OSWAYO VALLEY

HIGH SCHOOL

2026-27
Course Directory

“Home of the Green Wave”

ACADEMICS

Planning a program of study for successful completion of graduation requirements should involve careful consideration by the student and parents and should be made on the basis of a student's interest, abilities, and career goals. Students should work closely with the guidance department, school administration and parents to select course. Prior successes, failures, special individual interests, aptitude and future career plans should be considered when choosing courses. When available, students enroll in courses via the Student/Parent Portals.

Some instructional areas such as art, music, family and consumer sciences, and technical education require the use of materials which are to be purchased by the student.

Graduation Requirements

To graduate from Oswayo Valley Jr./Sr. High School, a student must successfully complete the requirements of their individualized educational program and/or the following:

A. CREDIT REQUIREMENTS

1. A high school diploma will be presented to students meeting the following (minimum) course credit requirements:
    - English: 4 credits (to include grade level ELA)
    - Social Studies: 3 credits (to include US History, Government & Economics, and World History)
    - Math: 3 credits (to include Algebra and Personal Finance)
    - Science: 3 credits (to include Chemistry and Biology)
    - Physical Education/Health: 2 credits
    - Electives: 9 credits
    - Total: Equal or exceed 24 credits

2. Non-credit course requirements
    - Careers – In fulfillment of Pennsylvania Career Readiness Standards students must complete a non-credit, career portfolio. Teachers will incorporate career-oriented activities into the regular curriculum. Beginning with their Freshman year, students will archive artifacts from stand-alone tasks that satisfy the four reporting categories of the state standards: #1 Career Readiness and Preparation; #2 Career Acquisition; #3 Career Retention and Advancement; and #4 Entrepreneurship. A faculty/staff mentor will guide students through the online course, culminating in successful submissions by the end of the Junior year.

    - Work-Based Learning Experience (WBLE) - WBLE "provides an opportunity for students to reinforce their classroom learning, explore future career fields, and demonstrate their skills in a real-world setting" (PA Dept of Ed). By the end of their Senior year, students must complete and document one of the following WBLE: Job Shadowing; Internships or Practicums; Cooperative Education Programs; Career Mentoring; Apprenticeship. Specific information and guidelines for these will be provided to the student.

3. Once students make their course requests for the upcoming school year, they may access them via the Student Portal during the summer. Requests for changes will be considered prior to the start of the school year based on the availability in the master schedule. Once the add/drop window closes, student schedules will be final.

4. Dual Enrollment courses enable a student to earn both high school and college credit for work completed at Oswayo Valley. Tuition will be assessed and must be paid to the college prior to starting the college portion of the class.

B. STATE "PATHWAYS" TO GRADUATION – In accordance with Pennsylvania Department of Education guidelines, students must complete one of the following "pathways' for graduation:
   1. **Keystone Proficiency**. Score 'Proficient' or 'Advanced" on Keystone Exams (Algebra, Biology, Literature)
   2. **Keystone Composite.** Earn a satisfactory composite score (2939) on two of the Keystone Exams (neither of which may be Below Basic and at least one of which must be Proficient or better)
   3. **Alternate Assessment Pathway**. Successful completion of an Oswayo Valley High School Keystone course (Algebra, Biology, Literature) on which the student did not achieve proficiency and one of the following:
      a. Attainment of an established score on an approved alternate assessment (SAT, PSAT, ACT, ASVAB)
      b. Attainment of an established score on an Advance Placement Program in an academic content area associated with each Keystone Exam on which a student did not achieve at least a proficient score
      c. Successful completion of a concurrent enrollment course in an academic content area associated with each Keystone Exam in which the student did not achieve at least a proficient score
      d. Successful completion of a pre-apprenticeship program or acceptance into an accredited 4-year nonprofit institution of higher education and the evidence of the ability to enroll in college-level coursework
   4. **Evidence Based Pathway.** Successful completion of an Oswayo Valley High School Keystone course (Algebra, Biology, Literature) on which the student did not achieve proficiency and demonstration of three pieces of evidence consistent with the student's goals an career plans, including:
      a. One of the following: Attainment of an established score on an SAT subject test or Advanced Placement Program Exam; Acceptance to an accredited nonprofit institution of higher education other than a 4-year institution: Attainment of an industry-recognized credential; Successful completion of concurrent enrollment or postsecondary course.
      b. Two additional pieces of evidence, including one or more of the options listed above; satisfactory completion of a service-learning project; attainment of a score of proficient or advanced on a Keystone Exam; a letter guaranteeing full-time employment; a certificate of successful completion of an internship or cooperative education program; or satisfactory compliance with the NCAA's core courses for college-bound student athletes with a minimum GPA of 2.0.
   5. **CTE Pathway**. For Career and Technical Education (CTE) students, successful completion of Oswayo Valley High School Keystone course (Algebra, Biology, Literature) on which the student did not achieve proficiency and attainment of an industry-based competency certification related to the CTE student's program of study or demonstration of a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study.

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DEPARTMENT: Language Arts

Course Name: **ELA 9** Course #: **1911**

Credits: **1.0** Grade(s): ☒**09** ☐**10** ☐**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): ELA 8

Course Description: "English 9" follows Grades 9/10 ELA PA Core Standards for Reading Informational Texts (1.2) and Literary Texts, including poetry and drama (1.3); Writing Informational, Persuasive, and Argumentative modes (1.4); and Speaking and Listening (1.5). Building on 8th grade work, the writing strand of the course begins with review of language basics: parts of speech and sentence structure (1.4 E, F, K, L, Q, R). Students progress to a review of paragraph writing with clear topic sentences, including the skill of composing evidence-based constructed responses to open-ended questions (1.4 S). Next are short essays, both response- and research-based (1.4 A – D, G- J, M-P, U - W). Students use a revision-based writing process throughout the year (1.4 T, X). The reading strand involves learning and using literary terminology for analysis of key ideas/details (1.2/1.3 A – C) and craft/structure (1.2/1.3 D – F). Students analyze both informational and literary texts for argument, theme, idea development and sources, and genre and period (1.2 G-I; 1.3 G, H). Students will use strategies for comprehension and for vocabulary acquisition (1.2 I – K, 1.3 I, J) and will read a spectrum of informational and literary texts independently (1.2/1.3 K, L). In addition, students are expected to participate in class discussion using appropriate Standard English (1.5 A, E, G), listen analytically to presentations (1.5 B, C) and make at least one research-based presentation 1.5 D, E).

