Senior High Program of Study
Updated October 2024

This booklet is designed to serve as a curriculum guide for the students of Susquehanna Community Senior High School and to assist them in choosing programs of studies that will best meet their needs. The curriculum at Susquehanna is divided into three basic programs of study: Academic and Vocational/Technical.

The Susquehanna County Career & Technology Center provides students in the 12th grade who are not considering 4 year college programs upon graduation and who desire specific training to prepare them for immediate entry to the workforce in Accounting Technology/Technician and Bookkeeping, Administrative Assistant/Secretary Science, Autobody/Collision and Repair Technology/Technician, Automotive Technology, Building and Property Maintenance (Electrical, Plumbing, Heating), Carpentry/Cabinetmaking, Cooperative Education/Diversified Occupations, Cosmetology, Food Management/Production/Services, Health Care Technology/ Criminal Justice and Police Science, Vehicle Maintenance/Repair Technology, Welding Technology/Welder, may consider this program. Because of the commitment and limited number of available slots students must meet selection criteria, have parental support and a sincere desire to attend and complete such a program. Students will spend their full day at Elk Lake.

PLANNING A PROGRAM OF STUDIES:

The program of studies which students plan for themselves will help them to enjoy successful and profitable high school careers. The program will also determine how well prepared these students will be for entering college or for obtaining and holding jobs. Well-planned programs of studies will contribute to the day-by-day personal growth and happiness of the students.

IN DEVELOPING A PROGRAM OF STUDIES A STUDENT SHOULD:

Establish personal goals. Students should have some specific educational, occupational, and personal goals toward which they are working. They should be allowed to revise these goals if necessary. The important point is that they have some goals.

Evaluate personal qualifications. Students should consider honestly what their real interests are, where their own strengths and weaknesses lie, and what their needs will be in achieving their personal goals.

Determine learning requirements for college entrance. Students should investigate just what the colleges of their choice expect of applicants since colleges vary in their requirements for College Board scores, rank in class, and in subjects taken in high school. Knowing what their colleges require, students can then plan their programs of study accordingly. Students who do not plan to attend college should find out all the information they can about the kind of work they plan to do after graduation from high school. Many colleges require a minimum of a two-year sequence in a modern foreign language.

Visit colleges, technical schools, or places of employment. Students will learn through visitations whether they really like the colleges, schools, or places of employment in which they have shown an interest.

Consult parents, teachers, and guidance counselors. Students should confer with parents, teachers, and guidance counselors to obtain the benefit of their experiences and to become aware of available information.

Select Subjects in the program of studies. Students should take into consideration their goals, interests and needs, and their college or vocational school requirements, and the advice of parents, teachers and counselors; then they should include in their programs of studies the subjects that will contribute most toward helping them achieve their established goals.

Utilize CHOICES.A computerized source of information about 4 year and 2 year colleges as well as lists sources of financial aid, scholarship information and occupation information, available in computer lab and library.

STUDENTS ARE REMINDED OF THE FOLLOWING:

- Certain basic subjects are required of all students are Susquehanna. Elective Subjects should be selected on the basis of the student's individual aptitude, interest, and skills.
- Students should discuss their choice of electives with their parents and guidance counselor.
- Students should select carefully from the course offering for each grade.
- Students and one of their parents must sign the Program of Study sheet. Once the sheet is signed, no course changes will be allowed without permission from the high school guidance office.
- Students who need help in selecting subjects for a program of study, or who desire further information concerning the courses and subjects offered at Susquehanna may come to the guidance office for an appointment.

GRADUATION REQUIREMENTS:

Certification for graduation will be determined by credits earned during grades 9, 10, 11, and 12. **All students will be scheduled for at least 5 credits plus Physical Education**. The 5 credits for Seniors includes Speech. Students must pass a minimum of 4 credits per year in grades 7-12. And accumulate twenty-five **(25**) units of credit which shall be required for graduation and shall be distributed as follows:

I. **Four units (years) of English**

II. **Four units of Social Studies –Vocational Ed. Students three credits**

III. **Four units of Science–Vocational Ed. Students three credits**

IV. **Four Mathematics courses–Vocational Ed. Students three credits**

V. **Two units Arts and Humanities**

VI. **One unit Health and Physical Education**
   a. **One Semester of Health Education in grade eleven will be counted as ½ unit**
   b. **Two periods of Physical Education per cycle in grades 9, 10, 11, and 12 will be counted as 1/3 unit each.**

VII. **One unit of Technology – (Computer Science or a PLTW Course)**

VIII. **Electives:**
   a. **Each student will schedule at least seven electives courses unless Algebra I is taken in grade 9-12 then only 6 electives will be needed. An elective will be any subject beyond the basic requirements listed above.**

IX. **Three Job Shadow experiences during grades 10th through 12th**

Ninth Grade

- English 9*, Read 180, Foundations of English
- American History Survey 9*
- Keystone Algebra I *, Algebra A
- Science 9 *
- Computer Principles or Advanced Product Design
    - Physical Education
    - Microsoft Applications 9
    - STEM 9
    - Intro to Family and Consumer Science 9
    - Personal Economics 9

- Elective

Electives:

- Advanced Product Design
- Computer Principles
- Spanish I *
- French I *
- Chorus
- Concert Band
- Intro to Wood
- Media Design
- Computer Science I

*NCAA Core Course

Tenth Grade

- Keystone Literature 10, Read 180, Foundations of English
- World History and Geography 10*
- Keystone Algebra I, Algebra II, Algebra A
- Keystone Biology
- Physical Education
- Health 10
- Intro to Fine Arts A/B
- Intro to Business 10
- Elective

Electives:

- Advanced Product Design
- Production Systems
- Media Design
- Spanish I / II
- French I / II *
- Food/Nutrition
- Food/Fiber
- Child Development
- Life Management
- Studio Art A,B,C
- Intro to the Fine Arts: Art and Dance
- Intro to Business (Careers)
- Computer Principles
- Computer Science I
- Intro to Wood
- Concert Band
- Chorus

*NCAA Core Course

Eleventh Grade

- English 11- Dual or English 11*, Read 180 Economics *
- Applied Science I, Chemistry*, Dual Chemistry*
- Keystone Algebra I, Algebra II, Geometry, Algebra A
- Physical Education
    - SAT Prep
    - Health 11
- Elective

