressor Parts Warranty
Adaptor Curb to Existing (Fld)

NOTE: ITEMS TO BE FURNISHED BY OTHERS:

- Equipment Start-Up And Warranty Labor Service
- Vibration Isolators
- Temperature Controls
- BAS Interface (other than conventional 24V thermostat interface)

Approximate unit weight: 1,100 lbs

COSTARS contract # 008-274

Item A – RTU-2

Total Product Category- RTU .....(excluding taxes) ..... $ 8,025.00

ADD for Startup by Trane (per unit) ..... $ 1,060.00

Clarifications

1. Any service not listed is not included.
2. Work will be performed during normal Trane business hours.

Patrick Doyle - Trane U.S. Inc.
3909 TecPort Drive
Harrisburg, PA 17111
Phone: (717) 561-5407
Fax: (717) 561-5499

This proposal is subject to your acceptance of the attached Trane terms and conditions.

TERMS AND CONDITIONS - EQUIPMENT

"Company" shall mean Trane U.S. Inc..

1. Acceptance. These terms and conditions are an integral part of Company's offer and form the basis of any agreement (the "Agreement") resulting from Company's proposal (the "Proposal") for the sale of the described equipment and any ancillary services (the "Equipment"). The Proposal is subject to acceptance in writing by the party to whom this offer is made or an authorized agent ("Customer") delivered to Company within 30 days from the date of the Proposal. If Customer's order is an acceptance of the Proposal, without the addition of any other terms and conditions of sale or any other modification, this document shall be treated solely as an acknowledgment of such order. If Customer's order is expressly conditioned upon Company's acceptance or assent to terms and/or conditions other than those expressed herein, return of such order by Company with these terms and conditions attached or referenced serves as Company's notice of objection to Customer's terms and as Company's counter-offer to provide Equipment in accordance with scope and terms and condition of the Proposal. If Customer does not reject or object in writing to Company within 10 days, Company's counter-offer will be deemed accepted. Customer's acceptance of goods and/or services by Company will in any event constitute an acceptance by Customer of these terms and conditions. This Agreement is subject to credit approval by Company. Upon disapproval of credit, Company may delay or suspend performance or, at its option, renegotiate prices and/or terms and conditions with Customer. If Company and Customer are unable to agree on such revisions, this Agreement shall be cancelled without any liability.

2. Title and Risk of Loss. All Equipment sales with destinations to Canada or the U. S. shall be made as follows: for HVAC Equipment, FOB Company's U.S. manufacturing facility or warehouse (full freight allowed); and for non-HVAC refrigeration Equipment, FCA Company's U.S. manufacturing facility or warehouse (Incoterms 2000). For non-HVAC refrigeration Equipment, Customer shall have the right to specify the method of transportation and the common carrier to be used; absent such specification, the Company shall ship the non-HVAC refrigeration Equipment by a reliable common carrier of its own selection in order to meet the delivery schedule and invoice Customer for all applicable charges associated with such shipment. For all Equipment, title and risk of loss or damage to Equipment will pass to Customer upon tender of delivery of such to carrier at Company's U.S. manufacturing facility or warehouse.

3. Pricing and Taxes. Following acceptance without addition of any other terms and condition of sale or any other modification by Customer, the prices stated are firm provided that notification of release for immediate production and shipment is received at Company's factory not later than 3 months from order acceptance. If such release is received later than 3 months from order acceptance date, prices will be increased a straight 1% (not compounded) for each 1 month period (or part thereof) beyond the 3 month firm price period up to the date of receipt of such release. If such release is not received within 6 months after the date of order acceptance, the prices are subject to renegotiation or at Company's option, the order will be cancelled. Any delay in shipment caused by Customer's actions will subject prices to increase equal to the percentage increase in list prices during that period of delay and Company may charge Customer with incurred storage fees. In no event will prices be decreased. The price of Equipment does not include any present or future foreign, federal, state, or local property, license, privilege, sales, use, excise, value added, gross receipts or other like taxes or assessments. Such amounts will be itemized separately to Customer, who will make prompt payment to Company. Company will accept valid exemption documentation for such from Customer, if applicable. All prices include packaging in accordance with Company's standard procedures. Charges for special packaging, crating or packing are the responsibility of Customer.

4. Delivery and Delays. Delivery dates are approximate and not guaranteed. Company will use commercially reasonable efforts to deliver the Equipment on or before the estimated delivery date and will notify Customer if the estimated delivery dates cannot be honored and will deliver the and services as soon as practicable thereafter. In no event will Company be liable for any damages or expenses caused by delays in delivery times.

5. Performance. Company shall be obligated to furnish only the Equipment described in the Proposal, and submittal data (if such data is issued in connection with the order), and Company may rely on the acceptance of the Proposal and submittal data as acceptance of the suitability of the Equipment for the particular project or location. If Company and Customer are unable to agree on revised prices or terms, the order may be cancelled without any liability. Unless specifically stated in the Proposal, compliance with any local building codes or other laws or regulations relating to specifications or the location, use or operation of the Equipment is the sole responsibility of Customer. If Equipment is tendered which does not fully comply with the provisions of this Agreement, and Equipment is rejected by Customer, Company will have the right to cure within a reasonable time after notice thereof by substituting a conforming tender whether or not the time for performance has passed.