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Prentice Hall Literature Gold Level

Course Name: **ELA 10** Course #: **1011**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☐**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): English 9

Course Description: Sophomore English Language Arts builds upon the 9th grade year. Throughout the 10th grade ELA course, students continue to focus on organizing and transitioning their essays. Furthermore, writing and grammar are included within the literature in order to enable students to approach them in a realistic manner. Within the literature units, students explore similar themes, relate ideas presented in the classroom to the real world, complete various projects, and perform several writing types, including narrative, informative, and persuasive. Literature, including the genres of short story, poetry, drama, novel, and nonfiction, are used as background for the written and oral portions of the course. In addition to the essay writing and the literature units, students also are required to complete a thesis paper, as part of the class requirements. Proper grammar, spelling and punctuation will be emphasized in all activities.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Prentice Hall Literature

Course Name: **Practical English** Course #: **1111**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): English 10

Course Description: Practical English is a possible 2-year offering that builds upon the 10th grade year. Throughout the 2-year course, students continue to focus on building strong writing skills as they explore American Literature. Understanding American history and the culture, which created the literature gives students a better understanding of how literature reflects the values of society. Within the literature units, students will explore American documents and apply the concepts covered to modern day applications and universal themes. Literature, including the genres of short story, poetry, drama, novel, and nonfiction, are used as platforms for the written and oral portions of the course. In addition to the essay writing and the literature units, students also are required to complete a research paper, as part of the class requirements. Proper grammar, spelling and punctuation will be emphasized in all activities.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Prentice Hall Literature: Timeless Voices, Timeless Themes (The American Experience)

Course Name: **College English Composition (DE)** Course #: **1221**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☒**Yes** ☐**No** If "Yes", Which College/University? **Pitt-Bradford**

Prerequisite(s): English 10 and at least a "B" cumulative average in English(grades 9-10)

Course Description: This college-level class focuses on improving student writing through research, analysis, grammar, and argument. Throughout this course, students will be required to write essays, peer edit, revise submitted work, and connect ideas to real-world applications. Grammar, punctuation, current event presentations, and paragraph submissions will be required on a weekly basis in order to build quality writing. In addition to these requirements, students will read a classic novel and write a literary response paper, incorporating quoted evidence to connect its universal theme to current social or political issues. There is a cost to take the class in order to earn college credit. Currently the cost is $125, but is subject to change.

Frequency of Course Offering: This course is offeredevery other school year. Course will be offered 26-27

Textbook(s) Used: _____

Course Name: **College English Literature (DE)** Course #: **1222**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☒**Yes** ☐**No** If "Yes", Which College/University? **Pitt-Bradford**

Prerequisite(s): English 10 and at least a "B" cumulative average in English (grades 9-10)

Course Description: Throughout the second half of the year, students will focus on literature in order to build a better understanding of characterization, plot structure, poetry, suspense techniques, and figurative language. A combination of essays, short stories and poems will provide students the opportunity to compare themes across genres. Writing assignments, graded discussions, memorization, dramatic monologues, and extemporaneous speeches will enable students to build better communication and analytical skills. There is a cost to take the class in order to earn college credit. Currently the cost is $125, but is subject to change.

Frequency of Course Offering: This course is offeredevery other school year. Course will be offered 27-28

Textbook(s) Used: _____

Course Name: **Public Speaking and Journalism** Course #: **TBD**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): English 10

Course Description: students will develop key communication skills essential for effective expression and information dissemination. They will learn the art of crafting and delivering compelling speeches, focusing on elements such as organization, clarity, and persuasion. The course will also delve into the principles of journalism, teaching students how to research, write, and edit news articles with accuracy and integrity. Students will explore different media formats, including print, digital, and broadcast journalism, and understand the ethical responsibilities of journalists. Through practical exercises and projects, students will enhance their confidence in public speaking, hone their writing skills, and gain a comprehensive understanding of the role of media in society.

Frequency of Course Offering: Course will be offered every year

Textbook(s) Used: None

DEPARTMENT: Foreign Language

Online Offerings:

Course Name: **French I** Course #: **3921**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: These courses are based on a researched scope and sequence that covers the essential concepts of French. Class discussions provide an opportunity for discourse on specific topics in French. A key support tool is the Audio Recording Tool that enables students to learn a critical skill for French: listening and speaking. Beginning with learning personal greetings and continuing through practical communications exchanges, French 1B introduces students to the skills necessary to make the most of traveling to French-speaking countries. (Edmentum Online)

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Edmentum Online

Course Name: **French II** Course #: **3922**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): French I

Course Description: Each of these semesters is designed to build on the principles mastered in French 1 and use a combination of online curriculum, electronic learning activities, and supporting interactive activities to fully engage learners. Unit pretests, post-tests, and end-of-semester tests identify strengths and weaknesses, helping to create a more personalized and effective learning experience. As with French 1, these 90-day courses emphasize practical communication skills while also building intercultural awareness and sensitivity. (Edmentum Online)

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Edmentum Online

Course Name: **German I** Course #: **3931**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: As with all Edmentum world language courses, German 1 A and B address two primary issues: providing a meaningful context that encourages learners to think in the target language as much as possible; and introducing grammatical concepts without over reliance on grammatical analysis. German 1A focuses on communicating basic and practical greetings and personal information. German 1B consists of five units over about 14 weeks, with an emphasis on a variety of practice types throughout the course. (Edmentum Online)

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Edmentum Online

Course Name: **German II** Course #: **3932**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): German I

Course Description: According to The Economist and the Census Bureau, German-American is America's largest single ethnic group, with over 46 million Americans claiming German Ancestry. German 2 A and B tap into learners' latent interest in their cultural past, present, and future. These courses employ direct instruction approaches, including application of the target language through activities. Each unit in the course includes a predefined discussion topic. These discussions provide an opportunity for discourse on specific topics in German. (Edmentum Online)

Frequency of Course Offering: This course is offeredevery school year.

Course Name: **Spanish I** Course #: **3911**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): German I

Course Description: Learning a new language is a multi-faceted experience in which you are introduced to a whole new set of words and ways of expressing yourself with words, along with new cultures formed by people who have been speaking that language for centuries. The Spanish-speaking world is vast and rich, spanning Spain in the Iberian Peninsula and many parts of North, Central, and South America, all with varied ethnic and political histories and cultures. In Spanish 1A, students will be introduced to several common situations in which people communicate, such as exchanging names and greetings, describing people by physical and personality traits, and describing family members and aspects of social life. Students will start with basic sentence structures and grammatical tools, and they will learn to communicate by listening, speaking, reading, and writing in Spanish as they learn new vocabulary and grammar. They will also learn about some regions of the Spanish-speaking world that the central characters of each unit are visiting. In Spanish 1B, students will be introduced to several common situations in which people describe how to earn, save, and manage money, modes of urban transportation, various seasons and the associated weather conditions, food, clothes, and activities. (Edmentum Online)

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Edmentum Online

Course Name: **Spanish II** Course #: **3912**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): German I

Course Description: Spanish 2A and B utilize three assessment tools that are designed specifically to address communication using the target language: Lesson Activities, Unit Activities, and Discussions. These tools help ensure language and concept mastery as students grow in their understanding and use of Spanish. Learning games specifically designed for language learning are used and can be accessed on a wide variety of devices. (Edmentum Online)

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Edmentum Online

DEPARTMENT: Mathematics

Course Name: **Pre-Algebra** Course #: **2911**

Credits: **1.0** Grade(s): ☒**09** ☐**10** ☐**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): 8th Grade Math or Teacher recommendation

Course Description: The Pre-Algebra class is designed to enhance the student's knowledge of mathematics as developed in Eighth Grade Math and to prepare the students for the math concepts and topics that will be taught in Algebra I. Topics covered will include expressions, equations and functions; order of operations; properties; operations with rational numbers; ratios and proportions; polynomials; factoring; graphing functions; solving and graphing linear equations; inequalities; probability and statistics; and box-and-whisker plots.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Algebra 1 –McDougall Littel

Course Name: **Algebra I** Course #: **2900**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☐**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): For student entering grade 10: Pre-Algebra. For student entering grade 9: Student must meet three of the four prerequisite criteria; 1.) Pro/Adv on 8th grade ELA PSSA 2.) Pro/Adv on 8th grade Math PSSA 3.) Earn a yearly average of 90% or higher in Math 8 4.) Teacher recommendation.