Electives: **

- Advanced Product Design
- Production Systems
- Media Design
- Psychology – Dual*
- Food/Nutrition
- Food/Fiber
- Child Development
- Life Management
- Studio Art A,B,C
- Concert Band
- Chorus
- Computer Principles
- Computer Science I
- Computer Science II
- Spanish III
- Yearbook

*NCAA Core Courses

Twelfth Grade

- English 12/Speech – Dual **or English 12/Speech***, Read 180
- Government*/Dual Enrollment Government
- Pre-Calculus/Dual Enrollment Pre-Calculus, Calculus, Algebra II, Geometry, Math Fundamentals, Probability & Statistics/Dual Enrollment Probability & Statistics, Environmental Science (Dual)
- Physics*/Dual Enrollment Physics, Anatomy & Physiology*/Dual Enrollment Anatomy & Physiology, Applied Science II
- Physical Education
- Elective
- Elective

Career & Technical Education at SCCTC:

- English 12 and
    - Autobody/Collision and Repair Technology/Technician
    - Automotive Technology
    - Building and Property Maintenance (Electrical, Plumbing & Heating)
    - Carpentry and Cabinetmaking
    - Cosmetology
    - Food Management/Production/Services
    - Healthcare Technology
    - Criminal Justice and Police Science
    - Vehicle Maintenance and Repair Technology
    - Welding Technology/Welder

Electives:

- Advanced Product Design
- Production Systems
- Media Design
- Spanish I/II/III/IV*
- French I/II*
- Psychology* - Dual
- Child Development
- Food/Nutrition
- Food/Fiber
- Life Management
- Studio Art A,B,C
- Drawing/Painting I/II
- Intro to the Fine Arts: Art and Dance
- Concert Band
- Chorus
- Theory: Performance of Popular Music
- Computer Principles
- Computer Science I
- Computer Science II
- Yearbook

*NCAA core courses

Department Course Offerings

- **Art Department**
- **Computer Department**
- **English Department**
- **Family & Consumer Science**
- **Foreign Language**
- **Health/Phys Ed/Drivers Ed**
- **Learning Support**
- **Math Department**
- **Science Department**
- **Social Studies Department**
- **Technology Education Department**
- **Career & Technical Education at SCCTC**

Art Department

Studio Art A, B, C:

This will be a three-year rotating-curriculum course (no prerequisite/recommended order) for students in grades 10-12. Students will be introduced to a variety of 2-dimensional and 3-dimensional media and fields of art including drawing, painting, clay-working, sculpture, mixed-media, and design. Projects will serve to introduce students to the Elements and Principles of art & design as well as explore historical and current artists and their work. Observational drawing, composition, color theory, perspective, creative concepts, analysis and critique, and media techniques will be stressed. Upon completion of three years of Studio Art, students will have a strong portfolio that meets college requirements. Students will be required to keep a sketchbook.

INTRO to the Fine Arts: ART and DANCE:

(10th grade requirement/split with Intro to Fine Arts: Music and Dance.)
This is a 45-day art history based course beginning with the Paleolithic Period and ending in the 20th century. Students will gain a deeper understanding of art, architecture, and dance from around the world and throughout time and the impact that specific cultures and religions have had on them. Students will produce and analyze artwork as well as study various forms of dance through videos and movement.

Portfolio Prep Description:

This is a full year course designed to introduce students to the concept of post-secondary portfolio requirements and development. Curriculum is constructed to help students refine and appropriately exhibit a variety of art styles and media through which to showcase artistic skill. It is recommended that students have previously taken Studio Art and seat preference will be given to 11th and 12th grade students.

Computer Department

The following courses cover the Pennsylvania academic standards of Science and Technology.

Microsoft Applications	9th
Intro to Business (Careers)	10th
Computer Principles	9-12
Computer Science I	10-12
Computer Science II	11-12
Media Design	10-12

Microsoft Applications:

This 30-day course covers the Pennsylvania academic standards for Business, Computer, and Information Technology as well as the Science and Technology standards. Students will be introduced to the basics of word processing, spreadsheets, presentation development, and desktop publishing. This class provides hands-on operation using the Microsoft Office suite of applications including: Word, Excel, and PowerPoint.

Intro to Business (Careers):

This 45-day course covers the Pennsylvania academic standards for Business, Computer, and Information Technology and Career Education and Work. This course will allow students to research various careers and map out possible career paths. Students will participate in several projects such as a research paper, resume, cover letter, and a project involving emerging technology-based careers. Students will have access to professionals via career day and guest speakers. Business concepts such as cost of living, budgeting, impact of emerging technologies, and business plans will be explored throughout the course.

Computer Principles:

This 180-day course covers the Pennsylvania academic standards for Science and Technology. Students will be exposed to Science, Technology, Engineering, and Math (STEM) concepts. Students will explore various aspects of innovations and digital technology while developing computational thinking skills. This course will allow students to participate in project-based learning through application and inquiry tasks. Students will also be introduced to the world of coding. This course is offered to students in grades 9 through 12 who have completed or are concurrently taking Algebra I.

Computer Science I:

This 180-day course covers the Pennsylvania academic standards for Science and Technology. Students will be exposed to Science, Technology, Engineering, and Math (STEM) concepts. Students will explore how complex coding is integrated into all aspects of technology to make it work. This course will teach students about programming and how to create their own programs using the Python coding language. Students will demonstrate mastery through a series of coding exercises, quizzes, and programs. This course is offered to students in grades 10 through 12 who have completed Algebra I.

Computer Science II:

This class will utilize an online software program and act as a follow up course to Computer Science I. This class will focus on more advanced topics in the Computer Science industry and explore other coding languages. Students must have completed Computer Science I and receive a teacher recommendation to be eligible for this course. The material is rigorous and fast paced and a student must be able to work independently to complete the material. The curriculum has the potential to be individualized to meet the differing interests within the vast computer science realm.

Media Design:

This course focuses heavily on the creative process. It includes skill development in the areas of photography, videography, audio production, and editing amidst these various avenues. A full range of strategies, techniques, and design theories will be utilized throughout the course. Students will explore the use of professional grade equipment to create their projects as well as learning how to use the technology they have readily available to them – their mobile devices. Several software programs and apps will be introduced and used to complete their artifacts. The Adobe Suite of programs students will be using include: Photoshop, Lightroom, Illustrator, InDesign, and Premier Pro. Access to the Inspiration Lab and the tools within will be heavily used throughout this course as well.