6. Force Majeure. Company's duty to perform under this Agreement and the Equipment prices are contingent upon the non-occurrence of an Event of Force Majeure. If the Company shall be unable to carry out any material obligation under this Agreement due to an Event of Force Majeure, this Agreement shall at Company's election (i) remain in effect but Company's obligations shall be suspended until the uncontrollable event terminates or (ii) be terminated upon 10 days notice to Customer, in which event Customer shall pay Company for all parts of the Work furnished to the date of termination. An "Event of Force Majeure" shall mean any cause or event beyond the control of Company. Without limiting the foregoing, "Event of Force Majeure" includes: acts of God; acts of terrorism; war or the public enemy; flood; earthquake; tornado; storm; fire; civil disobedience; pandemic insurrections; riots; labor/labour disputes; labor/labour or material shortages; sabotage; restraint by court order or public authority (whether valid or invalid); and action or non-action by or inability to obtain or keep in force the necessary governmental authorizations, permits, licenses, certificates or approvals if not caused by Company; and the requirements of any applicable government in any manner that diverts either the material or the finished product to the direct or indirect benefit of the government.

7. Warranty (not applicable to microturbines; see separate warranty attached). Company warrants to the end-user of the equipment that, for a period of the lesser of 12 months from initial start-up or 18 months for HVAC Equipment and 15 months for non-HVAC refrigeration Equipment from date of shipment, whichever is less, that the Equipment manufactured by Company: (1) is free from defects in material and manufacture and (2) has the capacities and ratings set forth in Company's catalogs and bulletins ("Warranty"). **Company HVAC Equipment that includes mandatory start-up and sold in North America will not be warranted by Company unless Company performs the HVAC Equipment startup.** Exclusions from this Warranty include damage or failure arising from: wear and tear; corrosion, erosion, deterioration; modifications made by others to the Equipment; repairs or alterations by a party other than Company that adversely affects the stability or reliability of the Equipment; vandalism; neglect; accident; adverse weather or environmental conditions; abuse or improper use; improper installation; commissioning by a party other than Company; unusual physical or electrical or mechanical stress; operation with any accessory, equipment or part not specifically approved by Company; and/or lack of proper maintenance as recommended by Company. Company shall not be obligated to pay for the cost of lost refrigerant or lost product. Company's obligations and liabilities under this Warranty are limited to furnishing replacement equipment or parts, at its option, FCA (Incoterms 2000) factory or warehouse (f.o.b. factory or warehouse for US domestic purposes) at Company-designated shipping point, freight-allowed to Company's warranty agent's stock location, for all non-conforming Company-manufactured Equipment (which have been returned by Customer to Company.) Returns must have prior written approval by Company and are subject to restocking charge where applicable. Equipment, material and/or parts that are not manufactured by Company are not warranted by Company and have such warranties as may be extended by the respective manufacturer. **UNLESS EXPRESSLY WARRANTED IN WRITING FOR CERTAIN HUSSMANN BRANDED EQUIPMENT, COMPANY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING PREVENTION OF MOLD/MOULD, FUNGUS, BACTERIA, MICROBIAL GROWTH, OR ANY OTHER CONTAMINATES.** No warranty liability whatsoever shall attach to Company until Customer's complete order has been paid for in full and Company's liability under this Warranty shall be limited to the purchase price of the Equipment shown to be defective. Additional warranty protection is available on an extra-cost basis and must be in writing and agreed to by an authorized signatory of the Company. Additional terms and conditions of warranty coverage are applicable for refrigeration equipment. **EXCEPT FOR COMPANY'S WARRANTY EXPRESSLY SET FORTH HEREIN, COMPANY DOES NOT MAKE, AND HEREBY EXPRESSLY DISCLAIMS, ANY WARRANTIES, EXPRESS OR IMPLIED CONCERNING ITS PRODUCTS, EQUIPMENT OR SERVICES, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF DESIGN, MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR OTHERS THAT ARE ALLEGED TO ARISE FROM COURSE OF DEALING OR TRADE.**

8. Indemnity. Company and Customer shall indemnify, defend and hold harmless each other from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees, resulting from death or bodily injury or damage to real or personal property, to the extent caused by the negligence or misconduct of their respective employees or other authorized agents in connection with their activities within the scope of this Agreement. Neither party shall indemnify the other against claims, damages, expenses or liabilities to the extent attributable to the acts or omissions of the other party. If the parties are both at fault, the obligation to indemnify shall be proportional to their relative fault. The duty to indemnify will continue in full force and effect, notwithstanding the expiration or early termination hereof, with respect to any claims based on facts or conditions that occurred prior to expiration or termination.

9. Insurance. Upon request, Company will furnish evidence of its standard insurance coverage. If Customer has requested to be named as an additional insured under Company's insurance policy, Company will do so but only subject to Company's manuscript additional insured endorsement under its primary Commercial General Liability policies. In no event does Company waive any right of subrogation.

10. Customer Breach. Each of the following events or conditions shall constitute a breach by Customer and shall give Company the right, without an election of remedies, to terminate this Agreement, require payment prior to shipping, or suspend performance by delivery of written notice declaring termination, upon which event Customer shall be liable to the Company for all Equipment furnished to date and all damages sustained by Company (including lost profit and overhead): (1) Any failure by Customer to pay amounts when due; or (2) any general assignment by Customer for the benefit of its creditors, or if Customer becomes bankrupt or insolvent or takes the benefit of any statute for bankrupt or insolvent debtors, or makes or proposes to make any proposal or arrangement with creditors, or if any steps are taken for the winding up or other termination of Customer or the liquidation of its assets, or if a trustee, receiver, or similar person is appointed over any of the assets or interests of Customer; (3) Any representation or warranty furnished by Customer in connection with this Agreement is false or misleading in any material respect when made; or (4) Any failure by Customer to perform or comply with any material provision of this Agreement.

