

Program of Studies



LINE MOUNTAIN
HIGH SCHOOL
2022-23

**LINE MOUNTAIN HIGH SCHOOL
COURSE DESCRIPTIONS
2022-2023**

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Northumberland County Career and Technology Center

Dear Student,

Course scheduling is an important activity. It is a time for you to assess your future career interests and create a learning pathway to meet your goal.

The faculty and administration encourages you to choose your courses wisely. We are available to answer any questions regarding any concerns you may have about course offerings. You need to know we are interested in your success and will make every effort to encourage you.

Please discuss your options with your parents/guardians. The guidance office has many resources to help you in your decision-making process.

Please do not hesitate to stop by our office if you need our assistance.

Sincerely,

Jeffrey Roadcap
High School Principal

Jeffrey Lagerman
Middle School Principal

Amy Zartman
High School Counselor

Jennifer Heitzman
Middle School Counselor

Regardless of content area or educational area, the methods of assessment employed by the professional staff of the Line Mountain School District emphasize authentic assessment, varied performance assessments and the production of work displaying student achievement of academic standards. All assessment techniques are formative and summative in order to attain a snapshot of student achievement and to plan to initiate the changes, which need to take place to ensure student achievement of academic standards.

GRADUATION REQUIREMENTS

Line Mountain School District and PA Code 57.31

(A) In grades 9 through 12 every student graduating shall have completed 120 hours of instruction in each of the following 21 units of credit:

<u>Unit</u>	<u>Subject</u>
4 courses	English (Northumberland County Career and Technology Center students are required to take two courses in English in the junior year by taking American Literature and Career English)
3 courses	Mathematics
3 credits	Science
3 credits	Social Studies
2 credits	Arts or Humanities (Art, Music, FCS, Tech Ed, Foreign Language, and Social Studies electives)
1 credit	Physical Education/Health
5 credits	Electives chosen from among those approved for credit towards graduation by the school: At least 2 electives must be in Foreign Language for College Prep students; NCCTC students will meet this requirement by the satisfactory completion of their vocational-technical program at Northumberland County Career and Technology Center)

TOTAL: 21credits

(B) Achievement of Proficient or Advanced score on the Keystone State Assessment in Algebra, Biology, and Literature or proficient on an equivalent local assessment.

AGRICULTURE

Note some agriculture courses are offered on an every other year basis. Even school years are 18-19, 20-21, 22-23, etc. Odd School years are 19-20, 21-22, 23-24, etc.

ELECTIVE **Introduction to Agriculture - Grades 9-10** **SEMESTER COURSE**
COURSE DESCRIPTION: This course is designed for first year agriculture students who are interested in beginning an agriculture-based course of study. Students will study a basic overview of the agriculture industry through the following areas: basic animal science, biotechnology, aquaculture, hydroponics, soil science. They will explore ways to improve society through agriscience **GOALS:** Students will learn the basic industries involved in agriculture. **PREREQUISITES:** Interest in any aspect of agriculture **COURSE REQUIREMENTS:** Students are expected to reimburse any cost for materials for projects as well as actively participate in all learning activities. **TEXT:** Agriscience Fundamentals and Application **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** quizzes/tests, written and oral assignments and laboratory exercises. **Offered every school year.**

ELECTIVE **Agriculture Fundamentals - Grades 9-10** **SEMESTER COURSE**
COURSE DESCRIPTION: This course is designed for first year agriculture students who are interested in beginning an agriculture-based course of study. Students will study a basic overview of the agriculture industry through the following areas: youth development organizations, record-keeping, leadership and communication skills, food science, home and shop skills and safety. They will have the opportunity to explore way agriculture provides the basics of life. **GOALS:** Students will learn the basic industries involved in agriculture. **PREREQUISITES:** Interest in any aspect of agriculture and career development skills **COURSE REQUIREMENTS:** Students are expected to reimburse any cost for materials for projects as well as actively participate in all learning activities. **TEXT:** Agriscience Fundamentals and Application **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** quizzes/tests, written and oral assignments and laboratory exercises. **Offered every school year.**

ELECTIVE **Basic Agriculture Technology - Grades 9-10** **SEMESTER COURSE**
COURSE DESCRIPTION: This course is designed for agriculture students who are interested in basic knowledge of agriculture technologies. This course will heavily emphasize on careers and the awareness various high-tech and low-tech tools used in the ag industry as well as safety. **GOALS:** Students will broaden their scope of knowledge of technology needed for food and fiber production. **COURSE REQUIREMENTS:** Students are expected to reimburse any cost for materials for projects as well as actively participate in all learning activities. Students need to have solid background in safety and good work ethics. **TEXT:** Agricultural Mechanics **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** tests/quizzes, written and oral assignments and laboratory exercises. **Offered odd years.**

ELECTIVE **Ag Mechanics/Small Gas Engines - Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: This course is designed for agriculture students who are interested in small gas engines. Students will study a basic theory and application of small gasoline engines. This course will heavily emphasize the proper usage of tools and equipment as well as safety. **GOALS:** Students will successfully rebuild a small gas engine. **COURSE REQUIREMENTS:** Students are expected to reimburse any cost for materials for projects as well as actively participate in all learning activities. Students need to have solid background in safety and good work ethics. **TEXT:** Agricultural Mechanics and Small Engines **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** tests/quizzes, written and oral assignments and laboratory exercises. **Offered odd years.**

ELECTIVE **Animal Production and Management 1 - Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: This course is an in-depth study of animals used for many aspects in our society. Students will learn the body systems, growth, nutrition, digestion and production practices of various agriculture animal species. Students will have hands-on animal production activities. **GOALS:** Students will learn the basic survey of the animal agriculture industry and practical skills in animal production. **PREREQUISITES:** "Introduction to Agriculture" or teacher recommendation (for students with extreme interest only) **COURSE REQUIREMENTS:** Students are expected to actively participate in all learning activities; complete all assignments as well as come to class

prepared and ready to learn. **TEXT:** Animal Science: Biology and Technology **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** tests and quizzes, written and oral assignments and laboratory exercises. **Offered odd years.**

ELECTIVE **Animal Production and Management 2 - Grades 10-12** **SEMESTER COURSE**

COURSE DESCRIPTION: This course is a continuation of **Animal Production and Management 1**. Students will learn the reproduction, genetics health, growth and production practices of dairy swine, sheep, horses, swine, beef, and other specialty animals. Students will have hands-on animal production activities as well as scientific theory of how animals grow and thrive. **GOALS:** Students will learn the basic survey of the animal agriculture industry and practical skills in animal production. **PREREQUISITES:** Animal Production and Management 1 **COURSE REQUIREMENTS:** Students are expected to actively participate in all learning activities; complete all assignments as well as come to class prepared and ready to learn. **TEXT:** Animal Science: Biology and Technology **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** tests and quizzes, written and oral assignments and laboratory exercises. **Offered odd years.**

ELECTIVE **Plant and Soil Management and Production 1 - Grades 10-12** **SEMESTER COURSE**

COURSE DESCRIPTION: Students will learn basic structures of plants and soil which serves as the building blocks to most agriculture crops. **GOALS:** Students will understand the structures of plants and soil. Students will have opportunity to investigate plant growth as well as soil properties. **COURSE REQUIREMENTS:** Students are expected to actively participate in all learning activities; complete all assignments as well as come to class prepared and ready to learn. **TEXT:** Introductory Horticulture **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** tests/quizzes, written and oral assignments and laboratory exercises. **Offered even years.**

ELECTIVE **Plant and Soil Management and Production 2– Grades 10-12** **SEMESTER COURSE**

COURSE DESCRIPTION: Students will learn basic agronomic crop production, greenhouse management and production, pest management and the use of plants in the landscape and home. **GOALS:** Students will have the opportunity to plant, grow and market plants that they grow in the school greenhouse. They will also practice various landscaping skills. Students will learn the general production practices for agronomic and greenhouse crops as well landscaping principles. **PREREQUISITE:** Plant and Soil Management 1 **COURSE REQUIREMENTS:** Students are expected to actively participate in all learning activities; complete all assignments as well as come to class prepared and ready to learn. **TEXT:** Introductory Horticulture **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** tests/quizzes, written and oral assignments and laboratory exercises **Offered even years.**

ELECTIVE **Hydroponic/Aquaculture – Grades 10-12** **SEMESTER COURSE**

COURSE DESCRIPTION: Hydroponics/Aquaculture is a course designed to expand into the fields of specialized agricultural science technologies. The course will cover principles and practices in growing plants and aquatic species in a contained, controlled environment. Students will apply knowledge learned to produce crops of their own. Students will recreate optimal conditions to grow plants and aquatics in a greenhouse for potential commercial use as well as record data to determine profitability and growth rates. **GOALS:** Students will learn the general hydroponic and aquaculture production practices. Students will also be required to construct units, nurture, monitor and record data for various plant and aquatic growth. **RECOMMENDED PREREQUISITE:** Introduction to Agriculture or Agricultural Fundamentals or Plant and Soil Management 1 **COURSE REQUIREMENTS:** All students are required to take, keep notes and complete in-class assignments/projects as well as assessments. Students are expected to reimburse any cost for materials for projects. They must productively participate in all learning activities. Students need to have a solid background in safety and good work ethic. **TEXT:** Agriscience Fundamentals and Application; various Hydroponics & Aquaculture resources **COURSE CREDIT VALUE:** This course carries the credit value of 0.75. **EVALUATION:** Typical assessments could include 1) tests, quizzes 2) oral and written assignments 3) lab- based projects 4) homework 5) and class participation. **Offered even years.**

ELECTIVE **Wildlife – Grades 10-12** **SEMESTER COURSE**

COURSE DESCRIPTION: This course is the study of wildlife species of Pennsylvania. They will focus on physical characteristics as well as natural habitat. **GOALS:** Students will learn the basic biology of the wildlife biology. They will have the opportunity to investigate physical characteristics of wildlife species. **COURSE REQUIREMENTS:** Students are expected to actively participate in all learning activities. They must complete all assignments as well as come to class prepared and ready to learn. **TEXT:** Managing Our Natural Resources and *PA Game Commission- Wildlife Notes* **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** tests/quizzes, written and oral assignments and laboratory exercises. **Offered even years.**

ELECTIVE **Forestry – Grades 10-12** **SEMESTER COURSE**

COURSE DESCRIPTION: This course is the study of forestry resources. Students will identify tree species of Pennsylvania as well learn conservation and management of woodland. **GOALS:** Students will learn the basic theory and application of forestry management. They will collect specimens of various trees and create a display. They will also explore the products/uses trees provide. **COURSE REQUIREMENTS:** Students are expected to actively participate in all learning activities. They must complete all assignments as well as come to class prepared and ready to learn. **TEXT:** Managing Our Natural Resources and *Common Trees of Pennsylvania* **COURSE CREDIT VALUE:** This course

carries the credit value of 0.75 credit. **EVALUATION:** tests/quizzes, written and oral assignments and laboratory exercises. **Offered even years.**

ELECTIVE **Advanced Agriculture – Grades 12** **SEMESTER COURSE**
COURSE DESCRIPTION: This course is the advanced study of agriculture designed on the interest of twelfth grade students. Students will focus on their individual interest while gaining additional skills. **GOALS:** Students will design and complete a meaningful a research/independent project. **RECOMMENDED PREREQUISITE:** 90% average in “Introduction to Agriculture” and at least 3 other Agriculture courses **COURSE REQUIREMENTS:** Students must be extremely self-motivated with good work ethics; they are expected to actively participate in all learning activities, and must complete all assignments as well as come to class prepared and ready to learn. **TEXT:** Various texts based on the needs of each student will be used. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** recordkeeping skills, hands on problem solving and research, written and oral assignments and class participation

ELECTIVE **Supervised Agriculture Experience - Grades 10-12**
COURSE DESCRIPTION: This course is an individual, independent program to enhance the real world experience based on student need and/or opportunities available. Students will record a minimum of 180 hours of experiences outside of school. They must complete and maintain the required record book. The type of experience must be pre-approved by the agriculture instructor. Students must meet with the instructor at arranged time on an individual basis. **GOALS:** Students will complete 180 hours of work in a Supervised Ag Experience record book by May 30. **PREREQUISITES:** 90% average in “Introduction to Agriculture” or teacher recommendation (for students with extreme interest only). **COURSE REQUIREMENTS:** Students must be extremely self-motivated and follow the guidelines of the course; they are expected to actively participate in all learning activities and complete all assignments as well as come to class prepared and ready to learn. **TEXT:** PA FFA Supervised Agriculture Experience Record Book and www.theaet.com **COURSE CREDIT VALUE:** Course credit will range from .25 – 1 credits depending on the amount of time instruction arranged. **EVALUATION:** evaluation and assessment of record book

ART

ARTS & HUMANITIES **Studio Art I - Grades 9-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Studio Art I is designed as a fundamentals course in art. The focus will be on the fine arts disciplines of Drawing, Painting and mixed-media. Students will recognize and apply the Elements and Principles of Art to their work. Other explorations in composition, color theory, art history, and critical thinking are covered. **GOALS:** 1) develop drawing and painting skills; 2) develop knowledge and improve technique in working with different media; 3) develop the language of art in making critical and aesthetic decisions in art-making. This course is designed to give students a foundation in art. **TEXT:** Classroom Resource Texts, Art in Focus-Mittler, and teacher created materials. **COURSE CREDIT VALUE:** This course carries the value of a 0.75 credit. **EVALUATION:** Grades will be based on the following: class participation, studio projects, tests, and sketchbook entries.

ARTS & HUMANITIES **Studio Art II - Grades 9-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Studio Art II is designed to offer students expanded experiences in 2D and 3D media. Concentrations include ceramics, textiles, printmaking, and additional drawing and painting media. **GOALS:** 1) create works of art in the media of clay and textiles 2) develop technical skills in drawing and painting; 3) improve critical thinking skills in developing themes for artwork; 4) continue more advanced sketchbook work. **RECOMMENDATIONS:** Successful completion of Studio Art One is highly recommended as a prerequisite to this course. **TEXT:** Classroom resource texts, The Craft and Art of Clay- Peterson, and teacher created materials. **COURSE CREDIT VALUE:** This course carries the value of a 0.75 credit. **EVALUATION:** Grades will be based on the following: class participation, studio projects, tests, and sketchbook entries.

ARTS & HUMANITIES **Studio Art III - Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Studio Art III is designed for those students who wish to continue their explorations of art into more media and techniques. The course also gives students the opportunity to develop more artwork for their portfolio. Students may continue work in drawing, painting, printmaking, ceramics, sculpture and photography. Concentrations include jewelry-making, watercolor/oil painting, intaglio printmaking, and pinhole photography. **PREREQUISITE:** Successful completion of Studio II. **TEXT:** Classroom resource texts and teacher created materials. **COURSE CREDIT VALUE:** This course carries the value of a 0.75 credit. **EVALUATION:** Grades will be based on the following: class participation, portfolio projects, critical thinking and analysis with instructor, and sketchbook entries.

ARTS & HUMANITIES **Studio Art IV - Grade 11-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Studio Art IV is designed for those students who want to continue advanced portfolio development or prepare an art portfolio for college admission/scholarship. Students will be expected to demonstrate critical analysis of their art both in production and in analysis. Emphasis will be on individual art portfolio development. In addition, the creation of an online digital portfolio is covered in the class. **GOALS:** To create a portfolio that echoes professionalism at this level and that meets the requirements of institutions of higher education in art. A total of 15-20 pieces should represent the student’s best and most recent artwork. The portfolio should include examples of various

media while at the same time show an area of concentration and refinement. **PREREQUISITE:** Successful completion of Studio Art II or III. **COURSE CREDIT VALUE:** This course carries the value of a 0.75 credit. **EVALUATION:** Grades will be based on: class participation, portfolio projects, weekly critiques and discussions, and sketchbook entries, and a final digital portfolio.

ARTS & HUMANITIES

Art History - Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: Art History is a course that helps students explore in more depth the history of art and its contexts. The course gives a foundational understanding of art through the ages and around the world. Unique art projects complement the book/image studies. History comes *Alive* in the classroom with student project studies from Greek black-ware ceramics to Renaissance fresco painting and silver point drawing. **COURSE REQUIREMENTS:** 3-ring binder notebook, reading and writing will be an essential component of the class in addition to media projects. **TEXTS:** Art History- Stokstad, History of Art- Jansen; supplemental online and teacher created materials. **CREDIT VALUE:** This course carries the value of a 0.75 credit. **EVALUATION:** Grades for each marking period will be composed of: class participation, notebook, unit quizzes, and *History Alive* study projects. Only offered every other year – odd years.

ARTS & HUMANITIES

Graphic Design I – Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: Graphic Design I is an introduction to graphic arts using Adobe Design software in Illustrator and Photoshop. The course also gives students the opportunity to compete up to the state level in graphic design. Skills are developed from thumbnail drawings to complete printed graphic presentations. Students will learn how to apply the elements/principles of design to text and graphic art. Typography, Font Design, Logo design, Poster Design, and Package Design are all addressed in creating vectored images in this course. **TEXT:** Adobe Classroom in a Book, teacher generated tutorials and materials. **COURSE CREDIT VALUE:** This course carries the value of a 0.75 credit. **EVALUATION:** Grades will be earned with class participation, computer projects, sketches, and graphic design presentations.