English Department

All English Courses cover the Pennsylvania academic standards for Reading, Writing, Speaking, and Listening.

English 9th grade course
Keystone Literature/English 10th grade course
English 11th grade course
English 12th grade course I, II, III
Speech/Writing 12th grade
Foundations of English
SAT Prep
Foundations of English

Foundations of English

Foundations of English (Stage B or Stage C):

Read 180 is an innovative reading intervention program by Houghton Mifflin Harcourt. READ 180 is a research-based program with proven results in raising student reading achievement. READ 180 uses cutting-edge technology to deliver individualized reading instruction, provide valuable skills practice, and motivate students to become confident readers. In our READ 180 class, students and teachers work together to: • Build essential literacy skills for college and career readiness. • Bring reading proficiency up to grade level. • Develop multi-paragraph writing skills. • Apply reading and writing strategies to other subjects such as social studies, science, and math. • Show students that they can attain reading success. This class meets for two periods each day.

9th grade English:

This course is designed to help students transition smoothly from junior high level work to senior high level work by building on the skills that students have already acquired. The curriculum for this course centers on the study of vocabulary, grammar, literature, and writing. First, the vocabulary studied will primarily come from the literature read and the literary terms studied. Second, grammar lessons will emphasize on correcting student weaknesses with the goal of improving their writing skills. Third, students will read and analyze a variety of literature covering the genres of short story, drama, poetry, and novel. The major works of literature students will read are, but not limited to: Fahrenheit 451, Lord of the Flies, Animal Farm, and *Romeo and Juliet*. Lastly, this course will have an added emphasis on writing. The writing process along with the writing structure will be modeled and taught. Students will learn how to respond to an open-ended constructed response question, similar to what they may see on a state exam. Also, Students will acquire research skills and learn how to properly document their research using proper methods of MLA documentation. In addition, students will be expected to write and deliver one speech during their freshman English class.

10th grade English:

English 10: Keystone Course Description:

Keystone Literature/English 10 is dedicated to helping all students (who have taken English 9) accurately and effectively read, interpret, analyze and respond to fiction and nonfiction to find success in personal and academic pursuits, including the Keystone Examination. Thus, writing and grammatical instruction and study are embedded within most instructional units. Potential units of study are as follows:

- Short Story Unit with related nonfiction and fiction.
- Sonnet Unit with related nonfiction and fiction.
- Julius Caesar by William Shakespeare with related nonfiction and fiction.
- Of Mice and Men by John Steinbeck with related nonfiction and fiction.
- To Kill a Mockingbird by Harper Lee with related nonfiction and fiction.
- Student Choice - independent reading.
- Keystone Lessons – biweekly anchor activities.
- Vocabulary Lessons – biweekly anchor activities.

SAT Prep or Keystone Remediation (11th grade)

SAT Prep and Keystone Remediation are quarter classes that meet for 45 days. A determination will be made as to the placement of 11th graders in **either** the SAT Verbal Prep class **or** the Keystone Remediation class based on the student's previous Keystone test results.

The SAT Prep course will provide students with time to complete standardized test practices on Khan Academy that are tailored to each student's weaknesses as determined by their performance on the PSAT. These practice exercises and tests focus on critical reading, vocabulary, identifying sentence errors, and improving paragraphs.

The Keystone Remediation course is remedial in nature and is designed for those students who were not proficient on their Keystone Literature exam in the spring of their sophomore year. Students in the class will primarily work through a booklet titled "Unlocking The Keystone Exam: Literature." However, the teacher will supplement the course with additional online resources. The course will review content vocabulary, literary fiction and nonfiction, analysis of literary terms, and constructed responses. At the end of this quarter class, students will retake the Keystone exam.

11th grade English: (Dual Enrollment Option)

The English 11 curriculum is designed to meet the needs of students who are considering college or technical school after graduation. This course is primarily a study of American literature, and the literature read will cover the genres of poetry, short story, drama, nonfiction, and novel. Students will read, analyze, and discuss these literary works with the goals of improving student reading comprehension and critical thinking skills. Students will read and closely examine significant literary works: ***The Crucible, The Odyssey, The Scarlet Letter, The Great Gatsby, and Gothic short stories.*** Students will improve their vocabulary by completing biweekly literature-based vocabulary lessons. In addition, great emphasis is placed on developing and refining students' writing skills. Writing assignments will vary from essays to constructed responses to narrative papers. To reduce errors in grammar and punctuation in student writing, weekly grammar lessons and assessments will be given. Research skills and MLA documentation

will be taught and integrated into assignments and writings. Throughout the year, students will be required to give speeches and to participate in class discussions. Finally, students will complete three assignments regarding careers. These assignments will become part of the student's portfolio in Career Cruising. To enroll in this class a student must have previously taken English 10.

This course is available for dual enrollment credit, in affiliation with Lackawanna College.

Foundations of English

This course is available ONLY to those students who are exiting the Read 180 program and will be scheduled in lieu of either the English 9, or the Keystone Literature/English 10 course. This course will provide eligible students with the opportunity to develop and strengthen their academic vocabulary, interpretive, analytical, and writing skills before advancing to the next grade level of English.

12th grade English/Speech: (Dual Enrollment Option)

This course is a combination of many different tasks that students will engage in that will prepare them for any career path that they choose to venture into after graduation. To enroll in this course, students must have previously taken English 11. This will include:

- reading and analyzing literature (short stories, plays, etc.)
- demonstrating understanding through APA formatted papers of various lengths
- learning and executing the art of public speaking through a variety of topics
- career preparation, including resume and cover letter construction
- participating in two mock job interviews
- running the school's morning news broadcasts on SNN

This course is available for dual enrollment credit, in affiliation with Lackawanna College.

Family Consumer Science

The following courses cover the Pennsylvania academic standards for Family and Consumer Science.

Food and Nutrition- Grades 9, 10, 11, 12
Food and Fiber - Grades 9,10,11,12
Child Development - Grades 9, 10, 11, 12
Life Management - Grades 10, 11, 12
Intro to Family and Consumer Science (required) - Grade 9
Intro to Family and Consumer Science (required) - Grade 8

Foods and Nutrition:

In Nutrition: safeguarding the family health, the efficient kitchen, choosing-using-and-care of appliances are the units covered. In the Food Preparation area, the units covered will be dairy products, breads and cereals, cakes, pies, fruit, vegetables, salads, soups, meat and poultry; selection, serving and storage is explored. Also, exploring the Food Guide Plate and how to eat healthy will be covered.