11. Limitation of Liability. NOTWITHSTANDING ANYTHING TO THE CONTRARY, IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING WITHOUT LIMITATION REFRIGERANT LOSS, PRODUCT LOSS, LOST REVENUE OR PROFITS), OR PUNITIVE DAMAGES WHETHER CLAIMED UNDER CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER LEGAL THEORY OF FACTS. In no event

will Company's liability in connection with the provision of products or services or otherwise under this Agreement exceed the entire amount paid to Company by Customer under this Agreement.

12. Nuclear Liability. In the event that the Equipment sold hereunder is to be used in a nuclear facility, Customer will, prior to such use, arrange for insurance or governmental indemnity protecting Company against all liability and hereby releases and agrees to indemnify Company and its suppliers for any nuclear damage, including loss of use, in any manner arising out of a nuclear incident, whether alleged to be due, in whole or in part to the negligence or otherwise of Company or its suppliers.

13. Intellectual Property; Patent Indemnity. Company retains all ownership, license and other rights to all patents, trademarks, copyrights, trade secrets and other intellectual property rights related to the Equipment, and, except for the right to use the Equipment sold, Customer obtains no rights to use any such intellectual property. Company agrees to defend any suit or proceeding brought against Customer so far as such suit or proceeding is solely based upon a claim that the use of the Equipment provided by Company constitutes infringement of any patent of the United States of America, provided Company is promptly notified in writing and given authority, information and assistance for defense of same. Company will, at its option, procure for Customer the right to continue to use said Equipment, or modify it so that it becomes non-infringing, or replace same with non-infringing Equipment, or to remove said Equipment and to refund the purchase price. The foregoing will not be construed to include any Agreement by Company to accept any liability whatsoever in respect to patents for inventions including more than the Equipment furnished hereunder, or in respect of patents for methods and processes to be carried out with the aid of said Equipment. The provision of Equipment by Company does not convey any license, by implication, estoppel, or otherwise, under patent claims covering combinations of said Equipment with other devices or elements. The foregoing states the entire liability of Company with regard to patent infringement. Notwithstanding the provisions of this paragraph, Customer will hold Company harmless against any expense or loss resulting from infringement of patents or trademarks arising from compliance with Customer's designs or specifications or instructions.

14. Cancellation. Equipment is specially manufactured in response to orders. An order placed with and accepted by Company cannot be delayed, canceled, suspended, or extended except with Company's written consent and upon written terms accepted by Company that will reimburse Company for and indemnify Company against loss and provide Company with a reasonable profit for its materials, time, labor, services, use of facilities and otherwise. Customer will be obligated to accept any Equipment shipped, tendered for delivery or delivered by Company pursuant to the order prior to any agreed delay, cancellation, suspension or extension of the order. Any attempt by Customer to unilaterally revoke, delay or suspend acceptance for any reason whatever after it has agreed to delivery of or accepted any shipment shall constitute a breach of this Agreement. For purposes of this paragraph, acceptance shall be any waiver of inspection, use or possession of Equipment, payment of the invoice, or any indication of exclusive control exercised by Customer.

15. Invoicing and Payment. Equipment shall be invoiced to Customer upon tender of delivery thereof to the carrier. Customer shall pay Company's invoices within net 30 days of shipment date. Company reserves the right to add to any account outstanding for more than 30 days a service charge equal to the lesser of the maximum allowable legal interest rate or 1.5% of the principal amount due at the end of each month. Customer shall pay all costs (including attorneys' fees) incurred by Company in attempting to collect amounts due and otherwise enforcing these terms and conditions. If requested, Company will provide appropriate lien waivers upon receipt of payment. Company may at any time decline to ship, make delivery or perform work except upon receipt of cash payment, letter of credit, or security, or upon other terms and conditions satisfactory to Company in accordance with its credit and collections policy. Customer agrees that, unless Customer makes payment in advance, Company will have a purchase money security interest in all Equipment to secure payment in full of all amounts due Company and its order for the Equipment, together with these terms and conditions, form a security agreement (as defined by the UCC in the United States and as defined in the Personal Property Security Act in Canada). Customer shall keep the Equipment free of all taxes and encumbrances, shall not remove the Equipment from its original installation point and shall not assign or transfer any interest in the Equipment until all payments due Company have been made. The purchase money security interest granted herein attaches upon Company's acceptance of Customer's order and on receipt of the Equipment described in the accepted Proposal but prior to its installation. The parties have no agreement to postpone the time for attachment unless specifically noted in writing on the accepted order. Customer will have no rights of set off against any amounts, which become payable to Company under this Agreement or otherwise.

16. Claims. Company will consider claims for concealed shortages in shipments or rejections due to failure to conform to an order only if such claims or rejections are made in writing within 15 days of delivery and are accompanied by the packing list and, if applicable, the reasons in detail why the Equipment does not conform to Customer's order. Upon receiving authorization and shipping instructions from authorized personnel of Company, Customer may return rejected Equipment, transportation charges prepaid, for replacement. Company may charge Customer any costs resulting from the testing, handling, and disposition of any Equipment returned by Customer which are not found by Company to be nonconforming. All Equipment damaged during shipment and all claims relating thereto must be made with the freight carrier in accordance with such carrier's policies and procedures. Claims for Equipment damaged during shipment are not covered under the warranty provision stated herein.