ARTS & HUMANITIES

Graphic Design II – Grades 9-12

SEMESTER COURSE COURSE

DESCRIPTION: Graphic Design II will provide instruction in Graphic Design software programs in Adobe Design software. Students will learn specific photo editing skills, techniques, and effects that can be created in computer software. Photoshop is more acutely explored in depth in this course. Additional aspects of graphic design such as motion graphics and web layout are introduced. **TEXT:** Adobe Classroom in a Book, teacher tutorials, online tutorials, and teacher generated materials. **RECOMMENDATIONS:** Successful completion of Graphic Design I is strongly recommended. **COURSE CREDIT VALUE:** This course carries the credit value of a 0.75 credit. **EVALUATION:** Evaluations will come from software tutorial lessons, sketches, and project assignments and presentations.

BUSINESS TECHNOLOGY

ELECTIVE

Accounting 1 - Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: Accounting 1 prepares students for everyday accounting tasks such as keeping an updated balance in check registers, calculating deductions from paychecks, and calculating personal taxes. In addition, it teaches personal finance skills that students will use for the rest of their lives. **GOALS:** 1) acquire knowledge of basic accounting skills and concepts; 2) develop skills to prepare records for a sole proprietor and/or partnership up to and including financial statements at the end of a fiscal period; 3) acquire ability to prepare personal and financial records, including banking and taxes. **TEXT:** Century 21 Accounting- seventh ed. First-year course. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: projects: workbook assignments and tests

ELECTIVE

Advanced Accounting – Grades 11-12

SEMESTER COURSE

COURSE DESCRIPTION: This course expands on topics introduced in the first-year course while adding new topics about management accounting, cost accounting, not-for-profit accounting, and financial analysis. Technology is integrated throughout the course, (Automated Accounting) using the computer as a business tool. This course should be a prerequisite for those pursuing accounting careers or college business administration or any other career field that will require knowledge of accounting and modern business practices. **GOALS:** 1) show students the characteristics of various business structures such as proprietorships, corporations, and partnerships and the details of forming and dissolving such businesses 2) provide students with competitive event preparation for FBLA contests 3) students will learn how accounting concepts can be applied to real-world business situations 4) help students make ethical decisions 5) have students apply what they have learned to a real-world situation and analyze business results 6) examine careers in accounting and related fields, spotlighting educational requirements and future trends in the field of accounting **TEXT:** Thomson South-Western, Century 21 Accounting Advanced, 8th edition **RECOMMENDED PREREQUISITE:** A grade of 86% or better in Accounting 1 **COURSE REQUIREMENTS:** completion of Accounting 1 with teacher recommendation, extreme willingness to work on an independent basis is a must. **CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: projects, workbook assignments and tests. **This course can be taken as a Lackawanna College dual enrollment course, Principles of Accounting, ACC 105, additional application and cost required**

ELECTIVE

Automated Accounting – Grade 12

SEMESTER COURSE

COURSE DESCRIPTION: This course is intended for students who want to learn about computerized accounting principles. The course further broadens the basic knowledge of all business organizational forms with emphasis on the computer as a business tool. A number of simulations will be completed as well as additional concepts covered at the college level to include inventories, depreciation of assets, plant and equipment, and payrolls. Extensive use of spreadsheet accounting is used. It is intended as independent study with teacher supervision. **GOALS:** 1) to present and integrate accounting principles in such a way that no prior knowledge of computerized accounting is required, 2) to provide a hands-on approach to learning how modern computerized automated accounting systems function, and 3) to provide knowledge and hands-on experience in integrating accounting with other business applications such as spreadsheet and word processors. **TEXT:** Thomson South-Western, Century 21 Accounting 8.0 **RECOMMENDED PREREQUISITE:** A grade of 86% or better in Advanced Accounting **COURSE REQUIREMENTS:** completion of Advanced Accounting with teacher recommendation, extreme willingness to work on an independent basis is a must. **CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: computer projects – 30%; workbook assignments – 30%; tests – 40%.

ELECTIVE **Business Law - Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Business Law is the study of how the law affects the business of everyday life. A basic introduction to the court systems and criminal law is provided. **GOALS:** 1) provide students with basic knowledge of our legal system from creation to enforcement; 2) provide students with the ability to know when to contact a lawyer or other legal expert; 3) apply knowledge to the everyday legal situations that arise in one's personal life. **TEXT:** Law for Business and Personal Use. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include projects, tests and class participation.

ELECTIVE **Entrepreneurship - Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Entrepreneurship will provide the student with the knowledge and ability to organize and operate a retail business in the state of Pennsylvania. It shall include the planning, ordering, set-up, organization, preparation and cost of running a business. This course will also allow accounting, marketing and sales experience for those interested in pursuing those areas as a career. This course may also include other entrepreneurial experiences. **GOALS:** 1) Students will be knowledgeable in small business practices and 2) have the ability to follow procedures necessary to develop a small business. **TEXT:** various sources. **COURSE CREDIT VALUE:** This course carries the value of 0.75 credit. **EVALUATION:** Typical assessment for one marking period will include the following: tests, projects, and class participation.

ELECTIVE **Career Preparation – Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: This class focuses on preparing students to obtain a job. Students will learn how to prepare a resume, letter of application, complete job applications, etc. **GOALS:** Students will gain skills in career decision making, money management, financial security, credit management, resource management, risk management, and consumer rights and responsibilities. **TEXT:** Managing Your Personal Finances, 4th Ed. **COURSE CREDIT VALUE:** This course carries the value of 0.75 credit. **EVALUATION:** Typical assessments for this course include tests, projects, and class participation.

ELECTIVE **Personal Finance – Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: This class focuses on your role as a citizen, consumer, and active participant in the business world. The intent of the class is to inform you of your various financial responsibilities including balancing a checkbook, filing a tax return, and creating a budget **GOALS:** Students will gain skills in career decision making, money management, financial security, credit management, resource management, risk management and consumer rights and responsibilities. **TEXT:** Managing Your Personal Finances, 4th ed. **COURSE CREDIT VALUE:** This course carries a value of 0.75 credit. **EVALUATION:** Typical assessments for this course include tests, class participation, and projects.

COMMUNICATION TECHNOLOGY

ELECTIVE **Microsoft - Grades 9-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Microsoft II is designed to teach students in Grade 9 about Microsoft Office computer software applications as well as the aim of the class is to prepare students for life by teaching them how computers and business are related through many integrated projects whereby students use computer software to create business solutions. **GOALS:** 1) for students to become proficient in the following programs: Word, Excel, PowerPoint and business document formatting 2) for students to have the ability to go to any secondary school or job and demonstrate proficiency in the Microsoft Office Suite **TEXT:** Microsoft Office Applications **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: in-class assignments, business-style projects, quizzes, performance-based assessments, daily work/class participation. Final examination is comprised of a comprehensive production test and/or project.

ELECTIVE **Advanced Microsoft – Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Microsoft III is an elective course designed to introduce students to the advanced features of Microsoft Word and Excel, Introduction to database tool Access, planning a database, creating and modifying tables, filtering and querying concepts will be

covered. This program uses Desktop Publishing to create pages with the design elements such as: formatted text, photographs, lines and pictures. Students will create brochures, newsletter, memos, postcards, and more. Students will also learn basic elements of web page design using FrontPage. **PREREQUISITE-** Successful completion of Microsoft. **TEXT:** Microsoft Office Applications **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Grades will be based on evaluated daily work, quizzes and teacher-made tests and projects. Typical assessments for one marking period include but are not limited to: daily work/class participation; homework; production test (programming); objective test; debugging code and projects.

ENGLISH

CORE

English 9 - Grade 9

YEAR LONG COURSE

COURSE DESCRIPTION: Introduction to Communication is designed to prepare students to enter a two-year or four-year school following high school. Reading, writing, and language awareness are emphasized along with speaking and listening skills. The course includes assignments and assessments to improve skills needed for success in Keystone and SAT testing. **GOALS:** 1) write focused, well-developed multi-paragraph essays of different types 2) establish a foundation for vocabulary-building and an awareness of language to improve all communication skills 3) develop research skills 4) read critically and analyze pieces of literature in various length and genre. **COURSE REQUIREMENTS:** All students are required to take and keep notes. Students will also read appropriate selections of various length and genre, complete writing assignments, practice rhetoric, and participate in class discussions and individual and group projects. Students will complete the vocabulary program designated for this course. **TEXT:** Prentice Hall Literature, and Vocabulary Workshop Level D. **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments could include 1) tests, quizzes 2) oral and artistic presentations and projects 3) essays and research projects 4) original poetry, fiction, and creative nonfiction 5) reading response journals 6) homework and class participation.

CORE

Honors English I – Grade 9

YEAR LONG COURSE

COURSE DESCRIPTION: Honors English I is designed for very motivated students who have demonstrated high academic standards and advanced proficiency in language arts skills. Reading, writing, language awareness and usage, speaking and listening skills are incorporated in this accelerated learning environment. **GOALS:** 1) read critically, pieces of literature of various length and genre 2) complete written and oral analysis of literature 3) write well developed pieces employing organized, thorough, effective, and stylistic presentation 4) develop effective research skills. **RECOMMENDED PREREQUISITES:** Students must have earned a 90% or greater in previous English course or have teacher recommendation. **COURSE REQUIREMENTS:** All students must complete all assignments. This course requires summer reading of an assigned novel. Students are required to complete notes and complete advanced working including narrative, informative, persuasive and research writing as well as creative assignments. Various genres of literature will be studied including poetry, short story, drama and the novel. This course requires a total of 4 novels (summer reading, an independent/teacher approved novel, and 2 in class novels). **TEXT:** Prentice Hall Literature, Vocabulary Workshop Level D **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for one period include 1) tests and quizzes, 2) oral and artistic presentations and projects, 3) essays and research papers, 4) original poetry, fiction, and creative nonfiction 5) reading response journals, 6) homework and class participation. Each marking period grade and the final exam grade will be raised five points.

CORE

World Literature - Grade 10

YEAR LONG COURSE

COURSE DESCRIPTION: World Literature is designed to promote and develop effective reading, writing, and speaking skills. The course will cover literature from the Americas, Eastern and Western Europe, Africa, Asia, the South Pacific and the Middle East. Works by authors such as Leo Tolstoy or Miguel de Cervantes will be studied. Time periods include ancient China and Greece to the 20th century. Literary analysis and interpretation is emphasized. Building on the skills from Intro to Communications, the course will strengthen vocabulary knowledge in preparation for the SAT's. This course will focus heavily on skills needed for success in Keystone testing and SAT's. **GOALS:** 1) to foster critical thinking; 2) to improve reading, writing, and speaking skills; 3) to encourage and develop research skills. **PREREQUISITE:** Successful completion of 9th grade English. **COURSE REQUIREMENTS:** Students must read and analyze various forms of literature. In addition, students will complete various types of composition and vocabulary assignments, and keep a notebook current with class notes. **TEXT:** Prentice Hall Literature, Vocabulary Workshop Level E. **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for one marking period include the following: tests, quizzes, writing assignments, group presentations, research paper, and class participation.

CORE

Honors English II – Grade 10

YEAR LONG COURSE

COURSE DESCRIPTION: Honors English II is designed to develop and challenge effective reading, writing, and speaking skills. Building on skills from English I the course will improve and strengthen vocabulary knowledge in preparation for the SAT's. Literary analysis and interpretation is also emphasized. It is designed for students who plan to attend higher education. **GOALS:** 1) to improve critical thinking, 2) to challenge reading, writing, and speaking skills, 3) to encourage and develop research skills, 4) develop and improve working vocabulary, 5) build competency in interpretation and analysis of various literary genres, both fiction and non-fiction, both prose and poetry. **PREREQUISITE:** Students must have earned a 90% or greater in previous English course or have teacher recommendation. **COURSE REQUIREMENTS:** This course requires summer reading of an assigned novel. Students will read and analyze various forms of literature,

including novels read outside of class time. In addition, students will complete various types of composition assignments. **TEXT:** Prentice Hall Literature, Vocabulary Workshop Level E **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments could include tests and quizzes, homework, class participation and preparedness, and composition assignments. Most assessments are authentic and practical based on the student's completion of written and oral projects. Each marking period grade and the final exam grade will be raised five points.

CORE

American Literature - Grade 11

YEAR LONG COURSE

COURSE DESCRIPTION: American Literature is advanced writing, vocabulary development, critical analysis and research skills that are integrated within the framework of the study of American Literature. Since this is a survey course, the literature encompasses the poetry of the Native Americans to the drama of the modern theater. **GOALS:** 1) to understand the origin of American Literature and its direct connection to American History through the various time periods; 2) to improve writing skills through informative, critical, persuasive writing; 3) to develop a working vocabulary through a prescribed program and through the reading of literature. **PREREQUISITE:** Successful completion of 9th and 10th grade English **COURSE REQUIREMENTS:** All students are required to complete all assignments. In addition, students must read at least two fiction novels and a play by American authors and complete the assignments (i.e. writing/projects) given. Class participation and successful completion of all tests, writing assignments, and projects are an expectation. All students will do independent and cooperative small group work. **TEXT:** Prentice Hall Literature: The American Experience, Vocabulary Workshop Level F **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for one marking period include the following: homework, quizzes, daily assignments, tests, and writing assignments.

CORE

Honors English III - Grade 11

YEAR LONG COURSE

COURSE DESCRIPTION: Honors English III is based on the study of American Literature and is designed to prepare students for AP English. It includes but is not limited to the close, intense study of literary terms and techniques used in novels, dramas, short stories, and poetry. Students will also use a variety of writing techniques as they develop critical analysis essays of the literature studied. **GOALS:** 1) to understand the origin of American Literature and its direct connection to American History through various time periods; 2) to improve writing skills through informative, critical, analytical, and persuasive writing; 3) to develop a working vocabulary through a prescribed program and through the reading of literature; 4) to prepare to take the SAT's and AP English. **RECOMMENDED PREREQUISITE:** Students must have earned a 90% in previous English course or have teacher recommendation. **COURSE REQUIREMENTS:** All students must complete all assignments. This course also requires summer reading of an assigned novel. Students will continue using this journal as they will be required to select one novel each marking period from a recommend list to complete an independent reading assignment. Class participation and successful completion of all tests, writing assignments, and performance based assessments are an expectation. All students will participate in both independent and small group work. **TEXT:** Prentice Hall: The American Experience, Vocabulary Workshop Level F; various novels written by American authors from recommended reading lists in preparation for AP English. **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for one marking period may include but are not limited to the following: homework; quizzes, daily assignments, tests, writing assignments, and performance based assessments. Each marking period grade and the final exam grade will be raised five points. **This course can be taken as a Lackawanna College dual enrollment course for College Writing, English 105, additional application and cost required.**

CORE

British Literature - Grade 12

YEAR LONG COURSE

COURSE DESCRIPTION: British Literature is used as a framework for refining skills in reading, writing, speaking, listening, language awareness and research. Literature from various time periods is studied with a focus on the history and culture in which it was created, as well as the universality of the themes and relevance to modern life and popular culture. Regular vocabulary study will also be incorporated into the course. **GOALS:** 1) to understand the origin and development of the English language, literature, and culture 2) to strengthen communication skills through speech and writing (oral presentations, discussion, writing and revising) 3) to strengthen literal and critical comprehension 4) to foster critical thinking and supply the opportunity for analytic response 5) to prepare students for experiences of higher education literature and composition course. **PREREQUISITE:** successful completion of 9th, 10th and 11th grade English **COURSE REQUIREMENTS:** All students will be required to complete independent reading and writing assignments. Students will complete homework and participate in classroom discussions. Students will be give oral presentations and use media. Students will utilize the library and internet for research purposes. Cooperation and productivity is essential in group work and independent work for success. **TEXT:** The British Tradition, Vocabulary Workshop Level G- **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Individual and group projects, writing assignments, research, tests, quizzes, oral presentations, and homework.

CORE

Career English – Grade 12

YEAR LONG COURSE

COURSE DESCRIPTION: Career English is used as a framework for refining skills in reading, writing, speaking, listening, language awareness, and career expectations. Literature from the various time periods is studied with a link to the history and culture in which it was created, as well as the universality of the themes and relevance to modern life and popular culture. Regular vocabulary study will also be incorporated into the course. **GOALS:** 1) to understand the origin and development of the English language, literature, and culture 2) to strengthen communication skills through speech and writing (oral presentations, discussion, writing and revising) 3) to strengthen literal and critical comprehension 4) to foster critical thinking and supply the opportunity for analytic response 5) to prepare students for the

experiences for entry into the workplace through effective oral and written communication skills. **COURSE REQUIREMENTS:** All students will be required to complete independent reading and writing assignments. Students will complete homework, participate in classroom discussion. Students will give oral presentations and use media. Students will conceive, plan and create a career portfolio related to their field of interest or their field of vocational study. Students will utilize the library and internet for research purposes. Cooperation and productivity is essential in group work and independent work for success. **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Individual and group projects and presentations, writing assignments, career portfolio, tests, quizzes, oral presentations and homework.