Food and Fiber:

Student's interested in improving their cooking skills and abilities in a more involved way will explore food preservation, add finishing touches to food, entertaining, cooking customs from many countries and regions in the United States as well as preparing foods characteristic of these regions are emphasized. Students will also be responsible for planning and hosting a party with a group of others. Students will construct a sewing project to utilize sewing skills. The student will choose what they want to sew and parents may view it if they so choose. The student will be required to pay for the project.

Child Development:

This course explores the background and reasons for early childhood education programs; provides an opportunity for students to be introduced to child development and types of programs that exist; growth and development of child from pregnancy to age five; family planning, birth process, parenting and caregiving is discussed; discipline vs. punishment, development and purpose of play, development of curricula areas are also studied; guidance techniques are taught. Experience with simulation; Baby…Think It Over; also mini craft units will be incorporated into the curriculum.

Life Management:

This course is designed to help students understand the responsibilities of life after high school. Students will learn techniques and strategies to manage real world problems. This class will focus on choosing a path after high school, housing responsibilities, financial responsibilities and community interaction.

9th Grade Intro Family and Consumer Sciences:

This course is designed to introduce all 9th grade students to Family and Consumer sciences. The focus of Pennsylvania Academic Standards for Family and Consumer Sciences education is the individual, family, and community. Family experiences, to a great extent, determine who a person is and what a person becomes. Family and Consumer Sciences support the development of the knowledge and skills that students need as family members both now and in the future. Financial and Resource Management; Balancing Family, Work, and Community Responsibility; Food Science and Nutrition; Child Development; Students will experience the Baby…think it over program.

Foreign Language Department

French I and/or Spanish I	Grade 9
French II and/or Spanish II	Grades 10-12
Spanish III	Grades 11-12
Spanish IV	Grade 12

French I or Spanish I:

Students learn the fundamentals of conversation, structure, and vocabulary during the first year. In addition, the culture of the people where the languages are spoken is discussed. At the end of the first year, students should have the very basics of the language mastered. Prerequisite: Minimum overall average 75% in 7th and 8th grade English.

French II or Spanish II:

Further development of vocabulary and structure occurs in the second year. Students are expected to gradually develop their proficiency in conversation through oral practice of the vocabulary and structures presented. Cultural aspects of the people who speak the languages continue to be studied. It is recommended that a student have a 85 average in the first year to advance to the second.

Spanish III/IV:

This is a combined course. Students continue to develop their proficiency through the active use of the vocabulary and structures they learned in the first two years. There is a further emphasis on vocabulary. Most of the grammar learned in the first two years is reviewed in the third year, and virtually all grammar in the fourth year is a review. The course differs in vocabulary and in the civilization, cultural, and historical aspects which are covered. It is recommended that a student have a 85 to advance to the third or fourth year.

HEALTH/PHYSICAL/DRIVER EDUCATION

The following courses cover the Pennsylvania academic standards for Health, Safety, and Physical Education.

10th Grade Health:

This course is a quarter course and its main objective is to educate students on the Endocrine System, Male Reproductive System, Female Reproductive System, and the current Sexually Transmitted Disease epidemic that is affecting teens. Students will understand the anatomy and functions of these systems. Through research projects on STD's, the students will understand the prevalence and the risks associated with sexual contact.

11th Grade Health:

This course is a semester course in which students meet every day. The purpose of this course is to provide students with an understanding and assessment of their own health. Students will assess mental, emotional, and physical health along with personality, emotions, levels of stress, and self-esteem. Mental health, and its components, will also be discussed. The course will teach students to handle emergency situations for respiratory failure and cardiac arrest in victims of all ages as well as standard choking procedures. Certification by the EMS Safety Services is available in both areas.

Physical Education:

This course covers the Pennsylvania academic standards of Health, Safety, and Physical Education. Physical Education is that phase of education which endeavors to promote physical fitness through instructional and participation in activities which develop strength, speed, agility, endurance, fundamental motor skills and individual and social conduct and attitudes favorable to maintenance of physical fitness by participation. All Physical Education students who have a medical excuse must do one of two things to receive a grade in Physical Education class. (1) Students will dress for class, do what exercises possible and help in the class by keeping score or referring. (2) Go to the library or study hall with a term paper assignment which must be handed in at the end of Medical excuse or quarter to receive a grade. Classes missed for absence or disciplinary reasons must be made up as so as possible. P.E. grading system is based on being prepared for class with proper P. E. uniform along with cooperating with classmates/ teachers according to school policy. Students must fully engage in each class objective to receive full credit per class. Points will be deducted/added based on objective participation. Sleeved T-shirt, athletic gym shorts, and proper gym sneakers. It also includes full participation by the students in the class. If the student does not have the proper uniform and/or footwear for P.E., it is considered an unexcused class. The student will have 10 points deducted from his or her grade per unprepared class.

Learning Support Department

Study Skills:

The Itinerant Learning Support teacher is available for those students who have been identified as needing special education services. The duties of the Itinerant Learning Support Teacher include helping students prepare for tests and quizzes, receive specially-designed instruction for testing services, teaching organizational skills, prioritizing and completing homework assignments, and monitoring the student's progress in the general education curriculum.

Reading:

The course covers the Pennsylvania academic standards for Reading, Speaking, and Listening. This course utilizes the SRA Direct Instruction Reading Program, the Reading Mastery Plus Program, and The Strategies to Achieve Reading Success Program. They emphasize development in recognizing sight words, reading decoding/comprehension, vocabulary, and study skills. Improving reading levels is the primary goal of these programs.

Read System 44:

Read System 44 is a foundational reading program designed for the most challenged struggling readers in Grades 3-12. Intentionally metacognitive, System 44 helps students understand that the English language is a finite system of 44 sounds and 26 letters that can be mastered.

English, Science, and Social Studies:

The course covers the Pennsylvania academic standards for each content area. Learning Support students participate in these regular education classes. Depending on individual needs, the student could be placed in a class that utilizes the co-teaching model which allows the regular education teacher and special education teacher to work together to provide an optimal learning environment. Curricular adaptations and modifications are in accordance with each student's Individualized Educational Plan.

Algebra A

Algebra A uses enVision Mathematics as a comprehensive approach for students to gain the necessary skills to be ready to take Algebra the next school year.