17. Export Laws. The obligation of Company to supply Equipment under this Agreement is subject to the ability of Company to supply such items consistent with applicable laws and regulations of the United States and other governments. Company reserves the right to refuse to enter into or perform any order, and to cancel any order, under this Agreement if Company in its sole discretion determines that performance of the transaction to which such order relates would violate any such applicable law or regulation. Customer will pay all handling and other similar costs from Company's factories including the costs of freight, insurance, export clearances, import duties and taxes. Customer will be "exporter of record" with respect to any export from the United States of America and will perform all compliance and logistics functions in connection therewith and will also comply with all applicable laws, rules and regulations. Customer understands that Company and/or the Equipment are subject to laws and regulations of the United States of America which may require licensing or authorization for and/or prohibit export, re-export or diversion of Company's Equipment to certain countries, and agrees it will not knowingly assist or participate in any such diversion or other violation of applicable United States of America laws and regulations. Customer agrees to hold harmless and indemnify Company for any damages resulting to Customer or Company from a breach of this paragraph by Customer.

18. General. Except as provided below, to the maximum extent provided by law, this Agreement is made and shall be interpreted and enforced in accordance with the laws of the state of New York for Equipment shipped to a US location and the laws of the province to which Equipment is shipped within Canada, without regard to its conflict of law principles, and not including the United Nations Convention on Contracts for the International Sale of Goods. To the extent the Equipment is being used at a site owned and/or operated by any agency of the Federal Government, determination of any substantive issue of law shall be according to the Federal common law of Government contracts as enunciated and applied by Federal judicial bodies and boards of contract appeals of the Federal Government. This Agreement contains all of the agreements, representations and understandings of the parties and supersedes all previous understandings, commitments or agreements, oral or written, related to the subject matter hereof. This Agreement may not be amended, modified or terminated except by a writing signed by the parties hereto. No documents shall be incorporated herein by reference except to the extent Company is a signatory thereon. If any term or condition of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, all other terms and conditions of this Agreement will nevertheless remain in full force and effect as long as the economic or legal substance of the transaction contemplated hereby is not affected in a manner adverse to any party hereto. Customer may not assign, transfer, or convey this Agreement, or any part hereof, or its right, title or interest herein, without the written consent of the Company. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of Customer's permitted successors and assigns. This Agreement may be executed in several counterparts, each of which when executed shall be deemed to be an original, but all together shall constitute but one and the same Agreement. A fully executed facsimile copy hereof or the several counterparts shall suffice as an original.

19. NOTICE: Company is restricted from receiving funds appropriated or otherwise made available under U.S. Public Laws 110-161, 111-8, and 111-117.

20. U.S. Government Work. The following provision applies only to direct sales by Company to the US Government. The Parties acknowledge that Equipment ordered and delivered under this Agreement are Commercial Items as defined under Part 12 of the Federal Acquisition Regulation (FAR). In particular, Company agrees to be bound only by those Federal contracting clauses that apply to "commercial" suppliers and that are contained in FAR 52.212-5(e)(1). **This provision applies only to indirect sales by Company to the US Government.** As a Commercial Item Subcontractor, Company accepts only the following mandatory flow down provisions: 52.219-8; 52.222-26; 52.222-35; 52.222-36; 52.222-39; 52.247-64. If the sale of the Equipment is in connection with a U.S. Government contract, Customer certifies that it has provided and will provide current, accurate, and complete information, representations and certifications to all government officials, including but not limited to the contracting officer and officials of the Small Business Administration, on all matters related to the prime contract, including but not limited to all aspects of its ownership, eligibility, and performance. Anything herein notwithstanding, Company will have no obligations to Customer unless and until Customer provides Company with a true, correct and complete executed copy of the prime contract. Upon request, Customer will provide copies to Company of all requested written communications with any government official related to the prime contract prior to or concurrent with the execution thereof, including but not limited to any communications related to Customer's ownership, eligibility or performance of the prime contract. Customer will obtain written authorization and approval from Company prior to providing any government official any information about Company's performance of the work that is the subject of the Proposal or this Agreement, other than the Proposal or this Agreement.

1-26.130-4(0511)
Supersedes 1-26.130-4(0810)

AUTOMATEDLOGIC
United Technologies

To: Jersey Shore Area School District
175 A&P Drive
Jersey Shore, PA 17740

Date: November 30, 2018

Attn: Mark Wall

Job Name: Jersey Shore SD: Admin RTU Controls

Automated Logic (ALC) respectfully submits the following proposal to remove the existing controls from RTU#2 and install new ALC controls. Please see the scope for a detailed outline of the work.

INCLUDED IN OUR SCOPE OF WORK: OPTION #1

Automated Logic shall:

- Remove the existing controls from RTU#2.
- Furnish and install one (1) new ALC unit controller in the new RTU#2.
- Furnish and install the existing ALC communication trunk to the new unit controller.
- Furnish and install one (1) new supply air temperature sensor and one (1) new return air temperature sensor on the new RTU#2.
- Furnish and install one (1) new current sensor for the supply fan. This new sensor will provide for the enabling and status of the fan.
- Provide all necessary programming labor for this project.
- Provide updated engineered as-built control drawings for this project.
- Provide updated equipment graphics for this project.
- Commission the controls on the new RTU#2 for proper operation.