Course Description: The Algebra 1 class is designed to enhance the student's knowledge of mathematics as developed in Eighth Grade Math and/or Pre-Algebra to prepare the students for the math concepts that are tested on the Algebra 1 Keystone Exam. Topics covered will include operations with real numbers and expressions, linear equations and inequalities, functions and coordinate geometry, and data analysis.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Algebra 1 –A.C.E. - Houghton, Mifflin, Horcourt

Course Name: **Geometry** Course #: **2042**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Algebra 1 completion

Course Description: This course is designed to introduce students to inductive and deductive reasoning and logic. Additional topics to be covered include basic geometric concepts and constructions, problem solving, analytic geometry, algebra, trigonometry, circles and three dimensional figures.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Geometry – McDougal Littell

Course Name: **Algebra II (DE)** Course #: **2122**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☒**Yes** ☐**No** If "Yes", Which College/University? **Pitt-Bradford**

Prerequisite(s): 10 grade entry only upon teacher recommendation.

Course Description: The topics covered in college Algebra II are functions - linear, radical, quadratic, exponential, and logarithmic-and their graphs, rational expressions, linear and compound inequalities, rational exponents, solving systems of linear equations, and solving quadratic equations. There is a cost to take the class in order to earn college credit. Currently the cost is $125, but is subject to change.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: _____

Course Name: **Pre-Calculus (DE)** Course #: **2211**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☒**Yes** ☒**No** If "Yes", Which College/University? **Pitt-Bradford**

Prerequisite(s): Algebra II with teacher recommendation.

Course Description: This course is designed to develop the skills needed to succeed in a college level mathematics course. The material is presented analytically, graphically, and algebraically. The use of graphing calculators is used to visualize and explore various topics covered. Topics covered include functions and their inversed, applications of exponential and logarithmic functions, and trigonometry, including trigonometric graphs, identities, and equations. Sequence, series, and limits are introduced. This college course is worth 4 college credits. The college description is: the topics include intermediate algebra, functions and graphs, polynomial funtions, rathional functions, inverse functions, logarithmic and exponential functions, and trigonometry. Currently the cost is $125, but is subject to change. Student does not have to take Pre-Calc for college credit.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Pre-Calculus with Limits

Course Name: **Calculus (DE)** Course #: **2213**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☐**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☒**Yes** ☐**No** If "Yes", Which College/University? **Pitt-Bradford**

Prerequisite(s): Teacher recommendation

Course Description: We will study limits, continuity, the derivative and integral of functions of a single variable and their applications. It is recommended that each student have their own scientific calculator. There is a cost to take the class in order to earn college credit. Currently the cost is $125, but is subject to change. Student does not have to take Calculus for college credit.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: University of Pittsburgh at Bradford Calculus Textbook

Course Name: **Personal Finance** Course #: **2111**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☐**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Algebra 1 or teacher recommendation.

Course Description: Students will gain essential skills for managing their personal financial affairs. They will learn the fundamentals of budgeting, saving, and investing, as well as how to understand and manage credit, loans, and debt. The course will cover topics such as the importance of setting financial goals, the principles of responsible spending, and strategies for building wealth over time. Additionally, students will explore the impact of taxes, insurance, and retirement planning on their financial future. By the end of the course, students will be equipped with the knowledge and tools necessary to make informed financial decisions and establish a solid foundation for their financial well-being..

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Math Matters 2

Course Name: **Statistics (DE)** Course #: **2220**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☒**Yes** ☐**No** If "Yes", Which College/University? **Pitt-Bradford**

Prerequisite(s): Algebra 2 or currently taking Algebra 2 as well as Teacher recommendation

Course Description: Statistics is a course that will prepare students to take a college level statistics class. This is a math elective, but seniors may take this class for their senior math credit. Topics covered in this class will be: Frequency distributions, Measures of Variation, Probability, Discrete Probability Distribution, Normal Probablility Distributions, Confidence Intervals, Hypothesis Testing, and Correlation and Regression. This course is worth 4 college credits. The college description is: This is an introductory statistics course and covers methods of summarizing data, descriptive statistics, probability and probability distributions, sampling distributions, the central limit theorem, hypothesis testing, analysis of variance, and regression analysis. Mathematical derivations and formulas are stressed. Currently the cost is $125, but is subject to change. Student does not have to take Statistics for college credit.

Frequency of Course Offering: This course is offeredevery other school year. **This course offered 27-28.**

Textbook(s) Used: Elementary Statistics, Picturing the World

Course Name: **Trigonometry** Course #: **2002**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Algebra 2 or currently taking Algebra 2 as well as Teacher recommendation

Course Description: Trigonometry is a course that will prepare students for success in higher-level mathematics classes in high school and college. This is a math elective, but seniors may take this class for their senior math credit. It will also help them to better understand certain topics in physics. The topics covered in this class will include: Right Triangle Trigonometry, Law of Sines, Law of Cosines, Graphing Trigonometric Functions, Polar Coordinates, and Applications.

Frequency of Course Offering: This course is offeredevery other school year. **This course offered 26-27**

Textbook(s) Used:

DEPARTMENT: Science

Course Name: **Chemistry** Course #: **4172**

Credits: **1.0** Grade(s): ☒**09** ☐**10** ☐**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s):

Course Description: This course studies the composition, structure, and properties of matter and the changes it undergoes. Topics studied include mixtures, atomic theory, behavior of electrons, periodic trends, the mole, chemical bonding, chemical reactions, and gases. Classroom material is supplemented with laboratory experiments.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Pearson Chemistry (Foundation Edition), Pearson, 2012

Course Name: **Biology I** Course #: **4911**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☐**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Students must meet three of the four below criteria: 1. Pro/Adv on 8th grade PSSA Science exam, 2. Pro/Adv on 8th grade PSSA ELA exam, 3. 80% or higher in 9th grade Chemistry, 4. Teacher Recommendation

Course Description: A sophomore introductory biology course which covers the common ten units of study for the Pennsylvania Keystone Standards. The curriculum includes units in basic biological principles, biochemistry, bio-energetics, homeostasis and transport, DNA, RNA, and protein synthesis, cell growth and reproduction, patterns of inheritance, bio-technologies, evolution, and ecology.