Community Based Vocational Training:

11th & 12th grades: Students participate in on-the-job training in the community in preparation for the transition from high school to adult life. Credits are earned toward graduation requirements.

Career & Technical Education at SCCTC:

10^{th}, 11^{th}, and 12^{th} grade

Each student's IEP will outline district requirements and level of classes offered at the senior high level.*

Mathematics Department

Math 7 – 7th grade
Math 8– 7th, 8th grades
Keystone Algebra I – 9th, 10th, 11th grades
Algebra II – 10th, 11th, 12th grades
Geometry – 11th, 12th grades
Mathematics Fundamentals – 10th, 11th, 12th grades
Pre-Calculus – 12th grade
Calculus – 12th grade
SAT Prep – 11th grade
Probability & Statistics/Dual Enrollment
Algebra A

Keystone Algebra I:

Algebra I is designed as a first-year Algebra course for core instruction. It can be implemented with students at a variety of ability and grade levels. Content covered includes: Patterns and Multiple Representations, Proportional Reasoning, Percents, and Direct Variation, Solving Linear Equations, Linear Functions and Inequalities, Writing and Graphing Linear Equations, Lines of Best Fit, Systems of Equations and Inequalities, Quadratic Functions, Properties of Exponents, Polynomial Functions Rational Expressions, Probability, Statistical Analysis, Quadratic and Exponential Functions and Logic.

Geometry:

Our curriculum will enable students to develop a deep understanding of Geometry. The course assumes number fluency and basic algebra skills such as equation solving. It is aligned to NCTM and Achieve standards. It is designed to be taken after an algebra course and can be implemented with students at a variety of ability and grade levels. Content covered includes: Tools of Geometry, Introduction of Proof, Perimeter and Area of Coordinate Plane, Three-dimensional Figures, Properties of Triangles, Similarity Through Transformation, Congruence Through Transformation, Using Congruence Theorems, Trigonometry, Properties of Quadrilaterals, Circles, Arcs and Sectors of Circles, Circles and Parabolas, Probability, More Probability and Counting.

Algebra II:

Algebra II promotes the understanding of both linear and non-linear functional forms, as well as the relationship between text, equations, graphs and tables through the mathematical modeling of realistic situations. Our program motivates students to talk about mathematical functions, tackle real-world problems, strengthen their conceptual foundations and understand Algebra's relevance in everyday life. Content includes: Searching for Patterns, Quadratic Functions, Graphs of Polynomial Functions, Polynomial Expressions and Equations, Polynomial Modeling, Sequences and Series, Graphs of Rational Functions, Rational Expressions and Equations, Radical Functions, Graphs of Exponential and Logarithmic Functions, Exponential and Logarithmic Expressions and Equations, Mathematical Modeling, Graphs of Trigonometric Functions, Trigonometric Expressions and Equations, Interpret Data in a Normal Probability Distribution, Make Inference and Justify Conclusions, Make Decisions Using Complex Probability Models.

Mathematics Fundamentals:

This course will cover all of the Pennsylvania academic standards for Mathematics. The students will learn introductory concepts of General Math, Algebra, Algebra II, Trigonometry, Calculus and Geometry. The course is offered to students to help guide them in the local and state assessment plan.

Pre-Calculus / Calculus - Dual Option

This course will be a two-credit double-period course. The first semester will cover pre-calculus concepts all college students need as prerequisites to calculus and related courses required in many undergraduate majors. Specific topics include algebraic expressions, polynomial and rational functions, exponential and logarithmic functions, and trigonometric functions. The second semester will cover Calculus I concepts such as differential calculus, functions and graphs, exponential, logarithmic, and trigonometric functions, limits, derivatives, and integration.

SAT Prep:

11th grade students: The class will be one 45 day segment of SAT or PSSA Math preparation. Placement in the appropriate section will be determined by previously optioned PSSA scores. This course will prepare students for the SAT test or PSSA test. All Pennsylvania academic standards will be addressed and remediate during in the PSSA math prep segment.

Probability & Statistics – Dual (12th grade):

This course, which has the **option for dual-enrollment**, introduces students to statistical methods and measurements developed in the context of applications. Topics include data analysis and graphing, Variation and Measures of Central Tendency, Correlation and Regression, Elementary Probability Theory. The Binomial Distribution, and Normal Curves. This course is available for dual enrollment credit, in affiliation with Lackawanna College.

Algebra A

Algebra A uses enVision Mathematics as a comprehensive approach for students to gain the necessary skills to be ready to take Algebra the next school year.

Music Department

The following courses cover the Pennsylvania academic standards for the Arts and Humanities.

The music department offers to you many performing ensembles. The two basic ensembles are Concert Band and Chorus. From these basic ensembles come opportunities to participate in

other select groups such as Select Chorus, Jazz Band, Brass Ensemble, Woodwind Ensemble, Pep Band and more.

Chorus 7th through 12th grades
Concert Band 7th through 12th grades
Fine Arts B (Intro to Music and Theater) 10th grade
Theory and Performance of Popular Music

Chorus

Chorus is year-long course of instruction in vocal techniques and performance. Students will demonstrate proficiency and be graded on the following criteria: sing alone and with others, sight-read repertoire, identify and apply musical terms of notation, expression and articulation, demonstrate understanding of correct posture, breath support, and embouchure, articulation, pitch and tone. Students will have opportunities to reinforce ensemble skills as well as broaden their knowledge of music through the study and performance of music from a variety of musical eras and cultures, traditional and contemporary. All students in this ensemble are required to participate in two or three performances each year, most notably the evening Holiday and Spring concerts. Occasional opportunities to perform at community events may occur. Several after school rehearsals may be required. Students should consider these responsibilities when scheduling this course. Chorus members may also be eligible to audition for Susquehanna County and Pennsylvania Music Educators Association events (Susquehanna County Chorus, PMEA District, Regional and State). Chorus meets every other day within the 6-day cycle.