OPTION #1 PRICING

This project represents an investment of:

Project Price $9,330.00

AUTOMATEDLOGIC
United Technologies

INCLUDED IN OUR SCOPE OF WORK: OPTION #2 (RTU#2 THRU #5)

Automated Logic shall:

- Remove the existing controls from RTU#2 thru #5.
- Furnish and install one (1) new ALC unit controller in the four (4) new RTU's.
- Furnish and install the existing ALC communication trunk to each new unit controller in the new RTU's.
- Furnish and install one (1) new supply air temperature sensor and one (1) new return air temperature sensor on each of the new RTU's.
- Furnish and install one (1) new current sensor for the supply fan in each of the new RTU's. This new sensor will provide for the enabling and status of the fan.
- Provide all necessary programming labor for this project.
- Provide updated engineered as-built control drawings for this project.
- Provide updated equipment graphics for this project.
- Commission the controls on each of the new RTU's for proper operation.

OPTION #2 PRICING

This project represents an investment of:

Project Price $26,560.00

YOUR RESPONSIBILITIES

- Provide ALC with the RTU replacement schedule.
- Provide access to the site and the roof for this project.
- Coordinate with ALC on an project schedule.

NOTES & CLARIFICATIONS

- The proposed price is subject to unmodified acceptance of the attached Terms and Conditions of Sale.

AUTOMATEDLOGIC

- Proposal based on performing work during normal working hours (Monday - Friday, 0700 – 1530); This proposal is valid for a period of thirty (30) days after which time it will be subject to change or withdrawal.
- This proposal does not contain patching; painting; overtime; after hours work; bonds, if required; permits, if required or asbestos removal, if required.
- This proposal does not include PA sales tax.
- Payment schedule is 25% upon order, with final billing upon startup. Terms are Net 10 days.

Do not hesitate to call me at 717.773.7992 with any questions regarding scope or coverage. I thank you for the opportunity to serve you!

Respectfully,

Mark Crow

Mark Crow
Sr. Sales Engineer

Accepted by:

NAME: _____

TITLE: _____

DATE: _____

Automated Logic Pennsylvania
6345 Flank Dr. Suite 100 • Harrisburg, PA 17112 • Phone 717-909-7000 • Fax 717-909-7070
1011 Alcon Street • Pittsburgh • PA 15220 • Phone 412-444-0400 • Fax 412-444-0410
www.automatedlogic.com

AUTOMATEDLOGIC

United Technologies

TERMS AND CONDITIONS OF SALE
AUTOMATED LOGIC CONTRACTING SERVICES, INC.

1. **PAYMENT AND TAXES** – Payment shall be made net 30 days from date of invoice. Automated Logic reserves the right to require cash payment or other alternative method of payment prior to shipment or completion of work if Automated Logic determines, in its sole discretion, that Customer or Customer's assignee's financial condition at any time does not justify continuance of the net 30 days payment term. In addition to the price, the Customer shall pay Automated Logic any taxes or government charges arising from this Agreement. If Customer claims any such taxes do not apply to transactions covered by this Agreement, Customer shall provide Automated Logic with acceptable tax exemption certificates. Payment for service agreements shall be due and payable in advance of services being rendered.

2. **SCOPE OF WORK/EXCLUSIONS** – Repair to building construction, plastering, patching and painting are excluded. Customer agrees to provide Automated Logic with required field utilities (electricity, toilets, drinking water, receiving dock, project hoist, elevator service, etc.) without charge. Automated Logic agrees to keep the job site clean of debris arising out of its own operations. Customer shall not back charge Automated Logic for any costs or expenses without Automated Logic's written consent. Unless specifically noted in the statement of the scope of work or services undertaken by Automated Logic under this Agreement, Automated Logic's obligations under this agreement expressly exclude any work or service of any nature associated or connected with the identification, abatement, clean up, control, removal, or disposal of environment hazards or dangerous substances, to include but not be limited to asbestos or PCBs, discovered in or on the premises. Any language or provision of the Agreement elsewhere contained which may authorize or empower the Customer to change, modify, or alter the scope of work or services to be performed by Automated Logic shall not operate to compel Automated Logic to perform any work relating to Hazards without Automated Logic's express written consent. Services performed at customer's direction outside of the scope of this Agreement will be billed at our scheduled rates.

3. **EXTRAS** – Work and material in addition to or different from that stated herein, and changes in drawings, specifications or time of performance, shall be considered as extras, and shall entitle Automated Logic to an adjustment in the contract price and the delivery schedule.

4. **EMERGENCY SERVICE WORK** – If emergency service is performed at Customer's request and inspection does not reveal any defects for which Automated Logic is liable under this Agreement, Customer shall pay for such work at Automated Logic's prevailing time and material rate.

5. **SHIPMENT/PARTIAL SHIPMENT/RETURNS** – All product shipments shall be F.C.A. shipping point (Incoterms 2010), freight prepaid and allowed to the job site. Shipment dates quoted are approximate. Automated Logic does not guarantee a particular date for shipment or delivery. Automated Logic shall have the right to ship any portion of equipment, goods or other materials included in this Agreement and invoice Customer for such partial shipment. No goods will be accepted for return without prior written authorization. Returned goods may be subject to a restocking charge. Special order and non-stock items cannot be returned.