**This course results in the administration of the Keystone Biology Exam in the Spring. This exam is a graduation requirement.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Modern Biology: Holt 2005

Course Name: **Physics** Course #: **4212**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Biology and Algebra II

Course Description: Physics is the study of matter and energy and how they interact. Topics explored will include: Linear Motion, Circular Motion, Forces, Simple Machines, Heat, Waves, Sound, Light, and Electricity and Magnetism. The text material will be supplemented with laboratory experiments.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Foundations of Physics. CPO Science, 2004

Course Name: **Biology II** Course #: **4211**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Biology I and Chemistry

Course Description: The biology sequence covers basic botany, bacteriology, virology, mycology, protists, and organ system anatomy and physiology

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Modern Biology: Holt 2005

Course Name: **Concepts of Biology (DE)** Course #: **4213**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☒**Yes** ☐**No** If "Yes", Which College/University? **Pitt-Bradford**

Prerequisite(s): Biology I, Chemistry, and Teacher recommendation

Course Description: This is an optional 3 credit college level lecture (Lab is not included) course for non-science major offered as a dual enrollment course through the University of Pittsburgh. Seniors may earn the option of taking this course by obtaining teacher approval and maintaining a "B" or better average in the prerequisite courses. The course is a survey of biological concepts providing students with a good understanding of how biology relates to everyday life. There is a cost to take the class in order to earn college credit. Currently the cost is $125, but is subject to change.

Frequency of Course Offering: This course is offeredevery other school year. **This course not offered 26-27 due to staff.**

Textbook(s) Used: Cambell, Neil A., Reece, Jane B. and Simon, Eric J. (2004). Essential Biology, 4/e, San Francisco: Pearson/Benjamin Cummings. And Current Issues in Biology, Vol. 2, Scientific American.

Course Name: **Anatomy and Physiology** Course #: **4001**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s):

Course Description: This course is the first of two human anatomy and physiology courses. This first course is designed for students who have had little or no previous study of the body or the physical and chemical principles on which body structure and function is based. In this course, students are introduced to basic chemistry and physics, cytology, and histology, and the following organ systems are covered: integumentary, skeletal, muscular, cardiovascular, immune, and respiratory. The accompanying laboratory deals with basic terminology, microscopy, animal dissection, organ dissection, and experimentation.

Frequency of Course Offering: This course is offeredevery other school year. **This course offered 26-27**

Textbook(s) Used:

Course Name: **Environmental Science** Course #: **4011**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s):

Course Description: The goal of the Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the inter-relationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems and to examine alternative solutions for resolving and/or preventing them. Environmental Science is interdisciplinary; it embraces a wide variety of topics from different areas of study. **Special note: This course may also be offered as .50 credit. The decision to offer as a 1.0 credit or .50 credit course will be based upon availability. This course may also be offered in conjunction with Keystone Biology if offered as .50 credit.**

Frequency of Course Offering: This course is offered every other school year. **This course offered *27-28***

Textbook(s) Used: Environmental Science: Holt 2004

DEPARTMENT: Social Studies

Course Name: **US History (Civil War-Present)** Course #: **6911**

Credits: **1.0** Grade(s): ☒**09** ☐**10** ☐**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This course covers the history the United States from the Civil War to the present. It addresses the student's ability to analyze and develop the skills of chronological thinking, comprehension, interpretation, and research. The student will study the political and cultural contributions of individuals and groups, how continuity and change have influenced history, primary documents, material artifacts and historical places, and conflict and cooperation among social groups and organizations as seen through US History.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: US History-Civil War to the Present (Holt McDougal)

Course Name: **Government & Economics** Course #: **6121**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This course introduces students to the related Social Studies disciplines of Economics and Political Science. The Economics component provides the students the opportunity to examine different types of economic systems, to analyze the forces affecting markets and the functions of governmental actions in the economy, to determine how people choose to use scarce, limited resources, to connect and relate economic decisions both domestic and foreign, and to assign consequences to economic decisions. The Government portion of the course provides opportunities for the student to know and understand the principles and documents of government (both domestic and foreign), the rights and responsibilities of citizenship, how government works, and how international relations function. The content is designed to be historical as it traces the development of government, comparative as it identifies similarities and differences between governments, practical as it connects academic facts with real life situations, and evaluative as it requires students to analyze and interpret information. At the end of this course students take a civics test in fulfillment of PA Act 35 requirements.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: World History and Geography (McGraw-Hill)

Course Name: **World History** Course #: **6011**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This course covers the history of the world. It addresses the student's ability to analyze and develop historical skills of chronological thinking, comprehension, interpretation and research. The student will study the political and cultural contributions of individuals and groups, how continuity and change have influenced history, primary documents, material artifacts and historical places, and conflict and cooperation among social groups and organizations as seen through the history of the world.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: World History and Geography (McGraw-Hill)

Course Name: **Recent and Contemporary America** Course #: **6040**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: Recent and Contemporary America covers United States History since 1945. It begins with an overview of the World War Era and brings the student as close to the present as possible. It utilizes thematic history (e.g. "The Cold War", "The Civil Rights Movement", ect). Throughout the course the student will be given the opportunity to examine primary documents, material artifacts, and historical places, to study the political and cultural contributions of individuals and groups, to analyze how continuity and change have influenced history, and to interpret conflict and cooperation among social groups and organizations. Current events hold a central role in the course.

Frequency of Course Offering: This course is offered every other year. **This course is offered in 26-27**

Textbook(s) Used: United States History; Preparing for the Advanced Placement Examination

Course Name: **Psychology/Sociology** Course #: **6030**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s):

Course Description: This course spends one semester emphasizing man's understanding of himself (Psychology) and one semester emphasizing man's understanding of his relations with others (Sociology). Designed primarily as an introductory course, it serves as a primer for college prep students. A basic knowledge of how and why man does what he does enhances his interpersonal relationships. The course touches basic principles while at the same time offers more in-depth study as students initiate content on both individual and collective interest.

Frequency of Course Offering: This course is offeredevery other school year. **This course is not offered in 26-27**

Textbook(s) Used: Sociology and You (Glencoe); no Psychology text

Course Name: **History on Film** Course #: **6050**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: History on Film utilizes multi-media interpretations and portrayals of historical events. As technology advances, information—both in content and presentation—likewise expands. Historical topics have been a central theme on film; this course aims to optimize the educational value of "entertainment" vehicles as the student analyzes differences in content and style between films, puts film topics in historical perspective, researches content of films to contrast the accuracies with artistic license, and develops an appreciation for history.

Frequency of Course Offering: This course is offered every other year. **This course is not offered in 26-27**

Textbook(s) Used: None

DEPARTMENT: Business and STEM

Course Name: **Accounting I** Course #: **5121**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This course introduces the basic principles of double-entry bookkeeping. It covers the analysis and recording of business transactions. It prepares one to keep formal books of entry such as journals and ledgers, and to prepare simple financial statements. The student will complete the accounting cycle, learn to write checks and receipts, reconcile bank statements and keep simple payroll records. Students will be required to do accurate and timely assignments to prepare them for real-world Accounting Applications. Students get a hands-on experience through a simulation project done both manually and with Accounting Software.