CORE

AP English - Grade 12

YEAR LONG COURSE

COURSE DESCRIPTION: AP English is an advanced study of literature, thinking, and writing. Course work includes extensive discussion of literature designed to develop the student's ability to work independently, interpreting works of literature. **GOALS:** 1) read college-level literature critically and analytically; 2) plan, organize, and write college-level papers; 3) build self-confidence in time management and in completing college-level work. **RECOMMENDED PREREQUISITE:** Students must achieve a minimum of 90% in their previous English course or obtain teacher recommendation from both the 11th grade and Honors English teachers. **COURSE REQUIREMENTS:** Students participate in class discussion and activities, keep a reading journal during the summer and during each marking period, write and revise four to five papers per year, and complete four to five timed writings (essay tests) per year. **TEXT:** Vocabulary Workshop Level H **COURSE CREDIT VALUE:** The course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for one marking period include the following: papers, timed writings, independent reading journal, in class activities and vocabulary. The mid-term and final exam grades will consist, but is not limited to, at least two papers based on independent readings and vocabulary usage. Each marking period grade and the final exam grade will be raised five points. **SPECIAL CONSIDERATIONS:** This class is designed to prepare students to take the Advanced Placement English Literature Exam offered by the Educational Testing Service. The exam is typically offered each year during the month of May. Students are recommended, but not required to take the AP Exam. Satisfactory completion of the AP Exam may earn the student-advanced placement in college courses and/or college credits. Students who opt to take the AP Exam do so at their own expense. **This course can be taken as a Lackawanna College dual enrollment course for Intro to Literature, English 110, additional application and cost required.**

ELECTIVE

SAT Prep

SEMESTER COURSE

COURSE DESCRIPTION: The SAT Prep course is designed to help students prepare for the rigors of taking the PSAT and or SAT tests offered by the College Board. **GOAL:** The primary goal is to identify and implement test taking strategies using prerequisite knowledge to increase student performance. **COURSE REQUIREMENTS:** Students in this course should have passed Algebra 2 or be taking it concurrently. **COURSE CREDIT VALUE:** This course carries a credit value of 0.75 credits. **EVALUATION:** Typical assessments would include classwork, class participation, and tests with practice SAT questions. Students will split their time equally between math and English.

ELECTIVE

Journalism I - Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: Journalism is designed to develop newspaper writing skills, lay out and design, and an understanding of newspaper content and ethics. **GOALS:** 1) to develop writing skills; 2) to encourage thinking and reading; 3) to produce the school paper; 4) to understand fact and opinion. **COURSE REQUIREMENTS:** Students will write various types of news stories and advertisements to prepare for print. Layout, preparation of headlines, photography, and discussion of news ethics and responsibilities are also included in this course. **TEXT:** Press Time **COURSE CREDIT VALUE:** This course carries the credit value of one 0.75 credit. **EVALUATION:** Assessment is authentic. Students are graded on the following: lay out and design of the paper, writing assignments (news, editorial, features), photography, written and oral reports.

ELECTIVE

Journalism II – Grades 11-12

SEMESTER COURSE

COURSE DESCRIPTION: Journalism II is designed to enhance newspaper writing skills, layout and design, and an understanding of what the position of an editor entails. **GOALS:** 1) to develop writing skills 2) to mentor new journalism students 3) to produce the school paper 4) to understand the position of editor. **PREREQUISITE:** successful completion of Journalism I **COURSE REQUIREMENTS:** Students will write various types of news stories to prepare for print. They will also analyze and correct peer writing and act as a student editor. Layout, preparation of headlines, photography, and discussion of news ethics and responsibilities are also included. **TEXT:** Press Time **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits. **EVALUATION:** Assessment is authentic. Students are graded on the following: layout and design of the paper, writing assignments (news, editorial, features), and meet expectations for a student editor.

FAMILY AND CONSUMER SCIENCES

ARTS & HUMANITIES

Child Care I – Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: Child Care I will begin to prepare students for child-care related occupations, as well as for parenting. It will include instruction in prenatal development, childbirth, birth defects, growth and development of children, safety, developmentally appropriate activities for children, child abuse and neglect, dating violence and nutrition. Students will also work with the children in the Head Start classroom and take care of the baby simulator for 24 hours. **GOALS:** 1) to develop an understanding of the growth and development of

children; 2) to relate the developmental stages of children to appropriate care giving techniques, play and learning activities and behavior guidance; 3) to gain hands on experience working with young children; 4) to explore various child related careers. **COURSE REQUIREMENTS:** Students will be required to actively participate in classroom activities and discussions, as well as work in the Head Start classroom, and take care of the baby simulator for 24 hours. They will research an assigned birth defect and complete class projects. There will also be a final project where they will create learning activities for children. **TEXT:** The Developing Child and Working with Young Children. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits. **EVALUATION:** Grades will be based on, but not limited to, student performance in the following areas: class participation, quizzes, tests, and projects.

ARTS & HUMANITIES

Child Care II – Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: Child Care II will continue to prepare students for child-care related occupations as well as preparation for parenting. It will include instruction in the development of toddlers and preschoolers with a focus on various child development theorists. Students will work with the children in the Head Start classroom and take care of the baby simulator for 3 days. **GOALS:** To develop an understanding of the growth and development of children ages 2-5. **PREREQUISITES:** successful completion of Child Care I. **COURSE REQUIREMENTS:** Students will be required to actively participate in classroom activities and discussions, as well as work in the Head Start classroom, and take care of the baby simulator for 3 days. **TEXT:** Developing Child and Working with Young Children. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits. **EVALUATION:** Grades will be based on, but not limited to, student performance in the following areas: class participation, quizzes, tests, and projects.

ARTS & HUMANITIES

Child Care III – Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: Child Care III will continue to prepare students for child-care related occupations as well as preparation for parenting. It will include instruction in the development of toddlers and preschoolers. Students will learn about types of early childhood programs and careers, different types of assessment, developmentally appropriate activities for children, effective child guidance skills and recognizing child guidance problems, child development theorists, and comparing the physical, social, emotional, and intellectual development of 3, 4, and 5 year old children. Students will again work with the children in the Head Start classroom and take care of the baby simulator for 3 days. **GOALS:** 1) identify ways to keep children healthy and safe; 2) evaluate characteristics of a proper learning environment; 3) analyze methods to blend work and family responsibilities to meet the needs of children; 4) identify practices that develop a child's physical abilities as well as imagination, creativity and reading/writing skills; 5) to gain hands on experience working with young children in a lab setting. **PREREQUISITES:** successful completion of Child Care I and II. **COURSE REQUIREMENTS:** Students will be required to actively participate in classroom activities and discussions, as well as work in the Head Start classroom, and take care of the baby simulator for 5 days. **TEXT:** Developing Child and Working with Young Children. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits. **EVALUATION:** Grades will be based on, but not limited to, student performance in the following areas: class participation, quizzes, tests, and projects.

ARTS & HUMANITIES

Foods and Nutrition I –Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: Foods and Nutrition I will include instruction on the history of food, our nutritional needs, and how to make healthy food choices. The main focus will be on American cuisine, applying basic cooking principles and techniques, as well as, acquiring fundamental kitchen skills and equipment use. Students will learn and practice safety and sanitation safeguards while preparing delicious foods in this lab-based course. Students will learn through teacher demonstration and laboratory experiences, along with the use of a textbook that provides a base of culinary information. **GOALS:** 1) to prepare students with entry-level skills to enter food service employment; 2) to prepare students for independent living; 3) to help students understand the importance of good nutrition; 4) develop the teamwork skills necessary for future employment; 5) begin to understand the chemistry of cooking. **COURSE REQUIREMENTS:** Students will be required to work in all capacities in the kitchen while complying with Dept. of Health regulations. Students will be required to complete and pass several mandatory tests with an 80% or better to advance to cooking labs. **TEXT:** Food for Today. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits. **EVALUATION:** Grades will be based on, but not limited to class participation, quizzes and tests, class assignments, and cooking labs. Science, math, and communication skills are reinforced throughout this course experience.

ARTS & HUMANITIES

Foods and Nutrition II – Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: Foods and Nutrition II will be a continuation of Foods and Nutrition I, including instruction on the history of food, our nutritional needs, and how to make healthy food choices. The main focus will be on American cuisine, applying basic cooking principles and techniques, as well as, acquiring fundamental kitchen skills and equipment use. Students will learn and practice safety and sanitation safeguards while preparing delicious foods in this lab-based course. Students will learn through teacher demonstration and laboratory experiences, along with the use of a textbook that provides a base of culinary information. **GOALS:** 1) to prepare students with entry-level skills to enter food service employment; 2) to prepare students for independent living; 3) to help students understand the importance of good nutrition; 4) develop the teamwork skills necessary for future employment; 5) begin to understand the chemistry of cooking. **COURSE REQUIREMENTS:** Students will be required to work in all capacities in the kitchen while complying with Dept. of Health regulations. Students will be required to complete and pass Foods and Nutrition I with at least an 80% or better. **TEXT:** Food for Today. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits. **EVALUATION:** Grades will be based on, but not limited to class participation,

quizzes and tests, class assignments, and cooking labs. Science, math, and communication skills are reinforced throughout this course experience.

ARTS & HUMANITIES

Foods and Nutrition III – Grades 11-12

SEMESTER COURSE

COURSE DESCRIPTION: This class is for the student who enjoys cooking and wants to explore advanced culinary techniques, hone their knife skills through multiple labs, and advance their palate by taking a culinary tour of a variety of nations. Through exploration, students will become familiar with the diverse customs that influence the food habits of people throughout the world. Students will gain an appreciation for the diverse cuisines and cultures of the world. **GOALS:** 1) To develop an understanding of international foods; 2) Continue to advance cooking skills; 3) Prepare students for independent living; **RECOMMENDED PREREQUISITE:** Students will have completed Foods and Nutrition I and II with an 80% or better. **COURSE REQUIREMENTS:** Students will be required to work in all capacities in the kitchen while complying with Dept. of Health regulations. Students will need to design and complete a cookbook filled with the recipes they have cooked throughout the semester, as well as, prepare a three-course meal of their choosing at the end of the semester. **TEXT:** Cooking Essentials. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits. **EVALUATION:** Grades will be based on, but not limited to, student performance in the following areas: class participation, tests and quizzes, projects, classroom assignments, cooking labs, and individual cookbooks.

FOREIGN LANGUAGE

ARTS & HUMANITIES

German I - Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: German I is an introductory level foreign language class that will introduce the student to basic vocabulary, elementary sentence structure and conversation, and the culture of German-speaking countries. **GOALS:** 1) establish a working vocabulary for every day situations and items; 2) understand written and spoken German and appropriately respond to the information; 3) compare and contrast American society to German speaking societies. **COURSE REQUIREMENTS:** Students must be self-motivated to continually review concepts covered in class to build a strong foundation for language development. Because of the oral component of the curriculum, active classroom participation is essential for success. **TEXT:** Deutsch Aktuell 1. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessment for one marking period includes the following: listening comprehension and written unit tests; oral readings; quizzes; homework and class participation.

ARTS & HUMANITIES

German II - Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: German II continues to build the student's vocabulary, focuses on more complicated sentence structure and conversational skills, and increases knowledge of cultural aspects of German speaking countries. **GOALS:** 1) increase active vocabulary for every day situations; 2) display in written and spoken German an understanding of more difficult sentences and forms for the past tenses; 3) delve further into the culture of the German speaking countries. **RECOMMENDED PREREQUISITE:** In order to take this course student must attain a 77% grade average in German I or secure teacher permission. **COURSE REQUIREMENTS:** It is necessary for students to constantly review class work to ensure success with oral and written communication skills. Frequent class participation is expected. **TEXT:** Deutsch Aktuell I. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessment for one marking period will include the following: listening comprehension and written unit tests; oral readings; quizzes; homework and class participation.

ARTS & HUMANITIES

German III - Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: German III includes more specialized vocabulary, more complex sentence structure and conversational situations, and a closer look at the people of the German speaking countries. **GOALS:** 1) use new vocabulary in spoken and written German; 2) demonstrate the ability to use complex sentences in spoken and written German; 3) acquire additional knowledge about speakers of German. **RECOMMENDED PREREQUISITE:** In order to take this course the student must attain a 77% average in German II or secure teacher permission. **COURSE REQUIREMENTS:** Frequent class participation is required in order to achieve success with communication skills. **TEXT:** Deutsch Aktuell II. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessment for one marking period will include the following: listening comprehension and written unit tests; oral readings; quizzes; homework and class participation.

ARTS & HUMANITIES

German IV – Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: German IV's focus is on a grammar review, development of a reading vocabulary, increased oral communication, and an in-depth study of many aspects of German life. **GOALS:** 1) improve and apply grammar knowledge in written and oral German; 2) build a passive reading vocabulary; 3) examine closely the German people (their history, geography, politics, economics, occupations, leisure time activities). **RECOMMENDED PREREQUISITE:** In order to take this course the student must attain 77% grade average in German III or secure teacher permission. **COURSE REQUIREMENTS:** It is absolutely essential for success in this course for the student to be involved to the highest degree in class participation. **TEXT:** Deutsch Aktuell II. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessment for one marking period includes the following: listening comprehension and written unit tests; quizzes; homework and class participation.

ARTS & HUMANITIES**Spanish I – Grades 9-12****SEMESTER COURSE**

COURSE DESCRIPTION: Spanish I is an introductory level foreign language class that focuses on basic vocabulary, grammar and culture. **GOALS:** 1) understand elementary spoken and written Spanish; 2) converse about everyday situations; 3) understand and apply basic grammatical structure. **COURSE REQUIREMENTS:** Students need to practice aloud nightly. Frequent practices of relatively short duration produce the best results. **TEXT:** Realidades 1 **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** During the course of each marking period, each individual class will be informed of the value of the assessments conducted in the course of the marking period. These include class participation, homework, tests and quizzes.

ARTS & HUMANITIES**Spanish II - Grades 9-12****SEMESTER COURSE**

COURSE DESCRIPTION: Spanish II reviews everything from Spanish I and expands communication skills, both oral and written. Students learn to understand and communicate in new verb tenses, especially past tense. **GOALS:** 1) participate in conversation requiring more than an elementary response; 2) read stories and legends; 3) apply more abstract grammar, such as tense and pronouns. **RECOMMENDED COURSE REQUIREMENTS:** Students need to practice aloud at frequent intervals. In order to internalize speech patterns, they need to be attentive and involved in class activities. **TEXT:** Realidades 1 **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** During the course of each marking period, each individual class will be informed of the value of the assessments conducted in the course of the marking period. These include class participation, homework, tests and quizzes.

ARTS & HUMANITIES**Spanish III - Grades 10-12****SEMESTER COURSE**

COURSE DESCRIPTION: Spanish III reviews Spanish I and II material, involves new verb tenses and moods, such as future and subjunctive. Practical vocabulary is greatly expanded. The geography, culture, and history of Spain are studied. **GOALS:** 1) participate in involved conversational situations; 2) read adapted short stories in Spanish; 3) learn the concept of the mood, specifically subjunctive; 4) know Spain's geography, history, and culture. **RECOMMENDED PREREQUISITE:** In order to take this course the student must have a 77% grade point average in Spanish II or teacher permission. **COURSE REQUIREMENTS:** Students need to work together on oral tasks. They will consciously understand and manage speech patterns and grammatical structure. **TEXT:** Realidades 2 **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** During the course of each marking period, each individual class will be informed of the value of the assessments conducted in the course of the marking period. These include class participation, homework, tests and quizzes.

ARTS & HUMANITIES**Spanish IV - Grade 10-12****SEMESTER COURSE**

COURSE DESCRIPTION: Spanish IV reviews selected knowledge as determined by the class and instructor. Communication should become more comfortable and automatic. **GOALS:** 1) initiate oral communication and learn new oral strategies; 2) expand and master everyday and situation vocabulary; 3) read world news and literature in Spanish. **RECOMMENDED PREREQUISITE:** In order to take this course the student must have a 77% grade point average in Spanish III or teacher permission. **COURSE REQUIREMENTS:** Self-motivation is necessary for success in this. Students need to assess their strengths and weaknesses, and together as a class, choose skills, vocabulary topics, etc. which need to be expanded and/or developed. **TEXT:** Realidades 2 Resource materials are used as needed. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** During the course of each marking period, each individual class will be informed of the value of the assessments conducted in the course of the marking period. These include class participation, homework, tests and quizzes.

MATHEMATICS**CORE****Algebra - Grade 9****YEAR LONG COURSE**

COURSE DESCRIPTION: Algebra I builds an understanding of real numbers by using symbolic, graphic, and numeric representations as they solve equations and inequalities. Students will work with scatter plots and functions to model two-variable, or bivariate data. They will use tables, graphs, verbal rules, and symbolic rules to describe linear, quadratic, and exponential functions. Students will begin to use geometric models with proportions, percent, and probability. They will make decisions about appropriate scales with graphical representations of data. Students will also solve equations using the properties of real numbers and of equality to justify their steps. They will use algebra to develop formulas for geometric measurements and to describe statistical relationships (lines of best fit). Finally, the students will gain facility in graphing these families of functions: linear, quadratic, exponential and rational functions. **GOALS:** 1) understand the processes of algebraic manipulation and computation; 2) solve real and imagined problems by applying algebraic skills; 3) to prepare students to successfully complete the Keystone Exam **REQUIREMENTS:** Scientific calculator (TI-83 graphing calculator would be very helpful). **TEXT:** Prentice Hall – Algebra 1 Common Core. **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Assessments may include but are not limited to tests, quizzes, laboratory activities, journal, notebook, homework, class participation reports and writing assignments.