Concert Band

Band is open to all current instrumental students or students new to their particular instrument. Students will have opportunities to reinforce ensemble skills as well as broaden their knowledge of music through the study and performance of music from a variety of musical eras and cultures, traditional and contemporary. All students in this ensemble are required to participate in two or three performances each year, most notably the evening Holiday and Spring concerts as well as the Memorial Day and graduation ceremonies. Occasional opportunities to perform at community events may occur. Several after school rehearsals may be required. Students should consider these responsibilities when scheduling this course. Band members may also be eligible to audition for Susquehanna County and Pennsylvania Music Educators Association events (Susquehanna County Band, PMEA Band Fest, Jazz Ensembles, District, Regional and State). Band meets every other day within the 6-day cycle.
** Students who are just developing basic skills in playing an instrument will be provided with individual or small group lessons until they have the appropriate skills to continue to the full band. **

Fine Arts B: Music and Theater:

The objectives of this 45- day course include knowledge and use of the elements and principles necessary to produce, review, critique, and revise original and respected works in the arts. Students will study the arts of music composition and performance, performance art, and theater. This project-based course inspires creativity and requires cooperation and problem-solving skills. Each unit of study culminates in performance-based projects, including a musical composition and its performance, the production of a student written and produced stage play.

Science Department

The following courses cover the Pennsylvania Science, Technology, Engineering, Environmental Literacy & Sustainability Standards (PA STEELS).
Required

9th Grade
9th Grade Science

10th Grade
Keystone Biology

11th Grade
Must take one Academic Chemistry w/Dual Enrollment option or Applied Science I

12th Grade
Must take at least one:
Physics
Applied Science
Environmental Science w/Dual Enrollment option (successful completion of academic chemistry is recommended)

9th Grade Science:

Science-9 is a PA STEELS course. The course explores Ecology, Evolution, Homeostasis, Macromolecules, and Genetics. Students explore these topics through phenomenon-based unit storylines and lessons. Students are expected to work as scientists individually and in groups, plan and carry out investigations, analyze and interpret data, communicate understanding, and keep an organized and complete notebook for practice and review that utilizes sketchnotes and higher level thinking skills.

Keystone Biology:

Biology uses the 3D learning of the PA STEELS . Students will be expected to use the scientific process as they engage in inquiry-based, hands-on science lessons covering these topics. This learning process is to be documented daily in their "phenomenal" notebook. Biology students are expected to continue the learning cycle by participating fully in class and out of class through course readings, project, investigations, and case studies/arguments. Unit storylines will explore the topics of Genetics, Mutations, & Protein Synthesis; the Cell Cycle and Cellular Division; Speciation; Population Ecology & Human Impacts. Biology will prepare students for the Keystone Exam, but also prepare ALL students for a better understanding of living things (including themselves). The course will provide a strong biological foundation for students planning to take Dual Enrollment Environmental Science or pursue higher education.

Chemistry:

This course is designed for the college bound student. The course topics include the study of the composition of matter, how elements interact, atomic theory, types of chemical bonding, chemical reactions, gas laws, kinetic theory and stoichiometry; solutions, kinetics and reaction mechanisms, chemical equilibrium, and acids and bases. Throughout the course, connections to natural earth processes will be made. There is an emphasis placed on laboratory work. At the end of the course, the students will have a strong background for any entry level college science coursework. The course is based upon the PA Chemistry standards and aligned to the Keystone Chemistry Exam anchors.

Dual – Chemistry (11th grade):

Additional projects and assignments. In affiliation with Lackawanna College, the course enables the student to receive college credits upon completion. Dual enrollment chemistry is an academically based course for students seeking to attend a 2 or 4 year college program. The course is based upon the PA Chemistry standards and aligned to the Keystone Chemistry Exam anchors.

Applied Science I:

Applied Science I is a course about the processes and systems that affect the landscape of Earth. The course begins with 90 days of basic Chemistry where we explore the nature of Earth's matter and its change. The next 45 days of the course applies the Chemistry coursework to Earth's Composition: Minerals and Rocks. The final 45 days of the course covers the dynamic nature of Earth's surface as it relates to Plate Tectonics, Volcanism, and Earthquakes. Students will learn about fundamental geologic processes and how they impact society and the environment on local and regional scales. Students will learn that Earth's processes can be both slow and rapid and how they are related and interact with each other.

Applied Science II:

Applied Science II is a course that continues the study of the processes and systems that affect the landscape of the Earth. The course begins with Surface Processes on Earth's surface, continues with processes above the Earth, weather systems and finishes with a study of Earth's oceans, tides, the Sun-Earth-Moon system, the Solar system, and stars. Students will learn about fundamental geologic processes and how they impact society and the environment on local and regional scales. Students will learn that Earth's processes can be both slow and rapid and how they are related and interact with each other.

Physics – Dual (12th grade):

Physics is a senior high course designed for academic, college bound students. Upon completion of the course, the student will have an understanding of introductory physics principles and concepts. The course involves the use of algebra and basic trigonometry as the primary means of problem solving. The student will learn critical thinking skills, process problem solving skills and develop a solid background for any related college course work. Course topics include mechanics (motion, force and energy), heat, waves, sound, fluids and electricity. Laboratory computer work is an integral part of the course. This course is available for dual enrollment credit, in affiliation with Lackawanna College.

Environmental Science – Dual:

Environmental Science is designed for the academic, college bound, non-science major looking to earn an elective science credit or the ecology/environmental science major-bound college student looking to familiarize themselves with the content at an introductory college level. The course is developed around the Earth and Space Science and the Environmental Literacy and Sustainability standards of the PA STEELS but taught on the college level with consistent academic rigor. Students will be expected to perform at the college level through traditional classroom practices, laboratory, and field experiences. The course will require students to complete work and readings outside the normal school hours. The course requires students to apply science content learned through their academic career to research, analyze, and interpret data, plan and conduct scientific investigations, and design and evaluate solutions for various environmental scenarios. Chemistry is recommended as a prerequisite for this course as well as a solid understanding of biological and ecological concepts from tenth grade Biology. This course is available for dual enrollment credit, in affiliation with Lackawanna College.

Social Studies Department

The following courses cover the Pennsylvania academic standards associated with Social Studies: History, Civics and Government, Economics, and Government. *In all required Social Studies courses, students undertake primary source analysis, independent research, and data interpretation activities to build the skills required by the Pennsylvania Standards associated with Social Studies.*

American History Survey (9th grade)
Personal Economics (9th Grade Rotation)
World History and Geography (10th Grade)
Principles of Economics (11th Grade)
Government (Dual Enrollment – 12th grade)
Psychology (Dual Enrollment--11th & 12th Grade)

American History Survey (9th Grade)

This course attempts to examine the full sweep of American History in a manner meaningful to today's students. The focus is on the people of America and the values that shaped the nation, past and present. The major focus of the year will revolve around 5 units of study--The Development of the Early United States, the Civil War, World War I, World War II and America Since 1945. Upon completion of this course, students should have acquired a basic understanding and appreciation of the values and responsibilities necessary to cope with the complexities of the life that they live today.