6. **DELAYS** – Automated Logic shall not be liable for any delay in the performance of the work resulting from or attributed to acts or circumstances beyond Automated Logic's control, including, but not limited to, acts of God or of the public, acts of government, acts of terrorism, fire, floods, epidemics, freight embargoes, unusually severe weather, riots, strikes or labor disputes, conditions of the premises, acts or omissions of the Customer, Owner or other contractors, or delays caused by suppliers or subcontractors ("Force Majeure Event(s)"). In the event Automated Logic is delayed in manufacturing, shipping, delivery or any other performance under this Agreement by a Force Majeure Event and without the fault or negligence of Automated Logic, Automated Logic agrees to notify Customer in writing as soon a practicable of the causes of such delay, and Automated Logic shall further be entitled to an extension of the time equivalent to the duration of any such delay and a reasonable time in which to recover from said delay to resume performance. In the event any materials or equipment to be provided by Automated Logic under this Agreement becomes permanently unavailable as a result of a Force Majeure Event, Automated Logic shall be excused from furnishing said materials or equipment.

7. **WARRANTY** – Automated Logic warrants to Customer that the Work performed by Automated Logic hereunder will comply in all material respects with the attached Scope of Work or Statement of Services and will be free from material defects in workmanship. Automated Logic warrants that all equipment manufactured by Automated Logic Corporation and all Automated Logic equipment, parts or components supplied hereunder will be free from defects in material and workmanship. Automated Logic shall at its option repair or replace, F.C.A. point of sale (Incoterms 2010), any equipment, part or component sold by Automated Logic and determined to be defective within one (1) year from the date Customer has beneficial use. Automated Logic does not warrant products not manufactured by Automated Logic, but it does pass on to Customer any available manufacturer's warranty for such products. Automated Logic warrants that all services provided by Automated Logic hereunder shall be performed in a workmanlike manner. In the event any such service is determined to be defective within ninety (90) days of completion of that service, Automated Logic shall at its option re-perform or issue a credit for such service. Automated Logic's obligations as set forth herein shall be Customer's exclusive remedy. Automated Logic shall not be responsible for labor charges for removal or reinstallation of defective equipment, parts or components, for charges for transportation, handling and shipping, or for repairs or replacement of such equipment, parts or components required as a consequence of faulty installation when not installed by Automated Logic, misapplication, vandalism, abuse, exposure to chemicals, improper servicing, unauthorized alteration or improper operation by persons other than Automated Logic. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

8. **WORKING HOURS** – All services performed under this Agreement, including major repairs, are to be provided during Automated Logic's normal working hours unless otherwise agreed in writing.

9. **CHANGE ORDERS/ADDITIONAL WORK** – Automated Logic will not perform additional work until such time as Automated Logic receives a change order, duly executed by each party, setting forth the scope and an agreed upon price for the additional work, as well as any appropriate adjustments to the delivery schedule. Additional work and/or materials supplied under any change order shall be subject to the terms of this Agreement.

10. **CUSTOMER RESPONSIBILITIES** – Customer shall: provide safe and reasonable access to the job site and equipment being serviced; provide a safe work environment; keep areas adjacent to equipment free of extraneous material, move any stock, fixtures, walls, partitions, ceilings, enclosures or such other property as may be necessary to perform the specified work; promptly notify Automated Logic of any unusual operating conditions; operate any equipment supplied hereunder properly and in accordance with instructions; and identify and label any asbestos containing material that may be present. The Customer will provide, in writing, prior to the start of a job, a signed statement regarding the absence or presence of asbestos for any job where the building or the equipment to be serviced is older than 1981. Should this document state that no asbestos is present, the Customer will also provide in writing the method used to determine the absence of asbestos. If online service via modem is being provided, the Customer shall provide and maintain, at Customer's cost, a voice grade dial-up telephone line or internet connection installed in a mutually agreed upon location.

11. **LIMITATION OF LIABILITY** – Under no circumstances shall Automated Logic be liable for any indirect, incidental, special or consequential damages, including loss of revenue, loss of use of equipment or facilities, loss of data, or economic damages howsoever arising. Automated Logic shall be liable for damage to property, other than equipment provided under this Agreement, and to persons, to the extent that Automated Logic's negligent acts or omissions directly contributed to such injury or property damage. To the extent permitted by law, Automated Logic's aggregate liability for any reason, whether in contract, tort (including negligence) or otherwise, will be limited to the value of the payments received by Automated Logic under this Agreement. The aggregate liability shall not limit the liability of Automated Logic for any injury to, or death of a person, caused by its gross negligence.

12. **CUSTOMER TERMINATION FOR DEFAULT** – Customer shall have the right to terminate this Agreement for Automated Logic's default provided Automated Logic fails to cure such default within thirty (30) days after having been given prior written notice of the default. Upon early termination or expiration of this Agreement, Automated Logic shall have free access to enter Customer locations to disconnect and remove any and all Automated Logic-owned parts, tools and personal property. Additionally, Customer agrees to pay Automated Logic for all incurred but unamortized service costs performed by Automated Logic including overhead and a reasonable profit.

13. **AUTOMATED LOGIC TERMINATION** – Automated Logic reserves the right to discontinue its service or performance under this Agreement any time payments have not been made as agreed or if alterations, additions or repairs are made to equipment during the term of this Agreement by others without prior agreement between Customer and Automated Logic. Should Customer fail to make payment in accordance with the terms of this Agreement and such failure continues without cure for a period of five (5) days following Customer's receipt of written notice of such payment default, Automated Logic may terminate this Agreement without liability.