Frequency of Course Offering: This course offered in 27-28

Textbook(s) Used: South-Western Century 21 Accounting – General Journal

Course Name: **Accounting II** Course #: **5122**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Accounting I

Course Description: This course is designed for the students that excelled in Accounting I and wish to go to the next level. Each assignment builds upon prior lessons and goes into advanced detail. Again, students will be required to do accurate and timely assignments to prepare them for real-world Accounting Applications. Even if they use an automated accounting system they need to understand the theory behind the work and this class will prepare them.

Frequency of Course Offering: This course not offered in 26-27

Textbook(s) Used: Microsoft Office 2007: The Performing Series 2008 Course Technology, Cengage Learning

Course Name: **Intro to Computer Science** Course #: **5200**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science, inclusing AP Computer Science Principles and AP Computer Science A courses. The course allows students to work independently in text-based Python. The course also includes a career focus, where at the end of the units, students meet (via video) individuals from different industries who work in coding (medical, music, etc).

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: Online course

Course Name: **Intro to Engineering** Course #: **4100**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s):

Course Description: This course describes the field of engineering and engineering technology allowing students to explore technology systems and design processess. Through the course students will use math, science, technology, and writing to solve engineering problems. The course is primarily project-based and requires substantial participation by all students. the course also emphasizes team work, oral and written communication, and the impact technology has on society. This course is not eligible to be counted as a Science credit for graduation requirements.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used:

Course Name: **STEM /Intro to Aviation** Course #: **4101**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s):

Course Description: The Aircraft Owners & Pilots Association (AOPA) High School STEM class will provide the framework "advanced exploration in the areas of flying, aerospace engineering, and unmanned aircraft systems." Throughout the course students will complete several engineering-based activities which require problem solving, application of knowledge, technological innovation while gaining a historical perspective on the earliest inventions to the current aircraft designs. This course also will provide some exposure to real-world challenges within the aviation world and the possible career options available for students seeking an aviation-related career. Because this is a STEM-based class, there will be a strong emphasis on the engineering process and a push for students to embrace trial and error in order succeed as they seek to bring innovative ideas within the educational world.

Frequency of Course Offering: **This course not offered *26-27.***

Course Name: **Computer Science A** Course #: **5201**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Algebra I is required and Algebra II is highly recommended along with teacher recommendation

Course Description: Computer Science A is geared towards 11th and 12th grade students who are serious about programming. Java requires a good mathematical background and strong problem-solving skills. Students will learn to design and implement computer programs that solve problems relevant to today's society, including art, media, and engineering. Computer Science A teaches object-oriented programming using the Java language and is meant to be the equivalent of a first semester, college-level course in computer science. It will emphasize problem-solving and algorithm development, and use hands-on experiences and examples so that students can apply programming tools and solve complex problems.

Frequency of Course Offering: This course is offeredevery other school year. **This course offered in 26-27**

Textbook(s) Used:

Course Name: **Digital Fabrication** Course #:

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This course delves deeper into the capabilities of lasers, 3D printers, and vinyl cutters. Students will work on complex projects that combine multiple fabrication techniques, such as laser-cutting components for 3D-printed structures. The course will challenge students to think creatively and explore innovative applications for these technologies.

Frequency of Course Offering: This course is offered every year. This course can be taken multiple years

Textbook(s) Used:

DEPARTMENT: Fine and Practical Arts

Course Name: **Culinary Arts** Course #: **8814**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: Culinary Arts is the practice of preparing food tastefully and creatively. In this course, you will explore the craftsmanship of making food appealing in many different areas including: appetizers, salads, soups, breads, cakes, cookies, pies, candies, meats & poultry, eggs, and much more. You will also explore international cuisine, and the art of fine dining and etiquette. Emphasis will be placed on correct techniques and the mastery of food presentation.

Frequency of Course Offering: This course is offeredevery other school year,. **This course offered in 27-28**

Textbook(s) Used: None

Course Name: **Food Science** Course #: **8815**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: Also known as You Are What You Eat. Food Science involves the examination of the chemical composition of foods, how those foods react to one another during cooking, and how foods become YOU! You will explore many areas including: sensory evaluation (your taste buds), nutritional values of foods, the effects of ingredients in baked goods, sugars and crystal formation, food preservation (canning, dehydrating, concentrating, freezing), microbes in yogurt, cheese making, fats and emulsifiers, egg foams, and much more!

Frequency of Course Offering: This course is offeredevery other school year,. **This course offered in 26-27**

Textbook(s) Used: None

Course Name: **Family Economics** Course #: **8816**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☐**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: During your Family Economics session, you will have the opportunity to learn about the following: Personal Finances such as Savings, Checking, Credit, and how to Build a Budget; Developing Personal Relationships; Living on Your Own; Child Development, The Family Life Cycle and how to Balance Family Life with Work; Renting vs. Buying a Home and all you need to know about both; and more.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Working with Children** Course #: **8535**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This course is designed to help students understand and/or prepare for careers in Early Childhood-whether it be a caregiver, a preschool teacher/manager, or an elementary teacher. Topics will include social, emotional, intellectual, and physical development during each stage of childhood. Students will participate in fun and exciting learning activities that can be transferred to a child's learning environment. The role of the family and good parenting skills will also be examined. Students will participate in observations of children to help apply the knowledge learned in the classroom.

Frequency of Course Offering: This course is offeredevery other school year. **This course offered in 26-27**

Textbook(s) Used: Parenting: Rewards & Responsibilities and Working with Young Children

Course Name: **Housing & Interior Design** Course #: **8813**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: Students will discover and learn about space and design in the home. They will also learn practical ways to save money and make realistic purchases regarding homes. Topics of discussion include elements and principles of design, color and its effects, furnishing, window treatments, renting vs. buying, family life cycle stages and their affect on housing, and today's home buying market.

Frequency of Course Offering: **This course offered 26-27.**

Textbook(s) Used: Homes with Character

Course Name: **Graphic Design/Photography** Course #: **7574**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This is a year-long course covering an extensive range of artistic materials and processes. Students will learn about design elements and principles while completing graphic design projects using traditional (cut-and-paste), and contemporary (digital) technologies. The design elements and principles will be used throughout this course as students explore film photography and darkroom development, digital photography and Photoshop editing, multi-color printmaking, and the development and production of animation and movie-making.

**Projects subject to change at teacher discretion

Frequency of Course Offering: This course is offeredevery school year. You may only take one Art class per year.

Textbook(s) Used: _____

Course Name: **Drawing and Painting** Course #: **7562**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This is a year-long course covering a range of traditional artistic materials and processes. Students will explore a variety of drawing and painting techniques while completing a wide range of projects. Projects may include, but are not limited to, perspective drawing, oil painting, line design, charcoal/graphite drawing, color pencil drawing, watercolor painting, illustration, acrylic painting, ink drawing, Chinese brush painting, or pastel drawing.

**Projects subject to change at teacher discretion

Frequency of Course Offering: This course is offeredevery school year. You may only take one Art class per year.