CORE**Advanced Algebra - Grades 9, 10****SEMESTER COURSE**

COURSE DESCRIPTION: This is a semester course that extends the topics of Algebra. Since emphasis on mathematical structure must be combined with training in systematic techniques to produce good results, this course will present material in depth on the solving and graphing of linear equations and inequalities and systems of linear equations and inequalities. Polynomial operations, the laws of exponents, and manipulation of radicals are also important topics in mathematics that will be presented in this course. **GOALS:** 1.) to enable students to

become successful mathematical problem solvers; 2.) to apply algebraic concepts to abstract problems in all areas including required science courses; 3.) to prepare students for Pre-Calculus/Trigonometry; 4.) to prepare students to successfully complete Keystone exams. **PREREQUISITES:** successful completion of Algebra. **COURSE REQUIREMENTS:** a TI-83 plus graphing calculator is needed and will be used in this class. **TEXTBOOK:** Pearson - Algebra 2 Common Core. **EVALUATION:** Assignments may include but are not limited to tests, quizzes, laboratory activities, notebook, homework, class participation and report/writing assignments. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits.

CORE **Algebra II – Grades 9, 10** **SEMESTER COURSE**
COURSE DESCRIPTION: This is a semester course that extends the topics of Algebra and Advanced Algebra. Since emphasis on mathematical structure must be combined with training in systematic techniques to produce good results, this course will present material in depth on the solving and graphing of non-linear equations and functions. Knowledge of the Fundamental Theorem of Algebra, and complex numbers will be applied in the solving of higher order equations. The composition of functions and inverse equations are also important topics in mathematics that will be presented in this course. **GOALS:** 1.) to enable students to become successful mathematical problem solvers; 2.) to apply algebraic concepts to abstract problems in all areas including required science courses; 3.) to prepare students for Pre-Calculus/Trigonometry. **PREREQUISITE:** successful completion of Advanced Algebra. **COURSE REQUIREMENTS:** a TI-83 plus graphing calculator is needed and will be used in this class. **TEXTBOOK:** Pearson - Algebra 2 Common Core. **EVALUATION:** Assignments may include but are not limited to tests, quizzes, laboratory activities, notebook, homework, class participation and report/writing assignments. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credits.

CORE **Concepts of Algebra – Grade 10** **YEAR LONG COURSE**
Course Description: Concepts of Algebra II is a continuation of Algebra I with an emphasis on the development of the connections between algebraic and geometric concepts and practical applications. **TOPICS:** Tools of Algebra, Functions, Equations and Graphs, Linear Systems, Matrices, Quadratic Equations and Functions, Polynomials and Polynomial Functions and Right Triangle Trigonometry. **GOALS:** 1.) to enable students to become capable problem solvers; 2.) to apply linear and non-linear algebraic concepts to real life situations; 3.) to prepare students to successfully complete Keystone exams. **PREREQUISITE:** successful completion of Algebra I. **COURSE REQUIREMENTS:** It would be helpful for students to have a TI-84 plus graphing calculator. **TEXT:** Pearson Algebra 2 Common Core. **COURSE CREDIT VALUE:** The course carries the value of 1.5 credits. **EVALUATION:** Assignments may include but are not limited to tests, quizzes, laboratory activities, notebook, homework, class participation and report/writing assignments.

CORE **Geometry – Grades 10-11** **YEAR LONG COURSE**
COURSE DESCRIPTION: Geometry is an in-depth study of Euclidean geometry with some elements of solid and coordinate geometry. Goals: 1) Identify, name, and measure figures in geometry such as points, lines, planes, segments, rays, and angles, 2) determine the components, truth value, and converse of conditional statements, 3) investigate relationships within and between simple, isosceles, equilateral, and right triangles, 4) apply reasoning to prove theorems as well as congruence, 5) investigate relationships within quadrilaterals, 6) determine the measures of segments, angles, and arcs of a circle as well as its equation. **COURSE REQUIREMENTS:** a scientific calculator for class use. **PREREQUISITE:** Successful completion of Algebra I and Algebra II or Honors Algebra. **TEXT:** Pearson – Geometry Common Core. **COURSE CREDIT VALUE:** The course carries the value of 1.5 credits. **EVALUATION:** Assessments may include but are not limited to tests/quizzes, laboratory activities, journal, notebook, homework, class participation, and reports/writing assignments.

CORE **Concepts of Geometry – Grades 11-12** **YEAR LONG COURSE**
COURSE DESCRIPTION: Concepts of Geometry is a study of the basic concepts of Euclidean geometry with some elements of solid and coordinate geometry. **GOALS:** 1) Identify, name, and measure figures in geometry such as points, lines, planes, segments, rays, and angles, 2) determine the components, truth value, and converse of conditional statements, 3) investigate relationships within and between simple, isosceles, equilateral, and right triangles, 4) investigate relationships within quadrilaterals, 5) determine the measures of segments, angles, and arcs of a circle. **COURSE REQUIREMENTS:** a scientific calculator for class use. **PREREQUISITE:** Successful completion of Algebra I and Concepts of Algebra II. **TEXT:** Pearson – Geometry Common Core. **COURSE CREDIT VALUE:** The course carries the value of 1.5 credits. **EVALUATION:** Assessments may include but are not limited to tests/quizzes, laboratory activities, journal, notebook, homework, class participation, and reports/writing assignments.

CORE **Pre-Calculus and Trigonometry - Grades 11-12** **YEAR LONG COURSE**
COURSE DESCRIPTION: This full year course continues the development begun in the Algebra I and Algebra II courses. It will help students truly understand the fundamental concepts of algebra, trigonometry, and analytic geometry. Pre-Calculus will also foreshadow important ideas of calculus, and finally show how algebra and trigonometry can be used to model real-life problems. **GOALS:** 1) to develop a thorough understanding of algebra, geometry and trigonometry; 2) to apply concepts of pre-calculus to real life problems; 3) to help build an intuitive foundation for calculus. **PREREQUISITES:** Successful completion of Algebra 2 and Geometry **COURSE REQUIREMENTS:** All students are encouraged to purchase their own TI-84+ calculators to be used in this class. This course is recommended for all college-bound students following a successful completion of Algebra II. **TEXT:** Prentice Hall: Pre-Calculus, Graphical, Numerical, Algebraic

COURSE CREDIT VALUE: This course carries the credit value of 1.5 credits. **EVALUATION:** Assessments may include but are not limited to tests, quizzes, laboratory activities, journalism, notebooks, homework, class participation, reports, writing assignments and projects.

CORE **Trigonometry – Grades 11-12** **YEAR LONG COURSE**

COURSE DESCRIPTION: This full year course is a study of radian and degree measures of angles. The students will define and graph trigonometric functions and their inverses. They will solve triangle equalities and use applications that include: identities, laws of sine, laws of cosine, vectors in the plane, and polar coordinates. **GOALS:** 1) to convert from radian to degree measure and vice versa 2) develop a understanding of the trig functions and their inverses 3) apply the laws of sine and cosine 4) graph vectors in the plane and polar coordinates 5) prepare students for Precalculus. **PREREQUISITE:** successful completion of Geometry and Algebra 2 or Honors Algebra. **COURSE REQUIREMENTS:** TI-84+ plus calculator of their own **TEXT:** Prentice Hall - Trigonometry **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Assessments may include but are not limited to tests, quizzes, laboratory activities, journalism, notebooks, homework, class participation, reports, writing assignments and projects.

COURSE **Probability and Statistics – Grades 11-12** **YEAR LONG**

COURSE DESCRIPTION: Probability and Statistics is designed for students who wish to complete a course in introductory statistics. This course will introduce students to the collection, organization, analysis, and interpretation of data. **GOALS:** 1) Summarize, represent, and interpret data, 2) compute probabilities of simple and compound events 3) construct probability distributions for discrete random variables, 4) compute probability by determining the area under the curve of a continuous distribution, 5) use a sample to construct a confidence interval for a parameter, 6) test a hypothesis about a parameter and make a decision based on the outcome. **COURSE REQUIREMENTS:** TI-84 graphing calculator for class use. **PREREQUISITE:** Students must be motivated, responsible, independent learners who have successfully completed Algebra II and Geometry. **TEXT:** Prentice Hall - Elementary Statistics **COURSE CREDIT VALUE:** The course carries the value of 1.5 credits. **EVALUATION:** Assessments may include but are not limited to tests/quizzes, laboratory activities, journal, notebook, homework, class participation, and reports/writing assignments. **This course can be taken as a Lackawanna College dual enrollment course for Statistics and Data Analysis, MAT 135, additional application and cost required.**

COURSE **AP Calculus – Grades 12** **YEAR LONG COURSE**

COURSE DESCRIPTION: AP Calculus deals with functions that behave continuously or smoothly. The discreet operations of calculators can help students understand the idea of limit, on which the continuous behavior of functions in calculus is based. Students will also get a feeling for what the rate of change of a function means. Perhaps the most significant thing students will find is that the calculator gives them ways to resolve real world calculus problems approximately, using graphs and tables of values, before they have developed all of the algebraic techniques needed for exact solution. **GOALS:** 1) learn how to do calculus; 2) develop the ability to write about mathematics; 3) identify the four concepts of calculus; 4) apply concepts of calculus to real world calculus problems; 5) prepare for the AP Calculus Examination. **RECOMMENDED PREREQUISITE:** Completion of Pre-Calculus with at least a 90% average. Other students will be considered with a teacher recommendation. **COURSE REQUIREMENTS:** All students are asked to purchase their own graphing calculator (TI-84 Plus) to be used in class. Students will keep a notebook recording the concepts and techniques. Students must be motivated, highly responsible and be good independent learners. **TEXT:** Prentice Hall Calculus **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Assessments may include but are not limited to tests/quizzes, laboratory activities, journal, notebook, homework, class participation and reports/writing assignments. **This course can be taken as a Lackawanna College dual enrollment course for Calculus, MAT225, additional application and cost required.**

COURSE **Practical Math Applications – Grade 12** **YEAR LONG COURSE**

COURSE DESCRIPTION: Practical Math Applications provide students with a history reinforcement of Algebra 1, Algebra 2 and Geometry theory which you can put to use in their daily lives. It will combine basic algebraic functions with geometric shapes and basic problem solving skills. The course is intended to reintroduce mathematics theory which the students will then apply to daily activities such as personal finance, mortgage and interest rates, loans, construction and remodeling. **GOALS:** 1) reinforce basic Algebra 1, Algebra 2 and Geometry theory 2) apply the mathematics theory to daily activities 3) build problem solving and decision making skills **PREREQUISITE:** must have successfully completed Algebra 1, Algebra 2, and Geometry **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** tests, quizzes, projects, notebook, homework and class participation.

ELECTIVE **SAT Prep - Grades 10-11** **SEMESTER COURSE**

COURSE DESCRIPTION: The SAT Prep course is designed to help students prepare for the rigors of taking the PSAT and or SAT tests offered by the College Board. **GOAL:** The primary goal is to identify and implement test taking strategies using prerequisite knowledge to increase student performance. **COURSE REQUIREMENTS:** Students in this course should have passed Algebra 2 or be taking it concurrently. **COURSE CREDIT VALUE:** This course carries a credit value of 0.75 credits. **EVALUATION:** Typical assessments would include classwork, class participation, and tests with practice SAT questions. Students will split their time equally between math and English.

MUSIC

ARTS & HUMANITIES**Senior High Choir – Grades 9-12****SEMESTER COURSE**

***Students may elect to take this 1 or 2 semesters per year**

COURSE DESCRIPTION: Senior High Choir is a large performance group introducing a variety of vocal literature, developing ensemble and solo performance skills through continuous vocal performance skills. **GOALS:** 1) develop ensemble and small group performance skills through vocal literature; 2) develop proper stage deportment for performance; 3) acquire individual musical excellence and mastery of the individual voice 5) there will be a preparation and performance required for each marking period. **COURSE REQUIREMENTS:** Students must be motivated to participate in small and large group instruction. All students will do individual written evaluations of Holiday Concert and Spring Concert. Students must attend sectional rehearsals as per a pullout rehearsal schedule. **TEXT:** Various choral and musical theatre literatures. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: class participation/performances/evaluations.

ARTS & HUMANITIES**Senior High Band - Grades 9-12****SEMESTER COURSE**

***Students may elect to take this 1 or 2 semesters per year**

COURSE DESCRIPTION: Senior High Band is a large performance group introducing a variety of instrumental literature, developing ensemble and solo performance skills through continuous instrumental performance skills. **GOALS:** 1) develop ensemble and small group performance skills through instrumental literature; 2) develop proper stage deportment for performance; 3) acquire individual musical excellence and mastery of instrument 4) there will be a preparation and performance required for each marking period. **COURSE REQUIREMENTS:** Students must be motivated to participate in small and large group instruction. All students will do individual written evaluations of Holiday Concert and Spring Concert. Students must attend sectional rehearsals as per a pullout rehearsal schedule. The school will provide larger instruments. The student must provide smaller instruments. **TEXT:** Various band literatures. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: class participation/performances/evaluations.

ARTS & HUMANITIES**Foundations of Music – Grades 9-12****SEMESTER COURSE**

COURSE DESCRIPTION: Students will explore careers in music and how music influences health, history and society. **GOALS:** Students will identify and explore how music is connected to their lives and the world in which they live. **COURSE REQUIREMENTS:** notebook/journal, completion of assignments and assessments **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** tests, quizzes, written critiques, class work, and experiments.

ARTS & HUMANITIES**Music Theory I – Grades 9-12****SEMESTER COURSE**

COURSE DESCRIPTION: Music Theory I is the study of music notation and the basic fundamentals of music writing. This course provides a study of theory and technique, style and interpretation. **GOALS:** 1) understand the basic fundamentals of music; 2) identify the components of music writing; 3) experience and create music composition. **COURSE REQUIREMENTS:** Students must be motivated to participate in group discussions and to conduct individual research. A notebook and music portfolio must be maintained in this class. All students will do independent as well as small group work. **TEXT:** Essentials of Music Theory, Book 1 and 2 – a programmed text, Master Theory Series-Books 1-4. **RECOMMENDED PREREQUISITE:** Teacher approval. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: objective/quizzes, original composition, class participation and classwork.

ARTS & HUMANITIES**Music Theory II – Grades 10-12****SEMESTER COURSE**

COURSE DESCRIPTION: Music Theory II is the study of advanced music notation and fundamentals of music writing. This course provides a study of theory, technique, style and interpretation. This is specially designed for the students planning to continue their education in the field of music. **GOALS:** 1) understand the advanced fundamentals of music; 2) identify the components of advanced music writing; 3) experience and create music composition. **PREREQUISITE:** Music Theory I or teacher recommendation. **COURSE REQUIREMENTS:** Students must be motivated to participate in-group discussions and to conduct individual research. A notebook and music portfolio must be maintained in class. All students will do independent as well as small group work. **TEXT:** Tonal Harmony– a programmed text; Master Theory Series – Books 5-6; teacher prepared materials. **RECOMMENDED PREREQUISITE:** Teacher approval. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: objective/quizzes, original composition, class participation and classwork.

ARTS & HUMANITIES**Voice Class – Grades 9–12****SEMESTER COURSE**

COURSE DESCRIPTION: Voice Class is the study of the human voice and its uses. This course provides a study of theory and technique, style and interpretation, pedagogy, and song repertoire. **GOALS:** 1) understand the basic fundamentals of music; 2) understand the physical components of the human voice and how it works; 3) experience individual and small ensemble performance; 4) expand vocal literature and gain universal discipline for performance. **COURSE REQUIREMENTS:** Students must be motivated to participate in solo and small ensemble presentations. A notebook and music portfolio must be maintained in class. All students will do independent as well as small group work. All students will do individual work as part of a year-end concert. **RECOMMENDED PREREQUISITE:** Teacher approval.

COURSE CREDIT VALUE: This course carries the credit value of 0.75 credit. **TEXT:** The Singing Book **EVALUATION:** Typical assessments for one marking period include the following: individual vocal progress, objective/quizzes, class participation and small ensemble progress.

PHYSICAL EDUCATION/HEALTH

PE & HEALTH

Adapted Physical Education – Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: Adapted Physical Education is a course of activities, games, and sports suited to the needs, abilities, and limitations of students with disabilities who may not engage in the regular physical education class. Each student's program will be based on the applicable need of the individual. **GOALS:** 1) students will develop the applicable skills within their individual program; 2) students will develop an understanding of the values of physical education and recreation as a worthy use of leisure time; 3) students will become successful citizens by developing physically, mentally, emotionally, and socially through the physical education program. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: skill tests, written tests, and participation/preparation.

PE & HEALTH

Weightlifting - Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: This course is designed to help each student: improve muscular strength; gain knowledge and understanding of weight training theory and practice; develop a personalized weight training program. **GOALS:** 1) To understand basic anatomy and application of exercise physiology. 2) To gain fundamental knowledge of physiological principles: strength training benefits, strength training effects, strength training principles 3) To develop an individualized program based upon students goals: Emphasizing either muscle strength, muscle endurance, muscle size, muscle flexibility or a combination of any. **COURSE CREDIT VALUE:** This course carries the credit value 0.75 credit. **COURSE REQUIREMENTS:** appropriate attire for activity as described in the PE guidelines **EVALUATION:** PE Dept. Rubric, Written Test / Quizzes based on the guideline set forth by NASPE, regular participation at a health-enhancing level, responsible personal and social behaviors, following PE rules and procedures.