Personal Economics (9th Grade)

This is a 45 day rotational course for all 9th graders held on four days of the six day cycle. This course allows students to work with income, budgets and taxes. Students will also complete an

online budget simulation using the “On Your Own: Coast to Coast” Program. Students will gain knowledge of how working citizens manage their income as they begin to work as part-time, and then full-time, employees.

World History and Geography (10th Grade)

This course will cover the time period from the Renaissance to the Franco-Prussian war of 1871 in depth and coordinate with American History II for the time period 1871 to present. The history of Western Civilization and its geography will be emphasized.

Principles of Economics (11th grade)

This course will cover three basic units of Economics: economic systems, money and banking, government and the economy. Within these units certain issues will be covered such as: central planning, free market systems, the stock market, saving and investing, various taxes, federal budget, and the Federal Reserve system.

Government – Dual (12th grade)

This course is meant to introduce seniors to the workings of the United States government and their role as citizens in the United States. The course will cover the creation of the United States, the writing of the Constitution, the rights that all American citizens are given and the workings of the national, state and local governments within the nation. Civil liberties and civil rights will also be a major focus, allowing students to better understand their Constitutional rights. The course is available for dual enrollment credit, in affiliation with Lackawanna College.

Psychology - Dual (11th & 12th grades)

The role of psychology is to introduce the student to the study of the mind and brain, the most important parts of all of us. Psychology deals with several concepts: the history of Psychology as a Science, Developmental Psychology, the Brain and its Physical Process, Sensation and Perception, Learning and Forgetting, Language and Communication, Emotions, Personality, Personality Disorders, Personality Therapies and Social Psychology. The course is designed for college bound students. This course is available for dual enrollment credit, in affiliation with Lackawanna College.

Technology Education

The following courses cover the Pennsylvania academic standards for Science and Technology.

- Introduction to Woodworking - 9th, 10th, 11th, 12th grades
- Production Systems-10th, 11th, 12th grades
- Advanced Product Design - 9th, 10th, 11th, 12th grades

STEM 8 and **STEM 9** - These two courses are rotational courses for students in grade 8 and 9. Continuing with the "hands-on" approach from the previous year, students will engage with the follow curriculum over a two year cycle:

- Product Design: Students will utilize a host of hand and computerized tools including basic woodworking tools, vinyl cutters, laser engravers and computer aided design tools to expand on the design processes learned in previous years to develop "sale quality" products.
- Electronics & Robotics: Students will learn electronic theory through a hands-on approach to education. Students will gain knowledge in both traditional electronics as well as digital electronics and robotics.

Production Systems (1 credit)

Productions Systems is a course designed to give students hands-on experience using various machinery and fabrication techniques to create a marketable product. Production requires safe and effective use of high powered equipment in order to achieve a quality produced product. Production Systems is a combination of both the Metalworking and Woodworking labs. The Metalworking aspect will focus on shop safety, oxy/acetylene welding and cutting, foundry, arc welding, machining and other various tooling procedures, whereas the woodshop will also focus on shop safety and various tooling to produce high quality projects.

* It is highly recommended to take Advanced Product Design prior to taking Production Systems.

Introduction to Wood

Introduction to wood will focus on the cognitive value of doing physical work by using a variety of tools and techniques to process projects that will require different skill sets. Students will learn about safety, proper tool use, joining, and finishing techniques. Throughout the year Students will be introduced to linear and circular measurement, and a variety of techniques to make straight, angled, circular, and odd shaped cuts. Students will be required to problem solve in order to achieve the desired results, while dealing with differences in materials, human and machine error.

Advanced Product Design **(1 credit)**

Advanced Produce Design is a course that focuses on the engineering processes in developing a product from concept to prototype. Students will use the engineering process as they utilize a host of computer systems to communicate with rapid prototyping technology. At the conclusion of this course, students will have a solid foundation in CAD. Students are required to successfully complete Algebra 1 or currently enrolled in prior to enrolling in this course.

Programs at (SCCTC)

Susquehanna County Career and Technology Center

Seniors from Susquehanna Community High School may attend the SCCTC for a full day in the program of their choice. Transportation is provided to and from the school. Visit SCCTC's website to view more specifics about each program: www.scctc-school.org/

The SCCTC has an open admissions policy. There are sufficient openings available for all students who wish to apply. Funding is available to assist students in purchasing uniforms and tools.

PROGRAMS OF STUDY (POS)

Mission of SOAR
The mission of SOAR (Students Occupationally and Academically Ready) is to prepare students for college and careers in a diverse, high-performing workforce.

Goal of SOAR
SOAR is the career and technical Program of Study (POS) educational plan that articulates the secondary career and technical to postsecondary degree or diploma or certificate programs. SOAR programs lead students into a career pathway that align the secondary courses to a postsecondary program to complete a degree or certificate.

What is SOAR?
SOAR is built on programs of study which incorporate secondary education and postsecondary education elements and include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content. These career and technical programs of study includes a statewide articulation agreement partnership between secondary schools and postsecondary institutions.

SOAR Supports High Demand Careers
SOAR programs prepare today's student for High Priority Occupations (HPO) which include career Categories that are in high demand by employers, have higher skill needs, and are most likely to provide family sustaining wages.

Benefits of SOAR

Saving Money on College Tuition
Saving Time by Shortening College Attendance
Getting on the Right Career Pathway
Entering the Job Market Ready
Getting a Consistent Education

Autobody/Collision and Repair Technology/Technician (CIP 47.0603)

The **Autobody/Collision Repair Program** prepares individuals to apply technical knowledge and skills to repair damaged automotive vehicles such as automobiles and light trucks. Students learn to examine damaged vehicles and estimate cost of repairs; remove, repair and replace upholstery, accessories, electrical and hydraulic window and seat operating equipment and trim to gain access to vehicle body and fenders; remove and replace glass; repair dented areas; replace excessively damaged fenders, panels and grills; straighten bent frames or unibody structures using hydraulic jacks and pulling devices; and file, grind and sand repaired surfaces using power tools and hand tools. Students refinish repaired surfaces by painting with primer and finish coat.