14. **CLAIMS / ALC EMPLOYEES** – Any lawsuits arising from the performance or nonperformance of this Agreement, whether based upon contract, negligence, strict liability or otherwise, shall be brought within one (1) year from the date the claim arose. The Customer acknowledges that Automated Logic's employees are valuable assets to Automated Logic. During the Term of this Agreement or one hundred eighty (180) days thereafter, if Customer hires an Automated Logic employee who worked at the Customer's facility at any time, the Customer agrees to 1) pay Automated Logic an amount equal to twelve (12) months' salary for such employee, and 2) reimburse Automated Logic for all costs associated with any training Automated Logic provided to such employee.

15. **GOVERNMENT PROCUREMENTS –**

(a) **COMMERCIAL ITEMS** – The components, equipment and services provided by Automated Logic under this Agreement are "commercial items" as defined in Section 2.101 of the Federal Acquisition Regulations ("FAR"), and the prices of such components, equipment and services are based on Automated Logic's commercial pricing policies and practices (which do not consider any special requirements of U.S. Government cost principles, FAR Part 31, or any similar procurement regulations). As such, Automated Logic will not agree to provide or certify cost or pricing data, nor will Automated Logic agree to comply with the Cost Accounting Standards (CAS). In addition, no federal government procurement regulations, such as FARs or DFARs, shall apply to this Agreement except those regulations expressly accepted in writing by Automated Logic.

(b) **WHERE AUTOMATED LOGIC IS SUBCONTRACTOR** – Where Automated Logic is subcontractor, Automated Logic is agreeing to perform a private subcontract for the sale of a commercial item on a fixed-price basis to Customer (a private entity) and as such there shall be no Federal Acquisition Regulations (FARs), DFARS, CFRs, or any other federal government procurement regulations of any kind which apply to this Agreement, except those regulations expressly accepted in writing by Automated Logic. In addition, Automated Logic will not agree to provide or certify cost or pricing data nor will Automated Logic agree to comply with the Cost Accounting Standards (CAS). Automated Logic refers to FAR 52.244-6, "Subcontracts for Commercial Items and Commercial Components."

16. **HAZARDOUS MATERIALS** – If Automated Logic encounters any asbestos or other hazardous material while performing this Agreement, Automated Logic may suspend its work and remove its employees from the project, until such material and any hazards associated with it are abated. The time for Automated Logic's performance shall be extended accordingly, and Automated Logic shall be compensated for the delay.

17. **OCCUPATIONAL SAFETY AND HEALTH** – Automated Logic and Customer agree to notify each other immediately upon becoming aware of an inspection under, or any alleged violation of, the Occupational Safety and Health Act ("OSHA") relating in any way to the performance of work under this Agreement, the project or the job site.

18. **ENTIRE AGREEMENT, ASSIGNMENT and MODIFICATION** - This Agreement contains the complete and exclusive statement of the agreement between Automated Logic and Customer and supersedes all previous or contemporaneous, oral or written, statements. Customer may assign this Agreement only with Automated Logic's prior written consent. No change, modification, amendment or waiver of any of the terms or conditions of this Agreement shall be binding upon the parties unless made in writing and duly executed by both parties hereto.

19. **CUSTOMER CONSENT** - Customer consents and agrees that Automated Logic may, from time to time, publicize Automated Logic related projects with Customer, including the value of such projects, in all forms and media for advertising, trade, and any other lawful purposes.

20. **FOR WORK BEING PERFORMED IN CALIFORNIA** - Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

21. **INTELLECTUAL PROPERTY** – Notwithstanding anything to the contrary stated herein, Automated Logic retains ownership of its intellectual property and no license to Automated Logic's intellectual property is granted except as necessary for Customer to use any deliverables and/or services provided hereunder.

July 2017

Spencer Mechanical, Inc.
3007 Lycoming Creek Road
Williamsport, Pa. 17701
P (570) 494-2077 F (570) 494-2000

Bid Quote

Date: 1/31/19

Project: Jersey Shore Area School District
175 A&P Drive
Jersey Shore, PA 17740

Attn: Mark Wall
Cell (570) 279-2241

Scope: HVAC

- Install owner supplied new Trane RTU-2 and curb adapter in location of existing RTU includes demolition of existing unit.
- Existing gas piping to be connected to new RTU as needed.
- Power wiring from existing system to new RTU.

- **Scope by other**
- Permits/fees
- Temporary utilities
- Roof Top Unit & Curb
- Delivery and Handling
- Crane
- All Controls

HVAC price $ 5,930.00
Price good for thirty days.

Thank you.

Robert E. Spencer Jr.