ELECTIVE

Archery Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: This course follows the curriculum for the National Archery in the School Program. It appeals to students of all ability levels and promotes a lifetime sport of archery. **GOALS:** NASP teaches a lifetime skill. Emphasis is focusing on the teaching and skills. Students will understand the importance of safety and identify how the range is safely operated. Students will work together in scoring. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Tests, quizzes, self and peer evaluations, scoring, and participation.

PE & HEALTH

Physical Education – Grades 9

SEMESTER COURSE

COURSE DESCRIPTION: Through a variety of physical education activities, this course will address and expand on movement skills, and movement knowledge, comprehensive coursework in fitness foundations, using the Presidential Fitness test and using the five components of fitness. Students will analyze and assess their personal fitness level. The major emphasis of study is fitness, team sports, individual sports and cooperative games. **GOALS:** 1) students will participate in games that are challenging and involve risk-taking and problem solving; 2) students will be able to demonstrate physical movements using mature movement patterns. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **COURSE REQUIREMENTS:** appropriate attire for activity as described in the PE guidelines **EVALUATION:** PE Dept. Rubric, Written Test / Quizzes. Based on the guideline set forth by NASPE including competency in motor skills and movement concepts, regular participation at a health-enhancing level, responsible personal and social behaviors, following PE rules and procedures.

PE & HEALTH

Health I – Grade 10

MARKING PERIOD COURSE

COURSE DESCRIPTION: Health I is designed to educate students in the basic concepts of social interaction skills, decision-making skills, analyzing personal beliefs and values, developing self-concept and identity, relationships / dating, relationship violence and abuse, human sexuality, STI/STD's contraception and pregnancy. *Students will also learn proper safety skills in regards to properly operating a vehicle through driver's safety.* **GOALS:** 1) students will develop an awareness of themselves and will learn to express their opinion about what is acceptable and unacceptable young adult social behavior; 2) thorough understanding of human sexuality. **COURSE CREDIT VALUE:** This course carries the credit value of .375 credit **COURSE REQUIREMENTS:** Completion of class work and homework assignments, bringing materials to class, participation in discussions and demonstrating proficiency in various assessments. **TEXT:** "Too Good for Drugs" Curriculum. Teacher created workbooks. **EVALUATION:** Completed homework/classroom assignments, projects, quizzes and tests.

ELECTIVE

Lifetime Fitness Team Sports – Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: The goal of this course is to promote physical fitness through a variety of lifetime fitness activities and sport units. Students will experience opportunities that promote physical literacy and lifetime wellness. Fitness activities will include weight training, yoga, Pilates, walking/jogging and other group exercises. Sports activities will focus on team sports and include Ultimate Frisbee, Football, Volleyball, Nitroball, Soccer, Basketball, Handball, Dodgeball, Tchoukball, Broomball, Kickball, and Softball/Wiffleball. **GOALS:** 1) To help improve physical, mental, emotional, and social fitness, 2) Injury prevention, 3) Promote positive self-image, confidence, and mental

toughness, 3) To provide students with the knowledge and ability to incorporate a health and fitness, program into their daily lives, 5) Nutritional Awareness, 6) Foster leadership skills. **COURSE CREDIT VALUE:** The course carries the credit value of 0.75 credit. **COURSE REQUIREMENTS:** Completion of assignments and assessments. **EVALUATION:** Typical assessment for one marking period will include: class participation, skill demonstrations, knowledge based on quizzes and tests, and projects, presentations, and homework.

ELECTIVE **Lifetime Fitness Individual Sports – Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: The goal of this course is to promote physical fitness through a variety of lifetime fitness activities and sport units. Students will experience opportunities that promote physical literacy and lifetime wellness. Fitness activities will include weight training, yoga, Pilates, walking/jogging and other group exercises. Sports activities will focus on individual sports and include Badminton, Pickleball, Ping Pong, Cornhole, Spikeball, Gagaball, Badminton, Frisbee Golf, KanJam, Flimsee, Ladder Golf, Four Square, Bocce, Horseshoes, Darts, and Shuffleboard. **GOALS:** 1) To help improve physical, mental, emotional, and social fitness, 2) Injury prevention, 3) Promote positive self-image, confidence, and mental toughness, 3) To provide students with the knowledge and ability to incorporate a health and fitness, program into their daily lives, 5) Nutritional Awareness, 6) Foster leadership skills. **COURSE CREDIT VALUE:** The course carries the credit value of 0.75 credit. **COURSE REQUIREMENTS:** physical education attire **TEXT:** Fitness for Life **EVALUATION:** class participation, skill demonstrations, knowledge based on quizzes and tests, projects, presentations and homework.

ELECTIVE **Outdoor Adventure Education – Grades 9-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Outdoor education can be simply defined as experiential learning in, for, or about the outdoors. It is very important that students have a genuine affinity for the outdoors as most of the lessons will take place outdoors. The course content and activities are designed to help students develop team cooperation, trust, communication skills, and problem solving skills through alternative forms of lifetime fitness. Students will also participate in activities to prepare them for a wide range of outdoor pursuits, including wilderness survival and safety skills. Throughout the activities the students will enhance their personal development and will be challenged to face their own perceived limitations. Teamwork, trust, and leadership are developed by working, playing, and accomplishing goals together. **GOALS:** 1) Team Building 2) positive attitudes and relationships toward peers 3) effective communication 4) foster leadership skills 5) cooperation skills. **COURSE REQUIREMENTS:** physical education attire (sneakers, shorts/sweatpants, T-shirt/ sweatshirts). **COURSE CREDIT VALUE:** This course carries the credit value of 0.75. **EVALUATION:** Class participation, changing into PE attire, skill demonstrations, and knowledge based on quizzes, tests, projects, or presentations.

ELECTIVE **First Aid and CPR – Grades 10-12** **MARKING PERIOD COURSE**
COURSE DESCRIPTION: The students will study the laws and procedures in actively participating in first aid and CPR. The purpose of the course is the teach students how to properly administer proper first aid in various situations as well as perform the proper steps in the CPR system. Students will become certified in First Aid and CPR through the Red Cross certification program. Students' ability to administer proper first aid and CPR may help save others' lives as well as their own. **GOALS:** The learner will identify the Good Samaritan Laws in regards to administering first aid and CPR, demonstrate the proper procedures in performing various means of first aid including, but not limited to, splints, braces, bandages and wraps, carries, and recovery positions and demonstrate the proper procedures in performing CPR. **The learner will obtain First Aid and CPR certification.** **COURSE REQUIREMENTS:** Students are required to come to class prepared to actively participate in all learning activities during class and complete all in-class assignments. **TEXT:** Red Cross First Aid and CPR manual. **COURSE CREDIT VALUE:** This course carries the credit value of 0.375 credits. **EVALUATION:** Students will be required to complete in-class assignments, exams, and projects. Students will be graded on their abilities to perform the proper procedures in performing first aid and CPR.

ELECTIVE **Driver's Safety – GRADES 10-12** **MARKING PERIOD COURSE**
COURSE DESCRIPTION: The students will study the laws and common procedures/practices when operating a non-commercial Class C vehicle. This does not include an in-depth look at the procedures in operating a Class A, Class B, or Class M license, but will learn what each of these types of licenses entail. Students will learn the requirements for obtaining their learner's permit and/or their Junior/Senior Driver's License. Students will also learn the importance of driving without distraction, avoiding driving under the influence, and avoiding driving violations such as speeding and the potential consequences for each violation. The decisions that people make behind the wheel are vital to the safety of not only themselves, but also their passengers, pedestrians, and the people in other vehicles on the road. **GOALS:** The learner will identify the laws in operating a non-commercial Class C vehicle, explain the requirements in obtaining and maintaining a non-commercial Class C license, and analyze the impact decision-making plays when operating a vehicle. **COURSE REQUIREMENTS:** Students are required to come to class prepared to actively participate in all learning activities during class and complete all in-class assignments. **TEXT:** Pennsylvania Driver's Manual (Provided) **COURSE CREDIT VALUE:** This course carries the credit value of 0.375 credits. **EVALUATION:** Students will be required to complete in-class assignments, exams, and projects.

SCIENCE

CORE **Honors Biology - Grade 9** **YEAR LONG COURSE**

COURSE DESCRIPTION – Biology is the science of life. This full year course serves as a preparation for the Keystone Biology Exam for students who have shown high levels of achievement in middle school science courses and on the PSSA science exam. Students who take this course are expected to complete assigned work in a prompt manner and to actively prepare for assessments. This class will cover the following topics in depth. Basic biology principles, the chemical basis of life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution, and ecology. **GOALS:** 1. Understand and use the scientific methods and inquiry to solve problems. 2. Recognize unifying themes in biological study. 3. Apply knowledge of biological processes to explain everyday occurrences. **COURSE RECOMMENDATIONS:** Students must be motivated to complete daily assignments, participate in classroom activities and discussions, and use study skills to actively prepare for assessments. **TEXT:** Prentice Hall: Biology **COURSE CREDIT:** This course shall carry a credit value of 1.5 credits. **EVALUATION:** Typical assessments for one marking period could include the following: homework, projects, lab reports, class activities, vocabulary quizzes, concept quizzes, and unit tests

CORE

Biology I - Grade 9

SEMESTER COURSE

COURSE DESCRIPTION – Biology is the science of life. This course serves as a preparation for the Keystone Biology Test. Students in this class will study the following topics in depth: basic biology principles, the chemical basis of life, bioenergetics, and homeostasis and transport. **GOALS:** 1. Understand and use the scientific methods and inquiry to solve problems. 2. Recognize unifying themes in biological study. 3. Apply knowledge of biological processes to explain everyday occurrences. **COURSE RECOMMENDATIONS:** Students must be motivated to complete daily assignments, participate in classroom activities and discussions, and use study skills to actively prepare for assessments. **TEXT:** Prentice Hall: Biology **COURSE CREDIT:** This course shall carry a credit value of .75 credits. **EVALUATION:** Typical assessments for one marking period could include the following: homework, projects, lab reports, class activities, quizzes, tests.

CORE

Genetics & Ecology - Grade 9

SEMESTER COURSE

COURSE DESCRIPTION – Biology is the science of life. This course serves as a preparation for the Keystone Biology Test. Students in this class will study the following topics in depth: cell growth and reproduction, genetics, and ecology. **GOALS:** 1. Understand and use the scientific methods and inquiry to solve problems. 2. Recognize unifying themes in biological study. 3. Apply knowledge of biological processes to explain everyday occurrences. **COURSE RECOMMENDATIONS:** Students must be motivated to complete daily assignments, participate in classroom activities and discussions, and use study skills to actively prepare for assessments. **TEXT:** No text. Supplements used. **COURSE CREDIT:** This course shall carry a credit value of .75 credits. **EVALUATION:** Typical assessments for one marking period may include the following: homework, projects, lab reports, class activities, quizzes, tests.

CORE

Biology II – Grade 10

SEMESTER COURSE

COURSE DESCRIPTION: Biology is the science of life. This course serves as a preparation for the Keystone Biology Test. Students in this class will study specific topics from the Keystones as indicated through diagnostic testing. **GOALS:** 1. Understand and use the scientific methods and inquiry to solve problems. 2. Recognize unifying themes in biological study. 3. Apply knowledge of biological processes to explain everyday occurrences. **COURSE RECOMMENDATIONS:** Students must be motivated to complete daily assignments, participate in classroom activities and discussions, and use study skills to actively prepare for assessments. **TEXT:** No text. Supplements used. **COURSE CREDIT:** This course shall carry a credit value of .75 credits. **EVALUATION:** Typical assessments for one marking period may include the following: homework, projects, lab reports, class activities, quizzes, tests.

CORE

Animal Behavior – Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: This course is to provide students with a foundation of knowledge regarding the behavior of animals. Animal Behavior is developed to be a project-based study of the world of animals that allows some flexibility in content. The course is intended to provide a basic understanding of the variety of reasons for specific animal behaviors. **GOALS:** 1. identify a scientific problem or question, design and/or conduct a valid scientific investigation, evaluate investigations and apply results to make predictions about real life situations; 2. better understand the interactions between living things and their environment; 3. read and understand a variety of material; and 4. To apply critical thinking skills to reading, writing, listening and viewing. **PREREQUISITES:** Successful completion of Biology. **COURSE REQUIREMENTS:** It is recommended that the student purchase a binder that will be used to organize classwork, assessments, and supplemental materials. **TEXT:** No textbook, supplements will be used. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75. **EVALUATION:** Tests, field work, labs, projects, quizzes and classwork.

CORE

Chemistry – Grades 10-12

YEAR LONG COURSE

LAB SCIENCE

COURSE DESCRIPTION: Chemistry is designed to help students understand how chemical principles and concepts are developed from experimental observation and data, and how these principles can be used to explain phenomena in daily life as well as the laboratory. This is an introductory chemistry course for students preparing for college. **GOALS:** 1) to understand matter and the changes it undergoes; 2) to understand the language of chemical reactions; 3) to understand laboratory safety and procedures. **PREREQUISITES:** Satisfactory completion of Biology, and Algebra I or Honors Algebra. Students should be enrolled in Algebra 2. **COURSE REQUIREMENTS:** Students taking this course should be considering post secondary education and/or training. **TEXT:** Prentice Hall – Chemistry **COURSE CREDIT**

VALUE: This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for one marking period include the following: experiments, homework, notebook, quizzes and tests. Midterm and final exam grades are comprised of a written assessment.

CORE

Physics – Grades 11-12

YEAR LONG COURSE

LAB SCIENCE

COURSE DESCRIPTION: Physics is the study of the fundamental forces and concepts that impact everyday life including, but not limited to, forces, gravity, acceleration, velocity, kinematics, mechanics, circular motion, energy and work. The course includes the role mathematics in understanding science concepts. The course is designed for students planning to attend college. **GOALS:** 1) to familiarize students with fundamental concepts of physics; 2) application of mathematics in the sciences; 3) recognize physics concepts in every day life. **PREREQUISITES:** Students should have successfully completed or be enrolled in pre-calculus, geometry, and chemistry or with teacher recommendation. **COURSE REQUIREMENTS:** Scientific calculator (preferably graphic calculator), 3-ring binder, lab notebook (composition book) **TEXT:** Modern Physics **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for one marking period include the following: homework, projects, experiments, tests and participation.

CORE

Intro to Anatomy & Physiology - Grades 11-12

SEMESTER COURSE

COURSE DESCRIPTION: Anatomy & Physiology is the study of the structure and function of the body. This course is designed for students interested in a career in the health professions. **GOALS:** 1) to overview the human body systems; 2) to learn standard terminology as it relates to the medical field; 3) to review the cell and essential cell processes; and 4) to identify the bones of the human skeleton. **RECOMMENDED PREREQUISITE:** Completion of Biology with at least an 86%. Other students will be considered with a recommendation from present science teacher. **COURSE REQUIREMENTS:** Students must be self-motivated to develop an understanding of the human body. Students will complete research papers and projects as key assessments in this course. **TEXT:** Essentials of Human Anatomy & Physiology **COURSE CREDIT VALUE:** This course carries the credit value of 0.75. **EVALUATION:** Typical assessments for this course will include the following: objective tests and quizzes, group presentations and research papers

CORE

Anatomy & Physiology I – Grades 11-12

SEMESTER COURSE

COURSE DESCRIPTION: Anatomy & Physiology is the study of the structure and function of the body. This course is designed for students interested in a career in the health professions. This course is the part II of Anatomy & Physiology I and should be taken the spring semester after taking Anatomy & Physiology I. **GOALS:** 1) to review the human body systems; 2) to review key anatomical vocabulary; 3) to identify some of the major superficial muscles of the human body; and 4) to identify through dissection of a fetal pig, the body parts in each body system. **RECOMMENDED PREREQUISITE:** Completion of Anatomy & Physiology I in the previous semester. **COURSE REQUIREMENTS:** Students must be self-motivated to develop an understanding of the human body. Students will complete research papers and projects as key assessments in this course. Students **WILL DISSECT** a fetal pig during this semester. **TEXT:** Essentials of Human Anatomy & Physiology **COURSE CREDIT VALUE:** This course carries the credit value of 0.75. **EVALUATION:** Typical assessments for this course will include the following: objective tests and quizzes, group presentations and research papers. **This course can be taken as a Lackawanna College dual enrollment course for Anatomy and Physiology, BIO 205, additional application and cost required – must take Anat & Phys I in same school year for college credit.**

CORE

Anatomy II – Grade 12

SEMESTER COURSE

COURSE DESCRIPTION: Anatomy II is a continuation of the current Anatomy and Physiology Course. This course is designed to provide students with a more substantial foundation of knowledge regarding the structure and function of the human body. **GOALS:** 1) to understand the structure and function of additional major body systems; 2) to extend students' knowledge of the human body by pursuing inquiry-based studies. **PREREQUISITES:** Students must have successfully completed Anatomy and Physiology with an overall grade of 86% or higher. **COURSE REQUIREMENTS:** Students must be self-motivated to develop an understanding of the human body. Students will complete term papers and projects as key assessments in this course. **TEXT:** Essentials of Human Anatomy and Physiology by Elaine N. Marieb **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period will include the following: objective tests and quizzes, group presentations and research papers.