Textbook(s) Used: None

Course Name: **3D Art** Course #: **7561**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: 3D (three-dimensional) is a year-long course covering subtractive (carving away), and additive (adding on) processes. Projects/materials used during this course may include, but are not limited to, Sculpey, plaster (subtractive) and plaster (additive), wheel-thrown and hand-built clay projects, cardboard sculptures, wire, paper mache, or Mosaic, shadowbox/paper sculpture.

**Projects subject to change at teacher discretion.

Frequency of Course Offering: This course is offeredevery school year. You may only take one Art class per year.

Textbook(s) Used: None

Course Name: **Portfolio Art** Course #: **7550**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☐**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Graphic Design/Photography, Drawing and Painting, 3D

Course Description: Course is a year long program open only to senior students who have completed the three elective art offerings. It is an independent study program planned between the instructor and student exploring indepth concepts and techniques. A student may also use the class to prepare a portfolio to be used for admission to an art school.

Frequency of Course Offering: This course is offeredevery school year. You may only take one Art class per year.

Textbook(s) Used: None

Course Name: **Woods I** Course #: **8505**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: First year students will gain an understanding of wood production from seed to finished product. Students will demonstrate an understanding of hardwoods and softwoods. First year students will learn the imprtance of planning a project. This will include figuring out their supply list and materials list as well as the cost of building their project. Students will have created their own objectives for their projects and the steps to completion. Students will be on a deadline for completion. Students will safely use power tools and hand tools to complete projects. Students will utilize measurements, converting fractions and decimals to calculate linear, board and square feet for projects. Students will also demonstrate understanding of basic joinery. There will be specific joinery requirements for projects. Students will know the parts of a board and tool vocabulary as well as reading/writing/journaling activities. Students will also have the responsibility of daily and weekly clean up jobs. Students will have multiple evaluations during each 9 week project and are expected to be on task at all times.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Woods II** Course #: **8506**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Woods I

Course Description: Second year students will follow the same course sequence with emphasis being placed on difficulty of a project. Students will be required to increase the difficulty of joinery in their projects. Students will have one major project due at the end of each nine weeks. Students will be responsible for completing all projects as designed by their planning sheet. Students will have created their own objectives for their projects and the steps to completion. Students will be on deadline for completion. Students will safely use power tools and hand tools to complete projects. Students will utilize measurements, converting fractions and decimals to calculate linear, board and square feet for projects. Students will also demonstrate understanding of basic joinery. There will be specific joinery requirements for projects. Students will know the parts of a board and tool vocabulary as well as reading/writing/journaling activities. Students will also have responsibility of daily and weekly clean up jobs. Students will have multiple evaluations during each 9 week project and are expected to be on task at all times.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Woods III** Course #: **8507**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Woods II

Course Description: Third year students will follow the same course sequence with emphasis being placed on the degree of difficulty involved in their projects. Third year students should be able to demonstrate proficiency in all aspects of the woodshop. Third year students will create an 18 week project. Students will have created their own objectives for their projects and the steps to completion. Students will be on a deadline for completion. Students will safely use power tools and hand tools to complete projects. Students will utilize measurements, converting fractions and decimals to calculate linear, board and square feet for projects. Students will also demonstrate understanding of basic joinery. There will be specific joinery requirements for projects. Students will know the parts of a board and tool vocabulary as well as reading/writing/journaling activities. Students will also have the responsibility of daily and weekly clean up jobs. Students will have multiple evaluations during each 9 week project and are expected to be on task at all times. Students will be responsible for completing all projects as designed by their planning sheet.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Woods IV** Course #: **8508**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☐**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Woods III

Course Description: Fourth year students will be a culmination of previous years. Students will be encouraged to create at least one large project consuming at least 18 weeks. Throughout this semester there will be various teaching on woodworking and construction including framing, siding, roofing, block and brick work, drywall, electrical and plumbing as well as an emphasis being placed on how to problem solve around the house. Students will have created their own objectives for their projects and the steps to completion. Students will be on a deadline for completion. Students will safely use power tools and hand tools to complete projects. Students will utilize measurements, converting fractions and decimals to calculate linear, board and square feet for projects. Students will also demonstrate understanding of basic joinery. There will be specific joinery requirements for projects. Students will know the parts of a board and tool vocabulary as well as reading/writing/journaling activities. Students will also have the responsibility of daily and weekly clean up jobs. Students will have multiple evaluations during each 9 week project and are expected to be on task at all times. Students will be responsible for completing all projects as designed by their planning sheet.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Mechanical Drawing I** Course #: **8500**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: Mechanical Drawing is designed to teach students CAD/CAM/CAE (Computer Aided Design/Computer Aided Manufacturing/ Computer Aided Engineering) related to today's engineering needs. Students will use Autodesk, 3D Design, Engineering & Entertainment Software as well as current relevant open source/freeware to explore and solve problems related to today's engineering fields including mechanical, electrical, and structural. Students will design and engineer projects utilizing the Engineering Design Process. Students will also spend time creating models and test structures to help them explore the manufacturing and design process. Mechanical Drawing students will design and model in 3D with the ability to create complex blueprints and 2D drawings. Drawings can transfer from a 3D design into a 2D engineering drawing format and also create photo-realistic views. Students will create many projects related to current design from: wheels and tires, bikes, tree stands, watches, bridges, sunglasses and more.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Mechanical Drawing II** Course #: **8501**

Credits: **1.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Mechanical Drawing I

Course Description: Mechanical Drawing is designed to teach students CAD/CAM/CAE (Computer Aided Design/Computer Aided Manufacturing/ Computer Aided Engineering) related to today's engineering needs. Students will use Autodesk, 3D Design, Engineering & Entertainment Software as well as current relevant open source/freeware to explore and solve problems related to today's engineering fields including mechanical, electrical and structural. Students will design and engineer projects utilizing the Engineering Design Process. Students will also spend time creating models and utilize structural testing to help them explore the manufacturing process. Students will learn reverse engineering and ergonomic design. Through the design process students will formulate hypothesis and use animation, simulation, matting and presenting to test their design. Users design and model in 3D and can create 2D drawings. Drawings can transfer from a 3D design into a 2D engineering drawing format and also create photo-realistic views. Students will create many projects related to current design from: wheels and tires, bikes, tree stands, watches, bridges, sunglasses and more.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Mechanical Drawing III** Course #: **8502**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Mechanical Drawing II

Course Description: Mechanical Drawing is designed to teach students CAD/CAM/CAE (Computer Aided Design/Computer Aided Manufacturing/ Computer Aided Engineering) related to today's engineering needs, students will use Autodesk, 3D Design, Engineering & Entertainment Software as well as current relevant open source/freeware programs to explore and solve problems related to today's engineering fields including mechanical, electrical and structural. Students will design and engineer projects utilizing the Engineering Design Process. Students will also spend time creating models and utilize structural testing to help them explore the manufacturing and design process. Students will learn reverse engineering and ergonomic design. Through the design process students will formulate hypothesis and use animation, simulation, matting and presenting to test their design. Students will design large scale models through inquiry based problem solving skills developed throughout the course year. Students will explore simple machines through bridge building kits, building structures and blueprints. Students will design and model in 3D and can create 2D drawings/blueprints with photo realistic views. Students will create many projects related to current design including: bike, rv/camper design, dump truck with hydraulic cylinder, bridge building/structural building utilizing popsicle sticks, new features to existing designs.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Mechanical Drawing IV** Course #: **8503**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☐**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Mechanical Drawing III