Jersey Shore Area School District

SCHOOL CALENDAR

2018-2019

Approved 2-26-18
Revision Approved 10-8-18
Revision Approved 11-27-18
Revision Approved 1-28-19
Revision for Approval 2-11-19

AUGUST

M	T	W	T	F
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	31

August 15-16: Teacher induction
August 20-22: In-service
(0-3)

SEPTEMBER

M	T	W	T	F
3	4	5	6	7
10	11	12	13	14
17	18	19	20	21
24	25	26	27	28

September 5: In-service
September 6: First student day
(17-1) / (17-4)

OCTOBER

M	T	W	T	F
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30	31		

October 8: In-Service
(22-1) / (39-5)

NOVEMBER

M	T	W	T	F
			1	2
5	6	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30

November 8: End marking period 1
November 9: 2-hour early dismissal
November 16: Snow Day
November 19-20: Act 80 days/conferences
11/19 12:30-8:00 pm Parent conferences
11/20: 7:45 am-3:15 pm Parent conferences
November 21-26: Schools closed
(17-0) / (56-5)

DECEMBER

M	T	W	T	F
3	4	5	6	7
10	11	12	13	14
17	18	19	20	21
24	25	26	27	28
31				

December 21: 2-hour early Dismissal (staff and students)
December 24-31: Schools closed
(15-0) / (71-5)

JANUARY

M	T	W	T	F
	1	2	3	4
7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	

January 1-2: Schools closed
January 7-18: Keystone Testing, Wave 2
January 23: Snow Day
January 29: Snow Day
January 31: Cold Weather Day
(18-0)/ (89-5)

FEBRUARY

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	

February 1: End marking period 2
February 1: 2-hour early dismissal
February 8: Report cards distributed
February 18: Schools closed
(19-0) / (108-5)

MARCH

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	29

(21-0) / (129-5)

APRIL

M	T	W	T	F
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30			

April 8: End marking period 3
April 12: 2-hour early dismissal
April 18: Report cards distributed
April 15-26: PSSA Testing, Grades 3-8 English/Language Arts
April 19: Schools closed
April 29-30: PSSA Testing, Grades 3-8 Mathematics
(21-0) / (150-5)

MAY

M	T	W	T	F
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	31

April-May: PSSA Make-ups
May 1-3: PSSA Testing, Grades 3-8 Mathematics
May 13-23: Keystone Testing
Algebra I, Biology, Literature
May 24: Act 80 day/senior projects
Keystone exam makeups
May 27: Schools closed
(22-0) / (172-5)

JUNE

M	T	W	T	F
3	4	5	6	7
10	11	12	13	14
17	18	19	20	21

June 11: Last student day
2-hour early dismissal
June 8: Graduation
June 12: Act 80 day
June 13-14: In-service
(8-2) / (180-7)

- teacher induction
- first student day
- in-service day/no school for students
- schools closed
- Act 80 day/no school for students
- 2-hour early dismissal
- end of marking period
- report cards distributed

Weather Make-up Days:

1st make-up	January 21, 2018
2nd make-up	April 22, 2018
3rd make-up	June 10, 2018

All other weather make-up days will be added to the end of the calendar.

Jersey Shore Area School District
SCHOOL CALENDAR
2019-2020

1/24/2019 PROPOSED

AUGUST

M	T	W	T	F
			1	2
5	6	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30

August 13-14: Teacher induction
August 19-22: In-service
August 26: First student day
(5-4)

SEPTEMBER

M	T	W	T	F
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30				

September 2: Schools closed
(20-0) / (25-4)

OCTOBER

M	T	W	T	F
	1	2	3	4
7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	

October 14: Act 80 day
October 28: End marking period 1
(23-0) / (48-4)

NOVEMBER

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	29

November 1: 2-hour early dismissal
November 8: Report cards distributed
November 25-26: Act 80 days/conferences
11/25: 12:30 pm-8:00 pm Parent conferences
11/26: 7:45 am-3:15 pm Parent conferences
November 27-29: Schools closed
(18-0) / (66-4)

DECEMBER

M	T	W	T	F
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30	31			

December 2: Schools closed
December 20: 2-hour early Dismissal (staff and students)
December 23-31: Schools closed
(14-0) / (80-4)

JANUARY

M	T	W	T	F
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	31

January 1-2: Schools closed
January 3: In-service
January 6-17: Keystone Testing, Wave 2
January 17: End marking period 2
January 20: Act 80 day
January 24: 2-hour early dismissal
January 31: Report cards distributed
(20-1) / (100-5)

FEBRUARY

M	T	W	T	F
3	4	5	6	7
10	11	12	13	14
17	18	19	20	21
24	25	26	27	28

February 14-17: Schools closed
(18-0) / (118-5)

MARCH

M	T	W	T	F
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30	31			

March 24: End marking period 3
March 27: 2-hour early dismissal
(22-0) / (140-5)

APRIL

M	T	W	T	F
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	

April 3: Report cards distributed
April 10-13: Schools closed
April 20-24: PSSA Testing, Grades 3-8 English/Language Arts
April 27-30: PSSA Testing, Grades 3-8 Mathematics & Science
(20-0) / (160-5)

MAY

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	29

April-May: PSSA Make-ups
May 1-8: PSSA Testing, Grades 3-8 Mathematics & Science
May 11-21: Keystone Testing Algebra I, Biology, Literature
May 22: Act 80 day/senior projects Keystone exam makeups
May 25: Schools closed
May 29: Last student day 2-hour early dismissal
(20-0) / (180-5)

JUNE

M	T	W	T	F
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30			

June 1-2: In-service
June 6: Graduation
(0-2) / (180-7)

- teacher induction
- first student day
- in-service day/no school for students
- schools closed
- Act 80 day/no school for students
- 2-hour early dismissal
- end of marking period
- report cards distributed

Weather Make-up Days:
February 14: 1st make-up
April 13: 2nd make-up

All other weather make-up days will be added to the end of the calendar.