CORE

Forensic Science – Grades 11-12

SEMESTER COURSE

COURSE DESCRIPTION: Forensic science will provide a basic understanding of how forensic science is used in criminal cases. The course will provide an introduction to the application of scientific methods for the examination of physical evidence in the criminal justice system; an overview of forensic analysis of firearms, fingerprints, drugs, blood, hair, fibers, paint, glass and arson debris. The course is designed for students planning to major in criminal justice or forensic science in college. **GOALS:** 1) recognize the role science and technology plays in the criminal system; 2) understand the role of scientific method in solving crimes; 3) appreciate the relationship between science and law. **PREREQUISITES:** Students should have successfully completed or be enrolled in Algebra, Chemistry or Applied Chemistry, Physics or with teacher recommendation. **COURSE REQUIREMENTS:** Calculator, 3-ring binder. **TEXT:** Criminalistics: Introduction to Forensic Science **COURSE CREDIT VALUE:** This course carries a credit value of 0.75 credit. **EVALUATION:** Homework, projects, participation, experiments, tests and quizzes.

CORE**AP Biology – Grades 11-12****YEAR LONG COURSE**

LAB SCIENCE

COURSE DESCRIPTION – AP Biology is a high level biology course geared to meet the needs of college prep students who are pursuing a career in biology or health sciences. This course covers the 4 Big Ideas as outlined by AP Biology curriculum framework. 1. The process of evolution drives the diversity and unity of life. 2. Biological systems utilize free energy and molecular building blocks to grow, reproduce, and to maintain dynamic homeostasis. 3. Living things store, retrieve, transmit, and respond to information essential to life processes. 4. Biological systems interact, and these systems and their interconnections possess complex properties. **GOALS:** 1. Prepare the college preparatory student for first year courses in biology 2. Understand and utilize more advanced science study techniques 3. Apply experimental observations and data to phenomena in daily life. 4. Utilize science fundamentals to the pursuit of new scientific knowledge. **RECOMMENDED PREREQUISITES:** Completion of a high school biology and chemistry course with a minimum of an 86% average or teacher recommendation. **TEXT:** The Unity and Diversity of Life **COURSE CREDIT:** This course shall carry a credit value of 1.5 credits. **EVALUATION:** Typical assessments for a marking period include homework- 10%, Classwork -30%, and tests and assessments – 60%. This class is designed to prepare students for the mandatory AP Biology exam which will be offered near the end of the course. **This course can be taken as a Lackawanna College dual enrollment course General Biology I, BIO 120, and General Biology I Lab, BIO 121, additional application and cost required.**

CORE**AP Physics – Grade 12****YEAR LONG COURSE**

LAB SCIENCE

COURSE DESCRIPTION: AP Physics integrates calculus with college physics. The course is a faster-paced class based upon the college level applications. The course integrates the relationship of math and science to understand the fundamental forces including gravity, acceleration, velocity, work, energy, thermodynamics, fluids, kinematics, theory of relativity, and sound. This course is designed for students planning to major in science, engineering, or medical field in college. **GOALS:** 1) understand the relationship of science and math in understanding concepts; 2) recognize the role of physics in understanding how the world operates. **PREREQUISITES:** Students should have successfully completed Physics I or II as well as pre-calculus, geometry, calculus, and chemistry. Students should be enrolled in calculus. Students can also be admitted with teacher recommendation **TEXT:** College Physics. **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Experiments, lab reports, homework, tests, quizzes, participation and projects **SPECIAL CONSIDERATIONS:** This class is designed to prepare students to take the Advanced Placement Physics Exam offered by the Educational Testing Service. The exam is typically offered each year during the month of May. Students taking the Honors Physics class are not required to take the AP Exam. Students who opt to take the AP Exam do so at their own expense. **This course can be taken as a Lackawanna College dual enrollment course General Physics I, PHY 120, and General Physics I Lab, PHY 121, additional application and cost required**

CORE**Physical Science – Grades 10-12****SEMESTER COURSE**

COURSE DESCRIPTION: Physical Science is designed to help students to understand how chemical principles and concepts are developed from experimental observation and data collection and how these principles can be used to explain phenomena in our daily lives as well as in the laboratory. **GOALS:** 1. Gain an understanding of matter and the changes it undergoes. 2. Understand the language of chemical reactions. 3. Understand the importance of laboratory safety. 4. Demonstrate laboratory procedures with an emphasis on accuracy and precision. 5. Evaluate previously discovered scientific principles. **RECOMMENDED PREREQUISITE:** Biology **COURSE REQUIREMENTS:** Students will be expected to actively participate in classroom activities including independent and small group work. In addition, students will be required to complete daily assignments and actively prepare for assessments. **TEXT:** Physical Science – Concepts in Action **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: experiments, homework, notebook, quizzes, and tests.

CORE**Exploring the Medical Sciences – Grade 10 or 11****SEMESTER COURSE**

COURSE DESCRIPTION: Exploring the Medical Sciences is designed to help students determine if they have an interest in pursuing a career in the medical field. The course is an exploration of basic anatomy and a variety of health related careers. **GOALS:** 1) examine the basic structure and function of the human body with a focus on the organ systems 2) explore a variety of health related careers from nursing to therapy to becoming a doctor 3) introduce some basic anatomical terminology **RECOMMENDED PREREQUISITE:** Students taking this course need to have already successfully completed the required Biology courses. **COURSE REQUIREMENTS:** All students are required to complete work as assigned, maintain a notebook and/or folder for the purpose of staying organized, and research topics of interest. Students are expected to attend school regularly as classroom speakers and field trips may be critical components in the content of the course. **TEXT:** Supplemental Materials from Marieb's Essentials of Human Anatomy & Physiology **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments could include 1) tests and quizzes 2) oral presentations and projects 3) essays and research projects and 4) classwork.

CORE**Physics for Everyday Living – Grades 11 & 12****SEMESTER COURSE**

Course Description: Physics for everyday living is the study of the fundamental concepts of nature including energy, force, acceleration, velocity, work, and gravity that impact aspects of everyday activities such as walking and driving to the modern conveniences of electronics, amusement park rides, and space flight. The course relies on hands-on activities and inquiry rather than in-depth mathematics to understand concepts. **Goals:** 1) to appreciate the role of physics in everyday life; 2) to utilize the scientific method to solve problems. **COURSE REQUIREMENTS:** Students need to have a basic understanding of math. **TEXT:** Conceptual Physics, and supplemental references. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: group projects, quizzes, homework, class participation, inquiries, hands-on activities, and notebook.

SOCIAL STUDIES

CORE

Civics & Government – Grade 9

SEMESTER COURSE

COURSE DESCRIPTION: In this course, students apply knowledge gained in previous years of study to pursue a deeper understanding of the institutions of American Government. In addition, they draw on their studies of world and American history and geography and other societies to compare differences and similarities in world governmental systems today. This course is the culmination of history/social sciences classes to prepare students to solve society's problems, to understand and to participate in the governmental process, and to be a responsible citizen of the United States and the world. **GOALS:** 1) To foster informed, responsible participation in political life by competent citizens committed to the fundamental values and principles of American constitutional Democracy, 2) to develop effective and responsible participation requiring the acquisition of a body of knowledge and of intellectual and participatory skills. **COURSE REQUIREMENTS:** Reading is an essential part of this class to be fully involved in class discussions. This class provides a diversity of assessments with a heavy emphasis on projects. **TEXT:** Civics for Responsibility and Citizenship, Economics. **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessment for this semester course include the following: classwork and participation, notebook, tests, quizzes and projects.

CORE

United States History I – Grade 9 - 10

SEMESTER COURSE

COURSE DESCRIPTION: United States History 1 will focus on history, culture, geography, social, political, economic and industrial events of the 19th century. **GOALS:** 1) to give a chronological perspective to the events that occurred in the 19th century and the role Pennsylvania played in the success of the new nation, 2) to establish the relationships that exist between the social, economic, and political influences on the development of our country, 3) to establish the cultural, geographic, and industrial growth during the 19th century. **COURSE REQUIREMENTS:** Reading is an essential part of this class and students must complete their assignments. Student must be motivated to participate in classroom discussions. **TEXT:** America: Pathways to the Present. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: homework, quizzes, group work, chapter test and marking period test.

CORE

United States History II – Grades 10 -11

SEMESTER COURSE

COURSE DESCRIPTION: United States History 2 deals with America's political turmoil and tranquility, military conflicts, economic booms and busts, and major social changes that have occurred from 1900 to the present. **GOALS:** 1) chronological thinking; 2) historical comprehension; 3) historical analysis and interpretation; 4) historical research capabilities; 5) historical issues – analysis and decision making. **PREREQUISITES:** US History I **COURSE REQUIREMENTS:** Reading is an essential part of this class and students must complete their assignments. Students must be motivated to participate in classroom discussions. Independent, as well as small group work will be part of the class. **TEXT:** American Odyssey- The United States in the 20th Century. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Typical assessments for one marking period include the following: essay writing, combination objective and essay test, graded homework and class work, quizzes, cooperative projects, notebook, class participation. Final exam grade is based on a comprehensive objective test.

CORE

World History – Grade 11 - 12

SEMESTER COURSE

COURSE DESCRIPTION: World History 1 is a survey course covering the period of history from our human origins and the development of civilization and religion to the end of the middle ages. **GOALS:** 1) to develop and improve students analytical skills through the study of cause and effect in history; 2) to develop an awareness of connections between past and present; 3) and to further develop understanding that who we are today is largely dependent on the people and events of the past; 4) students will recognize that they are a part of a complex world, past, present and future. **COURSE REQUIREMENTS:** Reading is an essential part of this class to be fully involved in class discussions. This class provides a diversity of assessments with a heavy emphasis on simulations and projects. **TEXT:** World History: Connections to Today. **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessment for this semester course include the following: classwork and participation, notebook, tests, quizzes and projects.

CORE

US Government – Grade 11 & 12

SEMESTER COURSE

COURSE DESCRIPTION: In this course, students apply knowledge gained in previous years of study to pursue a deeper understanding of the institutions of American Government. In addition, they draw on their studies of world and American history and geography and other societies to compare differences and similarities in world governmental systems today. This course is the culmination of history/social

sciences classes to prepare students to solve society's problems, to understand and to participate in the governmental process, and to be a responsible citizen of the United States and the world. **GOALS:** 1) To foster informed, responsible participation in political life by competent citizens committed to the fundamental values and principles of American constitutional Democracy, 2) to develop effective and responsible participation requiring the acquisition of a body of knowledge and of intellectual and participatory skills. **COURSE REQUIREMENTS:** Reading is an essential part of this class to be fully involved in class discussions. This class provides a diversity of assessments with a heavy emphasis on projects. **TEXT:** Civics for Responsibility and Citizenship, Economics. **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessment for this semester course include the following: classwork and participation, notebook, tests, quizzes and projects.

ARTS & HUMANITIES

AP Economics- Grades 11-12

YEAR LONG COURSE

COURSE DESCRIPTION: The general objective of a high school economics course is for students to master fundamental economic concepts, appreciate how the principal concepts of economics relate to each other and understand the structure of economic systems. **Goals:** 1) Students will use economic concepts in a reasoned, careful manner in dealing with personal, community, national and global economic issues; 2) They will use measurement concepts and methods such as tables, charts, graphs, ratios, percentages and index numbers to understand and interpret relevant data. 3) They will learn to make reasoned decisions on economics. **COURSE REQUIREMENTS:** Students should have a basic statistical and probable mathematical skills. This class provides a diversity of assessments with a heavy emphasis on projects related to practical life and handling money. **COURSE CREDIT VALUE:** This course carries a 0.75 credit value. **TEXT:** Economics **EVALUATION:** Typical assessment for this semester course include the following: classwork and participation, notebook, tests, quizzes and projects.

ARTS & HUMANITIES

Pennsylvania and Local History - Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: Pennsylvania and local history is a course designed to help students understand and gain an appreciation for the history of the state they live in. Pennsylvania has played a crucial role throughout U.S. history. From the times of the colonies and the American Revolution, to the Civil War and development of labor unions, Pennsylvania's impact is evident throughout U.S. history. Along with this rich history comes a rich cultural heritage as well. Students will discover and explore not only the significance of Pennsylvania in the context of U.S. history but also gain an appreciation for the culture of their state today along with their community. This course will be geared towards helping students establish an understanding of what studying history is, and what it means for people to study history. In order to do this, students will also see how history is connected with such other disciplines as geography, economics, politics, and anthropology. **GOALS** 1) Point to (reasonable) connections between Pennsylvania history and the cultural context in which they are presently living – early 21st century Pennsylvania. 2) Identify and describe important individuals, groups, movements, and events throughout Pennsylvania history that helped to shape contemporary Pennsylvanian/Local society, culture, politics, and economics. 3) Construct reasoned judgments about specific cultural responses to persistent human issues. **COURSE REQUIREMENTS:** Students should have an introductory understanding of United States History and Government before taking this course so they can gain a better understanding of the role Pennsylvania played in that history. **COURSE CREDIT VALUE:** This course carries a 0.75 credit value. **TEXT:** None **EVALUATION:** Typical assessment for this semester course include the following: classwork and participation, notebook, tests, quizzes and projects.

ARTS & HUMANITIES

Students and Current Events I – Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: This course is an elective course in Social Studies. The course looks at current events going on around the work, in America, in the state of Pennsylvania, and our local communities. Student will learn how to research these topics and put it in a 5-10 minute video documentary. Student will learn how to use a digital video camera, video editing (Adobe Premiere Pro), video production skills and Adobe Photoshop for still images. **GOALS:** 1) to teach the student how to research current events and how to prepare a non bias opinion on the topics researched; 2) how to plan interview questions and how to put this into a video format. **PREREQUISITES:** The ability to use a computer. **COURSE REQUIREMENTS:** Students are required to work in a group. All the assignments are group/team assignments. They must learn how to work with other people to accomplish their goals. **TEXT:** none. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Each project will be evaluated using a scoring rubric. Small quizzes throughout the year on skills using the two software programs taught in the course.

ARTS & HUMANITIES

Students and Current Events II – Grades 11-12

SEMESTER COURSE

COURSE DESCRIPTION: This course is an elective course in Social Studies. The course is an **advanced** course in covering the “Current Events” of the Line Mountain School District. We will use special video and audio equipment to capture video of special events around the district. The class will provide special projects for all the major extra curricular activities. **GOALS:** 1) to teach the student how to plan for a full length promo video for the district 2) Archive special events during the school year in video format. 3) create a weekly drama skit to be played every Friday on the Morning announcements. **PREREQUISITES:** Must have passed Student and Current Events 1 class. **COURSE REQUIREMENTS:** Students are required to work in a group. All the assignments are group/team assignments. They must learn how to work with other people to accomplish their goals. Student must be willing to do extra hours outside of class time to complete assignments. **TEXT:** none. **COURSE CREDIT VALUE:** This course carries the credit value of 0.75 credit. **EVALUATION:** Each project will be evaluated using a scoring rubric. Small quizzes throughout the year on skills using the software programs and equipment taught in the course.

ARTS & HUMANITIES**AP Psychology – Grades 11-12****YEAR LONG COURSE**

COURSE DESCRIPTION: AP Psychology is an introduction to the basic concepts of behavior and thinking. It surveys the methods psychologists use to study behavior, theories, and research results. **GOALS:** 1) understand the scientific method used in psychology; 2) identify the main branches of psychological study; 3) apply psychological theory and research findings to explain human behavior. **RECOMMENDED PREREQUISITE:** Students must have an overall average of 90%. Students with overall averages below 90% may still be admitted with instructor approval. Students must be willing to accept the demands of a college level introductory course and be highly motivated to do the work, which this class requires. Students will be expected to read, write and discuss on a daily basis. **COURSE REQUIREMENTS:** Outside readings are an essential component of this class. A notebook must be maintained. Participation in classroom discussions, as well as small group work and independent studies are utilized. **TEXT:** AP Psychology **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for one marking period include the following: objective tests & essay, oral presentation, research project, quizzes, class participation. Each marking period, the midterm, and the final exam is raised 5 points. **SPECIAL CONSIDERATIONS:** This class is designed to prepare students to take the Advanced Placement Psychology Exam offered by the Educational Testing Service during the month of May. Students are not required to take the AP Exam. Students who opt to take the AP Exam do so at their own expense. **This course can be taken as a Lackawanna College dual enrollment course Intro to Psychology, PSY 105, additional application and cost required.**

ARTS & HUMANITIES**Honors Sociology – Grade 11-12****SEMESTER COURSE**

COURSE DESCRIPTION: In this course we introduce a range of basic sociological principles so you can develop your own sociological imagination. We study about the origins of sociology as a discipline, and some major sociological theories and research methods. We also explore the topics of sex and gender, deviance, and racism. As we move through the course, the goal is for students to develop their sociological imagination by relating the topics and theories they read about to their own life experiences. **COURSE REQUIREMENTS:** Students must have already taken AP Psychology as this course introduces Sociology. Students are cautioned that this course is taught as an intro college level course and should consult with the instructor, Mr. Knock, before taking the course. Reading is an essential part of this class to be fully involved in class discussions. This class provides a diversity of assessments with a heavy emphasis on analysis and discussion. **TEXT:** Introduction to Sociology 2nd Edition: Openstax Digital Version **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** Typical assessments for this course include the following: classwork and participation, notebook, tests, quizzes, projects & blog posts.