Automotive Technology (CIP 47.0604)

The **Automotive Technology Program** provides the student with practical instruction in the diagnosis, repair, and adjustment of all phases of the automobile. Instruction will also be given on the use of up-to-date equipment used in areas such as analyzing, fuel injection, ignition, electrical controls, ABS braking systems, computer engine controls, four-wheel alignment, and State Safety Inspection. Upon successful completion of this program, the student will be able to test for a State Inspection Mechanic license, and may seek entry level employment as an automotive technician, automobile salesperson, garage salesperson, service manager, parts salesperson, or service writer.

Building and Property Maintenance (Electrical, Plumbing & Heating) (CIP 46.0401)

In the **Electrical, Plumbing & Heating Program** students will experience hands-on training as well as classroom theory in Basic Residential Wiring, Plumbing, and Heating. During the first year, the student will practice developing basic skills by installing common electrical circuits, fixtures, and equipment as well as basic carpentry skills. The second year will consist of practice in joining common piping systems, fixtures, and equipment. Advanced plumbing systems will be installed during the third year. The student will also practice basic skills needed to install, maintain, and troubleshoot residential oil fired hydronic systems and forced warm air systems. The student will also practice basic skills in the areas of stick arc welding, oxyacetylene cutting, welding, and brazing.

Carpentry and Cabinetmaking (CIP 46.0201)

Students enrolled in the **Carpentry and Cabinetmaking Program** will study a number of related areas so that he/she will possess adequate entry level skills to work in the area of building

construction. The carpentry unit, for example, gives actual experience in layout, cutting and fitting wood members, rafter cuts, roof or platform framing, and selection of general building materials. The students will also hone their skills completing carpentry projects and working at the on-site house construction project. Upon successful completion of this program, the student may seek employment as an apprentice cabinetmaker, materials salesperson, roofer, rough carpenter, sheetrock installer, framer, or siding installer.

Cosmetology (CIP 12.0401)

The **Cosmetology Program** prepares individuals to apply technical knowledge and skills related to experiences in a variety of beauty treatments including the care and beautification of the hair, complexion and hands. Instruction includes training in giving shampoos, rinses and scalp treatments; hair styling, setting, cutting, dyeing, tinting and bleaching; permanent waving; facials; manicuring; and hand and arm massaging. Bacteriology, anatomy, hygiene, sanitation, salon management including record keeping and customer relations are also emphasized.

Food Management/Production/Services (CIP 12.0508)

Beginning with the basics, students In **Food Management/Production/Services** will proceed to intermediate and advanced levels to develop a solid foundation in Culinary Arts. Through lecture and cooking demonstrations, the student will learn the techniques of fine cooking. Classes will cover the basics of cooking and baking and the provisions used to create effective and elegant menus for the most discriminating palate. With instructor supervision, the students will then hone these skills by operating their on-site restaurants, “A Touch of Class” and The Serfass Solarium. The restaurants offer the students the opportunity to culminate all laboratory experiences as they rotate through all positions in management, production, and services perfecting skills and techniques. Upon successful completion of this program, the student may seek employment as a baker, cashier, caterer, chef, host, hostess, line cook, restaurant manager, salad maker, short-order cook, dining room service personnel, or any of the vast number of culinary positions. They may continue their restaurant management education in the hotel restaurant management or culinary arts fields.

Health Care Technology (CIP 51.0899)

The **Health/Medical Assisting Program** is a combination of subject matter and experiences designed to prepare individuals for entry-level employment in a minimum of three related health occupations under the supervision of a licensed healthcare professional. Instruction consists of core course content with clinical experiences in one or two health related occupations. The core curriculum consists of planned courses for introduction of health careers, basic anatomy and physiology, and medical terminology. Additional content includes: legal and ethical aspects of health care and communications and at least three planned courses for the knowledge and skills for the occupational area such as medical assisting, ward clerk, nursing assisting, pharmacy technician, EKG Technician, etc. Students may also continue their education in a post-secondary/college environment.

Criminal Justice and Police Science (CIP 43.9999)

The **Criminal Justice and Police Science** is an instructional program that prepares individuals to apply technical knowledge and skills that relate to performing entry level duties as a patrolman, corrections officer, juvenile officer, security officer or probation officer. The course stresses patrol and related duties such as traffic and crowd control, the American legal system, techniques used in the police laboratory and training in emergency and disaster situations.
Also stressed is physical development with a strong emphasis on self-defense and the building of self-confidence. Investigatory techniques covered are interviewing and evidence gathering, report writing, a study of juvenile law and procedure, the techniques of crime prevention, and the criminal process from arrest through conviction. Procedural matters affecting law enforcement such as arrest, search and seizure, and legal principles developed in information lessons are utilized in supervised simulated situations.

Vehicle Maintenance and Repair Technologies (CIP 47.0699)

The **Vehicle Maintenance and Repair (Small Engines)** program prepares individuals to apply technical knowledge and skills to repair, service, maintain and diagnose problems on a variety of small internal-combustion gasoline engines and related systems used on portable power equipment such as lawn and garden equipment, chainsaws, outboard motors, rototillers, snowmobiles, lawn mowers, motorcycles, personal watercraft and pumps and generators. This program includes instruction in the principles of the internal-combustion engine and all systems related to the powered unit. Instruction also includes the use of technical and service manuals, state inspection code, care and use of tools and test equipment, engine tune-up/maintenance, engine overhaul, troubleshooting and diagnostic techniques, drive lines and propulsion systems, electrical and electronic systems, suspension and steering systems and service operations and parts management.

Welding Technology/Welder (CIP 48.0508)

The **Welding Program** prepares individuals to apply technical knowledge and skills in gas, arc, tig, shielded and non-shielded metal arc, brazing, flame cutting, plasma cutting and plastic welding. Hand and semi-automatic welding processes are also included in the instruction. Students learn safety practices, types of electrodes and welding rods; properties of metals, welding symbols, blueprint reading, use of equipment for the testing of welds by destructive and non-destructive methods, use of manuals and specification charts, use of hand and portable power tools, use of metal fabricating equipment, positioning and clamping, and welding standards established by the American Welding Society, American Society of Mechanical Engineers and the American Petroleum Institute. Students will receive OSHA safety training and have the opportunity to become AWS Certified Welders.

Susquehanna County Career and Technology Center (SCCTC)