Course Description: Mechanical Drawing is designed to teach students CAD/CAM/CAE (Computer Aided Design/Computer Aided Manufacturing/ Computer Aided Engineering) related to today's engineering needs. Students will use Autodesk, 3D Design, Engineering & Entertainment Software as well as current relevant open source/freeware programs to explore and solve problems related to today's engineering fields including mechanical, electrical and structural. Students will design and engineer projects utilizing the Engineering Design Process. Students will also spend time creating models and utilize structural testing to help them explore the manufacturing and design process. Students will learn reverse engineering and ergonomic design. Through the design process students will formulate several hypotheses and use problem solving skills through computer animation, simulation, matting and presenting to test their design and formulate new hypotheses. Students will design large scale models through inquiry based problem solving skills developed throughout the course year. Students will explore simple machines through bridge building kits, building structures and blueprints. Users design and model in 3D and can create 2D drawings. Drawings can transfer from a 3D design into a 2D engineering drawing format and also create photo-realistic views. Students will create many projects related to current design including: bike, rv/camper design, dump truck with hydraulic cylinder, bridge building/structural building utilizing popsicle sticks, new features to existing designs. This course is similar to Mechanical Drawing III, but students have more input into their course material as it relates to their choice of college/career opportunities.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Household Maintenance** Course #: **8512**

Credits: **0.5** Grade(s): ☐**09** ☐**10** ☐**11** ☒**12** Course Length: **18 Weeks (1 Sem.)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s):

Course Description: This course is designed to help students navigate the world of everyday home repair essentials. Students will learn preventive maintenance from automobiles to home maintenance. Students will learn basic skills for home maintenance and repair from drywall repair to simple electrical wiring to new construction and design. This course is designed to encourage students to be proactive decision makers that are willing to work to find solutions to real life problems. This course will have a lab/project portion each quarter, some necessary supplies may be the responsibility of the student. (SCED 17010)

Frequency of Course Offering: **This course not offered 26-27**

Textbook(s) Used: None

Course Name: **Music In Our Lives** Course #: **7540**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: This course will familiarize you with popular music in the US from its beginnings into the 21st century. Course covers a vast array of styles and contexts. Course attempts to help students understand why he/she prefers certain musical styles and not others Students study and create listening charts and listening maps.

Frequency of Course Offering: **This course not offered in 26-27 due to staff**

Textbook(s) Used: None

Course Name: **Guitar I** Course #: **7545**

Credits: **1.0 or 0.5** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None. Preference will be given to current band and/or choir members as needed.

Course Description: Students will spend the year learning about the guitar in both in the technical and social/historical aspects. Students will develop their musical ear and their playing ability on the guitar. Students will perform a variety of styles of music on the guitar for themselves, their peers and the instructor.

Frequency of Course Offering: **This course not offered in 26-27 due to staff**

Textbook(s) Used: None

Course Name: **Small Ensemble** Course #: **7530**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: Interested musical students have the opportunity to play and sing on a number of different instruments on a number of different songs. Students would have the chance to learn new instruments, how to play, how to sing, how to read a different clef, how to express on different instruments. This is a practice and performance-based class, meaning the majority of the class with be student-centered and focus on individual practice and performace. The goal of this course will be to develop each student on an individual basis and also increase participation in competitions, festivals, and concert settings. We would learn a handful of songs over the year and perform at the concerts and perhaps the dessert theatre and.or Holiday in the Hallways.

Frequency of Course Offering: **This course not offered in 26-27 due to staff**

Textbook(s) Used: None

Course Name: **Band** Course #: **7533**

Credits: **0.5** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Middle school band or teacher approval.

Course Description: Students in grades 9-12 will perform on their primary instruments a variety of music during the course of the year. As well, the band will perform in concerts, adjudicated events and community and school functions.

Frequency of Course Offering: This course is offered every school year and can be re-taken.

Textbook(s) Used: None

Course Name: **Chorus** Course #: **7535**

Credits: **0.5** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: Students in grades 9-12 will sign in parts conducive to their singing voice a variety of music. the chorus will perform in concerts, adjudicated events and in community and school functions over the course of the year.

Frequency of Course Offering: This course is offered every school year and can be re-taken. **This course not offered in 26-27 due to staff**

Textbook(s) Used: None

DEPARTMENT: Health Physical Education

Course Name: **Physical Education** Course #: **9000**

Credits: **0.5** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **18 Weeks (1 Sem.)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: PE classes develop skills, competitive-cooperative learning and lifetime activities in the following areas: Golf, Archery, Soccer, Flag Football, Speedball, Basketball, Skiing, Weight Training, Volleyball, Badminton, Ping Pong, Shuffleboard, Presidential Physical Fitness and others.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Physical Education** Course #: **9001**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: PE classes develop skills, competitive-cooperative learning and lifetime activities in the following areas: Golf, Archery, Soccer, Flag Football, Speedball, Basketball, Skiing, Weight Training, Volleyball, Badminton, Ping Pong, Shuffleboard, Presidential Physical Fitness and others.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: None

Course Name: **Health 9** Course #: **9900**

Credits: **0.5** Grade(s): ☒**09** ☐**10** ☐**11** ☐**12** Course Length: **18 Weeks (1 Sem.)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: PE classes develop skills, competitive-cooperative learning and lifetime activities in the following areas: Golf, Archery, Soccer, Flag Football, Speedball, Basketball, Skiing, Weight Training, Volleyball, Badminton, Ping Pong, Shuffleboard, Presidential Physical Fitness and others.

Grade 9 Health class is designed to foster the ability of young people to make intelligent decisions regarding personal, family, and community health. The course will focus on various important topics such as communicable and non-communicable diseases, healthier eating habits, substance abuse, personal safety, and first aid.

Frequency of Course Offering: This course is offeredevery school year.

DEPARTMENT: Other

Course Name: **Service Learning** Course #: **0500**

Credits: **1.0** Grade(s): ☐**09** ☐**10** ☐**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Approval from Guidance Counselor

Course Description: The Service Learning Program is designed to teach the student the value of helping others. Students must demonstrate the commitment, reliability and responsibility necessary to be a good volunteer or participant in a service program. Most students will be assigned to the elementary school to assist teachers at various grade levels. Some students may be assigned posistions at the high school. Community Service may be considered under the Service Learning Program through special arrangements with the school and the community service organization. Course is a Pass/Fail offering.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: _____

Course Name: **Co-op** Course #: **0700**

Credits: **3.0** Grade(s): ☐**09** ☐**10** ☐**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): Approval from Guidance Counselor

Course Description: This course is run by the CTC in Port Allegany. Eligible students attend school for part of the day and report to their place of employment for the remainder of the day. Student must be employed before the start of your Senior year. Your place of employment must have verifiable workmens compensation insurance.