ARTS & HUMANITIES**Honors United States History – Grade 11-12****SEMESTER COURSE**

COURSE DESCRIPTION: AP United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history in order to prepare to take the AP US History exam offered by the ETS during the month of May. Students who opt to take the AP exam do so at their own expense. **GOALS:** 1) Prepare students for intermediate and advanced college courses by placing demands upon them equivalent to those made by full semester introductory college courses. 2) Students will learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance. **RECOMMENDED PREREQUISITES:** Completion of US History I and II with an average of 90% or better. Students who have an average below 90% may take the class with instructor approval. **COURSE REQUIREMENTS:** Text and outside readings are an essential component of the class. Students must be motivated to participate in class discussions. A notebook must be maintained. **TEXT:** America – Pathways to the Present. Divine, Breed, Frederickson, Williams **COURSE CREDIT VALUE:** This course carries the credit value of 1.5 credits. **EVALUATION:** homework, class work and participation, tests, quizzes, and projects

ARTS & HUMANITIES**World History 2 – Grade 11-12 – PILOT COURSE****SEMESTER COURSE**

COURSE DESCRIPTION: World History 2 is a survey course covering the period of history from the beginning of the renaissance and reformation to modern day. **GOALS:** 1) to develop and improve students analytical skills through the study of cause and effect in history; 2) to develop an awareness of connections between past and present; 3) and to further develop understanding that who we are today is largely dependent on the people and events of the past; 4) students will recognize that they are a part of a complex world, past, present and future. **COURSE REQUIREMENTS:** Reading is an essential part of this class to be fully involved in class discussions. This class provides a diversity of assessments with a heavy emphasis on simulations and projects. **TEXT:** World History: Connections to Today. **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessment for this semester course include the following: classwork and participation, notebook, tests, quizzes and projects.

ARTS & HUMANITIES Current World Cultures GRADES 11 and 12; 10th grade ONLY with approval by teacher SEMESTER COURSE

COURSE DESCRIPTION: Current World Cultures is an anthropology and geography based course focused on educating students about the modern world from many cultural viewpoints. Within the course students will examine societies throughout the world from the six inhabited continents, and compare these societies through different cultural lenses such as food, clothing, population, religion, politics, human rights, development, habits, customs, language, etc. **GOALS:** To establish cultural proficiency among students, Students will have the ability to

observe and understand change, Develop research and comparative skills, Learn and understand important anthropological and geographical concepts. **RECOMMENDED PREREQUISITE:** US History 1 & 2, World History (There are no grade point average requirements to enter the course.) **COURSE REQUIREMENTS:** writing assignments, multi-cultural day, reading and analyzing texts/artifacts/monuments, in class discussions. **TEXT:** No Required Text for the first year **COURSE CREDIT VALUE:** 0.75. **EVALUATION:** bell-ringers, written assignments, quizzes, projects, journaling, and class discussions

TECHNOLOGICAL STUDIES

ARTS & HUMANITIES

Introduction to Metallic Processing -Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: This practical course is designed to develop a distinct understanding of modern metallic materials, processes, and products through design and fabrication techniques. Students will learn how mechanical properties are influenced in real world applications through material properties and metallurgy. An emphasis on science and mathematics is stressed as students gain experience through metallic processing. **GOALS:** Students will 1) develop a basic understanding of blueprint reading; 2) demonstrate their ability to assemble metallic components through a variety of techniques; 3) become familiar with sheet metal fabrication. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. Clean up and participation are a large facet of this course. Students will be expected to take notes, complete assignments and clean up after themselves. **TEXT:** Modern Metalworking and Welding Principles and Applications **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Class Participation, Daily Timecards, Design Rubrics, Quizzes, Tests, Exit Tickets, Presentations.

ARTS & HUMANITIES

Advanced Metallic Processing- Grades 9 – 12

SEMESTER COURSE

COURSE DESCRIPTION: An advanced course designed to further the content knowledge of metallic processing gained through the introductory course. Students will understand the impacts of metallic material processing on industry in our society. A greater emphasis on mathematics and science will be conducted through the use of precision measurement tools and advanced blueprint reading. **GOALS:** Students will 1) produce metallic products using a variety of forming processes; 2) be able to demonstrate a basic knowledge of machining tools and speeds. 3) Comprehend and analyze advanced blueprints; 4) become familiar with Computer Numerical Control (CNC) through design and fabrication. 5) Implement the Technological Design Process to solve practical design challenges. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. Clean up and participation are a large facet of this course. Students will be expected to take notes, complete assignments and clean up after themselves. **PREREQUISITE:** Introduction to Metallic Processing. **TEXT:** Modern Metalworking and Welding Principles and Applications. **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Class Participation, Daily Timecards, Design Rubrics, Quizzes, Tests, Exit Tickets, Presentations.

ARTS & HUMANITIES

Manufacturing in Metallic Processing- Grades 10-12

SEMESTER COURSE

COURSE DESCRIPTION: This advanced level course is designed to allow the students to showcase their abilities learned in levels one and two. Students will learn the importance of manufacturing and its impact in industry. There will be a large emphasis on basic understanding of traditional methods of material processing used in product manufacturing. Students will also learn how production costs can influence production capabilities. Quality Control will be emphasized throughout the semester. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. Clean up and participation are a large facet of this course. Students will be expected to take notes, complete assignments and clean up after themselves. **GOALS:** Students will 1) be able to work as a team to design and build a product. 2) be able to determine exact production costs. 3) use CNC to aid in the construction process of the project. 4) be able to troubleshoot manufacturing errors. **PREREQUISITE:** Advanced Metallic Processing. **TEXT:** Modern Metalworking and Welding Principles and Applications **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Class Participation, Daily Timecards, Research Paper, and Project Plans.

ARTS & HUMANITIES

Energy Power and Transportation -Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: This practical course is designed to develop a distinct understanding of Energy, Power and Transportation Systems. Students will explore the development and significance of EPT systems and how they relate to our economic structure. Topics include electrical circuitry, residential wiring, and flight. An emphasis on Science, Technology, Engineering and Math will be included in each unit. **GOALS:** Students will 1) develop a basic understanding of different transportation systems; 2) demonstrate their ability to design and develop transportation vehicles; 3) become familiar with basic wiring and circuitry. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. Clean up and participation are a large facet of this course. Students will be expected to take notes, complete assignments and clean up after themselves. **TEXT:** Energy, Power, and **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Class Participation, Daily Timecards, Design Rubrics, Quizzes, Tests, Exit Tickets, Presentations.

ARTS & HUMANITIES

Energy Power and Transportation 2 -Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: This practical course is designed to develop an advanced understanding of Energy, Power and Transportation Systems. Students will explore the development and significance of EPT systems and how they relate to our economic structure. Topics include magnetic levitation, marine craft and simple machines with LEGOs. An emphasis on science and mathematics is stressed through STEM. **GOALS:** Students will 1) develop an advanced understanding of different transportation systems; 2) demonstrate their ability to

design and develop transportation vehicles; 3) become familiar with basic mathematical applications associated with the course. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. Clean up and participation are a large facet of this course. Students will be expected to take notes, complete assignments and clean up after themselves. **PREREQUISITE:** Energy, Power and Transportation **TEXT:** Energy, Power, and Transportation 2nd Edition **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Class Participation, Daily Timecards, Design Rubrics, Quizzes, Tests, Exit Tickets, Presentations.

**ARTS & HUMANITIES
COURSE**

Energy Power and Transportation 3 -Grades 9-12

SEMESTER COURSE FUTURE

COURSE DESCRIPTION: This practical course is designed to develop an advanced understanding of Energy, Power and Transportation Systems, with a concentration on sustainable energy. Students will explore the development and significance of renewable EPT systems and how they relate to our economic structure. Topics include solar power, wind power, biotechnologies, and simple machines. An emphasis on science and mathematics is stressed through STEM. **GOALS:** Students will 1) develop an advanced understanding of different transportation systems; 2) demonstrate their ability to design and develop transportation vehicles; 3) become familiar with basic mathematical applications associated with the course. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. Clean up and participation are a large facet of this course. Students will be expected to take notes, complete assignments and clean up after themselves. **PREREQUISITE:** Energy, Power and Transportation **TEXT:** Energy, Power, and Transportation 2nd Edition **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Class Participation, Daily Timecards, Design Rubrics, Quizzes, Tests, Exit Tickets, Presentations.

ARTS & HUMANITIES

Introduction to Robotics and Coding - Grades 9-12 Pilot

SEMESTER COURSE

COURSE DESCRIPTION: This STEM based course will utilize VEX Robotics to help students learn about robotics operation and coding. The specific VEX Robotics curriculum provides several different real-world design challenges that require students to use problem solving and team collaboration skills. Each lab is centered around a specific challenge where students will apply their learning and use the Technological Design Process to develop solutions in effort to solve the problem, all while making sure they stay within the stated criteria and constraints. **GOALS:** Students will 1) develop an understanding of basic robotic coding; 2) demonstrate their ability to design and construct robotic transportation vehicles; 3) become familiar with basic mathematical applications associated with the course. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. Clean up and participation are a large facet of this course. Students will be expected to take notes, complete assignments and clean up after themselves. **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Class Participation, Daily Timecards, Design Rubrics, Quizzes, Tests, Exit Tickets, Presentations.

**ARTS & HUMANITIES
FUTURE COURSE**

Introduction to Robotics 2 - Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: This STEM based course will build on the first Robotics and Programming course. A more challenging curriculum which will again utilize VEX Robotics. The specific VEX Robotics curriculum provides several different real-world design challenges that require students to use problem solving and team collaboration skills. Each lab is centered around a specific challenge where students will apply their learning and use the Technological Design Process to develop solutions in effort to solve the problem, all while making sure they stay within the stated criteria and constraints. **GOALS:** Students will 1) develop an advanced understanding of basic robotic coding; 2) demonstrate their ability to use the Technological Design process to design and construct robotic transportation vehicles to solve specific problems; 3) become familiar with basic mathematical applications associated with the course. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. Clean up and participation are a large facet of this course. Students will be expected to take notes, complete assignments and clean up after themselves. **PREREQUISITE:** Introduction to Robotics and Programming **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Class Participation, Daily Timecards, Design Rubrics, Quizzes, Tests, Exit Tickets, Presentations.

ARTS & HUMANITIES

Non-Metallic I: Introduction to Non-Metallic Processing - Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: Introduction to Non-Metallic Processing will introduce students to basic woodworking skills and knowledge about lumber materials, equipment, and processing. The material covered will be in the areas of design, planning, layout, proper equipment use, equipment safety, blueprint reading, and basic material processing. An additional emphasis will be placed on the areas of mathematics and science through the application of real world problems. **GOALS** Students will: 1) Gain an understanding of product design and planning. 2) Develop an understanding of lumber processing methods. 3) Be able to read as well as utilize blueprints to construct a product from rough cut lumber. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and cleanup are a large aspect of this course. Students will be required to work on a daily basis, take notes when necessary, clean up after themselves, as well as complete a classroom cleanup assignment. **TEXT:** Exploring Woodworking, 8th Edition: Fred W. Zimmerman, Larry J. McWard, Don L. Blazek ISBN: 978-1-61960-502-2 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Cleanup, Tests/Quizzes 3) Theory Review Questions 4) Project Rubrics 5) Exit Tickets 6) Notebook Checks **RECOMMENDED PREREQUISITE: NONE**

ARTS & HUMANITIES **Non-Metallic II: Manufacturing in Non-Metallic Processing - Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Manufacturing in Non-Metallic Processing follows the Introduction to Non-Metallic Processing Course. An emphasis will be placed on types of lumber manufacturing, entrepreneurship, setting up and managing an enterprise, methods for manufacturing, and the importance of manufacturing in today's ever-changing environment. Students will research existing manufacturing enterprises and use their knowledge to develop an efficient process for manufacturing in the classroom. Teamwork will be stressed throughout this course. **GOALS** Students will: 1) Gain an understanding of manufacturing processes. 2) Be able to utilize previous knowledge from the previous courses to construct products through a manufacturing process. 3) Develop an understanding of entrepreneurship and manufacturing enterprises. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and cleanup are a large aspect of this course. Students will be required to work with others on a daily basis, take notes when necessary, clean up after themselves, as well as complete a classroom cleanup assignment. **TEXT:** Exploring Woodworking, 8th Edition: Fred W. Zimmerman, Larry J. McWard, Don L. Blazek ISBN: 978-1-61960-502-2 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Cleanup, Tests/Quizzes 3) Theory Review Questions 4) Project Rubrics 5) Exit Tickets 6) Notebook Checks 7) Formal Presentation **REQUIRED PREREQUISITE: Non-Metallic I**

ARTS & HUMANITIES **Non -Metallic III: Advanced Non-Metallic Processing - Grades 9-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Advanced Non-Metallic Processing is a continuation of Manufacturing in Non-Metallic Processing. Students will explore the topic of lumber processing in greater depth. A greater emphasis will be placed on designing, planning, craftsmanship, joinery, and finishing. Real-world application will allow the students to solve problems as well as utilize basic mathematics and science skills. **GOALS:** Students will: 1) Be able to solve a problem through designing, planning, and constructing a solution. 2) Develop a greater understanding of processing methods and equipment. 3) Understand the importance of joinery and which type is most efficient. 4) Understand the importance of craftsmanship and finishing through project creation. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and cleanup are a large aspect of this course. Students will be required to work on a daily basis, take notes when necessary, clean up after themselves, as well as complete a classroom cleanup assignment. **TEXT:** Exploring Woodworking, 8th Edition: Fred W. Zimmerman, Larry J. McWard, Don L. Blazek ISBN: 978-1-61960-502-2 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Cleanup, Tests/Quizzes 3) Theory Review Questions 4) Project Rubrics 5) Exit Tickets 6) Notebook Checks 7) Research Paper **REQUIRED PREREQUISITE: Non-Metallic I**

ARTS & HUMANITIES **Intro to Drafting: Mechanical Drafting/CAD Exploration - Grades 9-12** **SEMESTER COURSE**
COURSE DESCRIPTION: CADD 1-Mechanical Drafting/CAD Exploration is a basic introduction to hand-drafting, Solidworks, AutoCAD, and Autodesk Inventor. Students are introduced to engineering through the use of hand-drafting/lettering, multi-view projection, parametric modeling through CAD, and 3D modeling and prototyping. During class, students will learn how to work efficiently in a professional atmosphere through hands-on experience. Cross-curricular lessons through the utilization of STEM are incorporated to provide practical applications to reading, writing, history, science, and math. **GOALS** Students will: 1) Gain an understanding of drafting and why it is important. 2) Develop an understanding of single and multi-view drawings. 3) Be able to construct blueprints for basic level drafting projects. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and labwork is a large portion of this class, requiring students to be able to work on computers as well as draft on paper using the proper drafting equipment. **TEXT:** Exploring Drafting 12th Edition: John R. Walker, Bernard D. Mathis, and Shauna Ann Scribner ISBN: 978-1-63126-265-4 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Drawing Rubrics 5) Exit Tickets 6) Notebook Checks **RECOMMENDED PREREQUISITE: NONE**

ARTS & HUMANITIES **Engineering Principles - Grades 10-12** **SEMESTER COURSE**
COURSE DESCRIPTION: Engineering Principles is an introduction to Engineering. Emphasis is placed on the Technological Design Process as well as Aerospace Engineering and Structural Engineering. Students will utilize 3D modeling and Rapid prototyping to design solutions to real-life problems while utilizing the Technological Design Process. Students will spend much of their time researching, designing, and modeling solutions to real-life, day-to-day problems as faced by an Engineer. Cross-curricular lessons through the utilization of STEM are incorporated to provide practical applications to reading, writing, history, science, and math. **GOALS** Students will: 1) Gain a better understanding of the AutoCAD program. 2) Develop a better understanding of dimensioning and why it is important. 3) Be able to construct drawings of sectional views. 4) Be able to construct drawings of auxiliary views. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and labwork is a large portion of this class, requiring students to be able to work on computers and construct blueprints using CAD programs. **TEXT:** Engineering Fundamentals: Design, Principles, and Careers, 3rd Edition: Ryan A. Brown, Joshua W. Brown, and Michael Berkeihiser ISBN: 978-1-64925-975-2 **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Drawing Rubrics 5) Exit Tickets 6) Notebook Checks **REQUIRED PREREQUISITE: None**

ARTS & HUMANITIES **Advanced Engineering Principles - Grades 10-12** **SEMESTER COURSE**

COURSE DESCRIPTION: In advanced engineering principles, students will expand on both the CADD processes as well as engineering processes. Students will fine-tune their CADD skills through the mechanical aspects of precision, tolerancing, fastening, etc. Students will also be introduced to other areas of engineering. Fluid dynamics engineering will be introduced through the adaptation of Physics to solve given problems relative to every-day life. Mechanical Engineering will also be introduced as students create working assemblies used to solve problems. Students will research, design, and model solutions to real-life, day-to-day problems. Cross-curricular lessons through the utilization of STEM are incorporated to provide practical applications to reading, writing, history, science, and math. **GOALS** Students will: 1) Gain a better understanding of 3D computer modeling. 2) Develop a better understanding of modeling and prototyping as well as it's impact on society. 3) Be able to construct drawings in 3D using different computer software to become diverse in the area. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and labwork is a large portion of this class, requiring students to be able to work on computers and construct blueprints and models/prototypes using CAD programs. **TEXT:** Technology: Engineering in Our World: John B. Gradwell and Malcolm Welch ISBN: 978-1-63563-471-6 Engineering Fundamentals: Design, Principles, and Careers, 3rd Edition:Ryan A. Brown, Joshua W. Brown, and Michael Berkeihiser ISBN: 978-1-64925-975-2 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Drawing Rubrics 5) Exit Tickets 6) Notebook Checks **REQUIRED PREREQUISITE: ENGINEERING PRINCIPLES**