Frequency of Course Offering: This course is offeredevery school year.

Textbook(s) Used: _____

Course Name: **Yearbook** Course #: **1008**

Credits: **1.0** Grade(s): ☒**09** ☒**10** ☒**11** ☒**12** Course Length: **36 Weeks (1 Year)**

Is College Credit Available for this Course**?** ☐**Yes** ☒**No** If "Yes", Which College/University? **N/A**

Prerequisite(s): None

Course Description: The class studies ethics and issues in journalism, modes of journalism, different types of

journalists, and changes in journalism over time. Students learn journalistic forms of writing and photo composition. Students create and evaluate layouts, compose and evaluate photography, write and evaluate articles, and develop and evaluate two different types of publications: a newsletter and a yearbook. The yearbook and the newsletter as class products are unique in they do not belong to the students who produce them, but to the public. In addition to studying material for tests and quizzes and applying skills to layouts, students are expected to provide photography for their layouts; adhere to inflexible yearbook and newsletter deadlines; show initiative, make and keep commitments, and take responsibility; work independently; employ problem-solving strategies; communicate well with staff and students; and collaborate as a team, regardless of personal feelings. As a part of the students' "Advertising and Marketing in Journalism" grade (a minor percentage of the overall grade), they are also expected to attempt to sell advertisements and work any fundraisers to lessen the cost of yearbooks to the student body. Students are graded on performance on quizzes and tests; on quality of writing and layouts; and on adherence to deadlines; and a large portion of the grade is weekly independent progress on or contribution to the yearbook or newsletter.

Frequency of Course Offering: **This course not offered in 26-27**

Textbook(s) Used: None

DEPARTMENT: Career and Technical Center

Course Name: **Automotive Mechanics** Course #: **0812**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification: PA State Inspection License

Prerequisite(s):

Course Objectives:

-Service, repair, and maintain engines

-Work on valve trains, suspension, brakes, and exhaust systems

-Use current tools/equipment such as scanning tools and computerized front end aligner

-Prepare for a career as a Front End Mechanic, Brake Repairer, Transmission Specialist or Automobile Mechanic

-Students should have good mechanical problem solving and measurement skills and be willing to work in a sometimes dirty work environment

Course Name: **Building Construction Occupations** Course #: **0813**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification:

Prerequisite(s):

Course Objectives:

-Build a residential house from the ground up

-Interpret blue prints and specifications

-Construct wood products and structures from rough lumber to finish grade

-Operate a wide range of hand power tools, air tools, and machines

-Prepare for a career as a Carpenter, Construction Carpenter, Construction Manager or Business Owner

-Students should have good measurement skills, be able to work at heights up to 50 feet and be willing to work in inclement weather

Course Name: **Early Childhood Education** Course #: **0820**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification: Child Development Associate Credential

Prerequisite(s):

Course Objectives:

-Early Childhood Education program is designed to teach students the aspects of teaching and working with young children

-Students will: explore career pathways and develop the characteristics of successful teachers/childcare providers

-Apply theoretical concepts to real-life situtation

-Students will learn how to meet the developmental needs and interests of young children

Course Name: **Culinary Arts** Course #: **0814**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification: ServSafe Sanitation Certificate

Prerequisite(s):

Course Objectives:

-Work side-by-side with professional chefs

-Make gourmet foods with artistic presentation

-Participate in catering projects and in the operation of a full-service restaurant

-Prepare for a career as a Cook, Pastry Cook, Kitchen Helper or Waiter/Waitress

-Students must be willing to taste food, learn French cooking terminology, work in the public eye, and should have good measurement skills

Course Name: **Health Assistant** Course #: **0816**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification: Nurse Aide

Prerequisite(s):

Course Objectives:

-Work side-by-side with health care professionals

-Learn medical terminology and anatomy

-Practice hands-on care

-Gain clinical experience at long-term care facilities

-Prepare for a career as a Nurse Assistant or Medical Assistant

-Students must have a good health record and be able to accept and carry out precise orders

Course Name: **Heavy Equipment Maintenance** Course #: **0817**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification: PA State Inspection License

Prerequisite(s):

Course Objectives:

-Service, diagnose, repair, and rebuild trucks, tractors, logging and construction equipment

-Work on both gasoline and diesel powered engines

-Use arc welding, oxy/acetylene cutting, and fabrication techniques

-Prepare for a career as an Equipment Mechanic, Truck Mechanic, Equipment Manager or Parts Clerk

-Students should have good mechanical problem solving and measurement skills and be willing to work outsdie in inclement weather and in a sometimes dirty environment

Course Name: **Homeland Security** Course #: **0821**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification:

Prerequisite(s):

Course Objectives:

-Acquire skills from public safety areas of firefighting, law enforcement, and emergency services

-Receive instruction; participate in practical applications and situational learning experiences

-Prepare for national, state and local certifications in all three areas of public safety

-Refine personal career opportunities and choose personal career opportunities in an area of specialization of public safety

Course Name: **Engineering Technology (fka: Metal Working)** Course #: **0818**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification: NIMS Certification, Cisco Certified, A+, CompTIA

Prerequisite(s):

Course Objectives:

-Use mills, CNC mills, and Lathes

-Learn to use precision measurement tools

-Read blueprints or design parts and machine them to precise specifications

-Students should have good problem solving and good measurement skills

-Introduction to Engineering Design

-Computer Integrated Manufacturing

-Principles of Engineering

-Engineering Design & Development

Course Name: **Network Systems Technology** Course #: **0810**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification: Cisco Certified, A+, CompTIA

Prerequisite(s):

Course Objectives:

-Design, build, configure, and troubleshoot networks

-Program routers and switches

-Explore wireless and security methods

-Learn with interactive and hands-on activities thorugh the Cisco Academy

-Prepare for a career as a Network Administrator, Technology Coordinator, Computer Support Specialist or Cable Installer

-Students should be enthusiastic about computers and technology, be able to communicate well with others, and have above average math, reading, and science abilites and excellent problem solving skills

Course Name: **Welding Technology** Course #: **0819**

Credits: **3.0** Grade(s): ☐**09** ☒**10** ☒**11** ☒**12** Program Length: **3 Years**

Certification:

Prerequisite(s):

Course Objectives:

-Use MIG, TIG, stick, and oxyfuel welding

-Perform oxyfuel and plasma cutting and air arc gouging

-Learn to choose the best welding and cutting process for the job at hand

-Prepare for a career as a Construction or Fabrication Welder

-Students should have good measurement skills and be willing to work outside and to get dirty

PC Now College Courses Available at the CTC (Please contact the CTC for more information):

Automotive Mechanics
AMT112 Brake Systems
AMT113 Steering and Suspension

Culinary Arts
FHD118 ServSafe-Sanitation

Heavy Equipment Maintenance
DSM119 Fuel Systems
DSM141 Heavy Duty Brake Systems

Network Systems Technology
CSC124 Information, Technology, and Society (1st year students)
CIT112 Introduction to Gaming and Simulation (2nd year students)