**ARTS & HUMANITIES
FUTURE COURSE**

3-D Modeling -Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: 3D Modeling is an advanced drafting course. Opposite of Engineering principles, this course focuses mainly on drafting processes used in creating blueprints. Students will focus on mechanical drafting, with an emphasis on precision and tolerancing. Mechanical objects such as cams, sprockets, chains, and fasteners will be discussed and drawn through the use of Solidworks, AutoCAD and Inventor. 3D prototyping will be utilized to ensure drawing accuracy and efficiency. **GOALS** Students will: 1) Gain a better understanding of 2D and 3D computer modeling. 2) Develop an understanding of the importance of Geometric Dimensioning and Tolerancing (GD&T). 3) Be able to construct drawings in 3D using different computer software to become diverse in the area. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and labwork is a large portion of this class, requiring students to be able to work on computers and construct blueprints and models/prototypes using CAD programs. **TEXT:** Geometric Dimensioning and Tolerancing: Principles and Practices: David A. Madsen, David P. Madsen, Dennis A. Schwartz ISBN: 978-1645646433 AutoCAD and Its Applications Comprehensive 2020, 27th Edition: Terence M. Shumaker, David A. Madsen, David P. Madsen, Jeffrey A. Laurich, Jeffrey A. Laurich, and Craig P. Black ISBN: 978-1-63563-867-7 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Drawing Rubrics 5) Exit Tickets 6) Notebook Checks **REQUIRED PREREQUISITE: Intro to Drafting: Mechanical Drafting and CAD Exploration**

**ARTS & HUMANITIES
FUTURE COURSE**

Automated Manufacturing CAD / CAM / CNC -Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: This course introduces students to the world of automated manufacturing through the application of CNC equipment. Students will be introduced to tooling, CNC mills, CNC lathes, CAM, and multi-axis programming. They will learn how this technology impacts the future as well as how they can utilize it to maximize efficiency and accuracy in industry. Computer programming will be the focus of the course as students work to complete several tasks utilizing the CNC equipment for various projects. **GOALS** Students will: 1) Gain a better understanding of CNC equipment and its capabilities. 2) Develop an understanding of the importance of programming and tooling selection. 3) Be able to operate CNC equipment using computer programming. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and labwork is a large portion of this class, requiring students to be able to work on computers, read and construct blueprints, and program machines to operate safely and efficiently. **TEXT:** CNC Manufacturing Technology: Rick Calverley ISBN: 978-1-63563-883-7 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Drawing Rubrics 5) Exit Tickets 6) Notebook Checks **REQUIRED PREREQUISITE: Intro to Drafting: Mechanical Drafting and CAD Exploration**

ARTS & HUMANITIES

Architecture - Grades 9-12

SEMESTER COURSE

COURSE DESCRIPTION: The Architecture course is designed to introduce students to the design process for a residential building. Throughout the course, students will complete key checkpoints for designing various areas of a home. Once all checkpoints have been completed, students will design a "dream home", using realistic constraints, from creating blueprints to constructing scaled models. **GOALS** Students will: 1) Gain an understanding of architectural design. 2) Develop an understanding of blueprints and creating blueprints. 3) Be able to construct accurate, scaled, blue prints and models of a dream home. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation during and after class discussions is a must. A majority of the course will consist of students developing blueprints and constructing a scaled model utilizing the computer software SoftPlan. **TEXT:** Architecture Residential Drafting and Design: Clois E. Kicklighter, Joan C. Kicklighter ISBN: 978-1-59070-699-2 **COURSE CREDIT VALUE:** This course carries the credit

value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Project Rubrics 5) Exit Tickets 6) Notebook Checks **RECOMMENDED PREREQUISITE: NONE**

ARTS & HUMANITIES

Architecture 2 - Grades 9-12 - Pilot

SEMESTER COURSE

COURSE DESCRIPTION: Architecture II is a continuation of Architecture. Students will finish their Dream Home plan sets using their project from level one. Upon completion of the plan set, students will construct a 3D model of their home using scaling and realistic modeling constraints. Upon completion of the dream home, students will learn about the ever-growing popularity of minimalism through the designing of a "Tiny Home." Students will utilize real-world constraints to design a tiny home and create a 3D model using proper residential building methods. They will utilize research to fully furnish their tiny home with actual furniture and appliances available to consumers. **GOALS** Students will: 1) Gain an understanding of Plan Sets and be able to complete each drawing necessary for a set of blueprints. 2) Develop an understanding of 3D modeling and its importance in representing a final product. 3) Be able to transfer trailer measurements and real-world constraints into house design through the design of a tiny home. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation during and after class discussions is a must. A majority of the course will consist of students developing blueprints and constructing scaled models utilizing the computer software SoftPlan and supplies within the STEM lab. **TEXT:** Architecture Residential Drafting and Design: Clois E. Kicklighter, Joan C. Kicklighter ISBN: 978-1-59070-699-2 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Project Rubrics 5) Exit Tickets 6) Notebook Checks **RECOMMENDED PREREQUISITE:** Architecture

ARTS & HUMANITIES

Product Design and Development - Grades 9-12

SEMESTER COURSE

FUTURE COURSE

COURSE DESCRIPTION: Product Design and Development focuses on the technological design process. This course utilizes design, drafting, and building skills to create solutions to real-world problems. Real-world problems will be given to the students and they will use critical thinking skills to develop solutions to a problem, design the solution, build the solution, test the solution, analyze the testing results, and present their solutions to others. Upon completion of their solutions, students will also market their products through package design and development using graphics. **GOALS** Students will: 1) Gain an understanding of the technological design process through problem solving. 2) Develop an understanding of marketing products to consumers. 3) Be able to utilize the technological design process to solve real-world problems. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation and labwork is a large portion of this class, requiring students to be able to work on computers, read and construct blueprints, and work with basic woodworking and metal working tools. **TEXT: Technology: Engineering in Our World:** John B. Gradwell and Malcolm Welch ISBN: 978-1-63563-471-6 Product Design and Development: Karl Ulrich, Steven Eppinger, Maria C. Yang ISBN: 978-1260043655 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Drawing Rubrics 5) Exit Tickets 6) Notebook Checks **REQUIRED PREREQUISITE: None**

ARTS & HUMANITIES

Practical Construction - Grades 9-12

SEMESTER COURSE

FUTURE COURSE

COURSE DESCRIPTION: Practical Construction Technology introduces students to technical residential building practices. Students will be introduced to common construction terminology, skills, and building methods/materials currently used in the work force. Some of the content discussed includes wall framing, framing for openings, roof framing, and interior/exterior finishing work. Students will work both individually and in teams to complete guided projects throughout the course. **GOALS** Students will: 1) Gain an understanding of common methods and materials used in residential construction. 2) Be able to understand and discuss practical terminology used in the construction workforce. 3) Gain the knowledge and skills required to successfully complete several common construction tasks as they relate to residential construction. **COURSE REQUIREMENTS:** Students will be required to show up prepared for class on a daily basis. Participation during and after class discussions is a must. Lab work is a large majority of the class and students will be working in a hands-on environment completing required tasks. Students will work individually and in teams while following blue prints to create residential structures/features. **TEXT: Modern Carpentry:** R. Jack Jones, Willis H. Wagner, Howard "Bud" Smith, and ISBN: 978-1-64564-660-0 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Project Rubrics 5) Exit Tickets 6) Notebook Checks **RECOMMENDED PREREQUISITE: None**

ARTS & HUMANITIES

Plastics and Polymers - Grades 9-12

SEMESTER COURSE

FUTURE COURSE

COURSE DESCRIPTION: This course is designed to give students an introduction to plastics and polymers with concentration in manufacturing. The course will educate students on the importance of repurposing readily available materials and turning them into useful materials that we would otherwise have to purchase. Students will sort recycled plastics by their molecular compound. They will then conduct a series of tests to determine exactly what the product is. Once the product has been identified, it will be crushed and repurposed into useful raw materials for other technology education classrooms. **GOALS:** Students will 1) develop an understanding of basic plastic and polymer characteristics; 2) demonstrate their ability to distinguish between the different categories by conducting a series of tests on the products; 3) be able to sort, crush, extrude and produce a useable piece of material for other technology education classrooms. **COURSE**

REQUIREMENTS: Students will be required to show up prepared for class on a daily basis. Participation during and after class discussions is a must. Lab work is a large majority of the class and students will be working in a hands-on environment completing required tasks. Students will work individually and in teams while following manufacturing processes outlined within the course lectures and assignments. **TEXT: Polymer Science and Technology:** Joel R Fried, ISBN: 978-0137039555 **COURSE CREDIT VALUE:** This course carries the credit value of .75 credits. **EVALUATION:** Typical assessments could include 1) Class Participation 2) Tests/Quizzes 3) Theory Review Questions 4) Project Rubrics 5) Exit Tickets 6) Notebook Checks

Career Exploration – Grade 10

MARKING PERIOD COURSE

COURSE DESCRIPTION: This course allows students to meet the career, education and work standards set forth by the PA department of education. The course addresses career awareness & preparation, career acquisition, career retention & advancement, and entrepreneurship. **COURSE REQUIREMENTS:** Students will be required to attend and participate in class on a daily basis. **COURSE CREDIT VALUE:** This course carries the credit value of .38 credits. **EVALUATION:** Speeches, worksheets, writing assignments, class participation, PowerPoint presentations.

Information Skills – Grades 9-12

Information Skills are integrated across the curriculum in grades 7-12. These skills are needed to meet the PDE standards and the National standards covering Information Literacy, Independent Learning and social responsibility. The Big 6 research method will be taught as a tool to assist students when working on projects. Students will be able to use the Library Catalog (OPAC) and POWER Library databases located on the school network as well as traditional print resources. Students will document sources when doing projects following MLA guidelines. Teacher made assessments will be used for projects completed in various curricular areas.

DUAL ENROLLMENT

Dual enrollment allows academically qualified juniors and seniors the opportunity to take high school courses and college courses concurrently. Students can choose to apply to programs at area schools including but not limited to Bloomsburg University through the STEM or ACE programs, Susquehanna University, Luzerne County Community College or Lackawanna College. In addition, certain courses listed above in the course selection handbook that are taught by Line Mountain School District teachers may be taken for credit through Lackawanna College. The courses students may take for Lackawanna College credit are as follows: AP English, Honors English III, Probability and Statistics, AP Psychology, Honors US History, AP Calculus, Advanced Accounting, Anatomy and Physiology 1 and 2, AP Biology, and AP Physics. On-line college courses can be scheduled for students during the academic day at the Line Mountain high school in place of a high school course. Courses at college campuses can be scheduled during the regular school day as well, and students can be scheduled for these courses in place of a high school course. Students must apply for admission to these programs and must achieve proficiency on college placement exams in order to be accepted. In addition, students must be in good academic standing in order to be recommended for the program by school administration. For more information on specific programs, students should speak with the guidance counselor. Students must apply during the previous school year to enroll in these programs. Most of these dual enrollment programs offer significant discounts to students. Students are responsible for the cost for the college courses and books. See the student handbook for an explanation of the grade weighting policy.

EARLY COMPLETION

Students are permitted to schedule all credits required for graduation during their third year of high school with one of the following three possible intentions: to earn a diploma at the end of the third year, to attend Northumberland County Career and Technology Center for their fourth year of high school, or to attend a college dual enrollment program full time during their fourth year of high school. Students who complete all credits required for graduation by the end of three years shall not be permitted to return to the high school for a fourth year.

CAREER AND TECHNOLOGY TRAINING

Students have the option receive career and technology training through the Northumberland County Career and Technology Center (NCCTC) located in Coal Township, PA during their senior year of high school. See the attached course selection guide for NCCTC.

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The Line Mountain School District wants to assure all community residents that our schools provide all persons access to our programs regardless of sex, race or handicapping conditions. This means that there will be no discrimination against people seeking employment, students attending our schools, and the general public using our facilities.

Line Mountain has made adaptations to many buildings providing access for the handicapped. We will also provide assistance in understanding this policy to those with visual or hearing impairments and to people whose native

language is not English. Anyone who has questions about these matters may contact the Affirmative Action Officer, at Line Mountain School District, District Office, 185 Line Mountain Road, Herndon PA 17830, (570) 758-2640.

Northumberland County Career and Technology Center General Information

OUR MISSION

The NCCTC mission is to provide an opportunity for all students to develop the necessary attitudes and technical skills to compete in the global workforce.

OUR SCHOOL

Northumberland County CTC is dedicated to offering the best technical service and trade programs to allow our students to develop a labor market advantage to obtain viable employment and/or post-secondary education. The three participating school districts in Northumberland County are: Shamokin Area, Mount Carmel Area, Line Mountain School Districts and Our Lady of Lourdes High School.

The ultimate purpose of technical education is to help each student become an effective citizen in our democracy. To develop and accept the responsibilities and obligations of a good citizen will help you to participate successfully in the world of tomorrow. We hope that you would participate in our activities and thus find the education and training offered in our school helpful in preparing you to live a better life and become a competitor in our emerging workforce.

YOUR CHOICE

You will want to base your decision on your interest, abilities, and career goals. Students have an opportunity to get a sound, theoretical background and literal hands-on experience in the field of their choice. Students who work seriously in completing our programs have an edge and will excel at a more rapid pace when entering the workforce than students who have not completed a program in our setting.

EARNING COLLEGE CREDIT

Students can earn advanced placement at various post-secondary institutions by taking advantage of a local articulation agreement established between the institution and the CTC or by utilizing Pennsylvania's statewide articulation system.

Local articulation agreements have been established with post-secondary institutions or career schools throughout the region. See Articulation Agreements table for specific information.

Through the Pennsylvania statewide articulation system, students who complete a NCCTC Program of Study (POS) course may be eligible for credit/advanced standing in one of many participating post-secondary institutions. To view the current statewide agreements, visit www.collegetransfer.net and search PA Bureau of Career and Technical Education.

COOPERATIVE EDUCATION

Cooperative Education is a structured paid educational program combining classroom learning with productive experiences in an occupation matching the student learner's academic and career objective. The program involves a planned partnership with specified connecting activities and responsibilities among students, parents, schools and employers.

The Co-Op program is open to all students who have completed at least one year in their vocational career path. Students will learn to apply in an actual work site the knowledge and skills which they have acquired in the formal school setting.

NATIONAL OCCUPATIONAL COMPETENCY TESTING INSTITUTE (NOCTI) CERTIFICATION

The Pennsylvania Skills Certificate was created by the Pennsylvania Department of Education to recognize vocational-technical students who have achieved high skills in their chosen technical area. To be eligible for the Pennsylvania Skills Certificate, a student must demonstrate that he/she has mastered the knowledge and skills required for an occupation.

To earn the Pennsylvania Skills Certificate, a student must achieve a high score on the National Occupational Competency Testing Institute (NOCTI) test given in the spring of the senior year. Students will be tested in two areas. The written test covers factual knowledge, technical information, and the understanding of principles and problem solving related to the chosen vocational-technical program. The performance test allows students to demonstrate that they have the skills required to do the job. The test takes place in the school, where students' performance will be evaluated by local business and industry persons.

LEARNING SUPPORT SERVICES

Learning support services are available to students that have learning disabilities and/or special needs. Course instructors and staff work collaboratively with the learning support teacher and paraprofessionals to provide the most beneficial educational atmosphere for students with special needs.

Articulation Agreements

Institution	CTC Program	Credits Received
Harrisburg Area Community College One HACC Drive Harrisburg, PA 17110 (800) 222-4222 www.hacc.edu	Automotive Technology Healthcare Occupations Occupational Child Care Protective Services Welding Technology	Up to 9 credits Up to 6 credits Up to 12 credits Up to 9 credits Up to 12 credits
Luzerne County Community College 1333 S Prospect St. Nanticoke, PA 18634 (800) 377-5222 ext. 7337 www.luzerne.edu	Automotive Technology Occupational Child Care	Up to 9 credits Up to 7 credits
Thaddeus Stevens College of Technology 750 E King St. Lancaster, PA 17602 (717) 299-7701 www.stevenscollege.edu	Automotive Technology Collision Repair Technology Welding Technology	Up to 10 credits Up to 12 credits Up to 9 credits
Penn College of Technology 1 College Ave. Williamsport, PA 17701 (570) 326-3761 www.pct.edu	Collision Repair Technology Healthcare Occupations Welding Technology	Up to 10 credits Up to 6 credits Up to 12 credits
Lackawanna College 501 Vine Street Scranton, PA 18509 (877) 346-3552 www.lackawanna.edu	Culinary Arts Healthcare Occupations Occupational Child Care Protective Services	Up to 9 credits Up to 1 credit Up to 9 credits Up to 12 credits
Triangle Tech 191 Performance Road Sunbury, PA 17801 (570) 988-0700 www.triangle-tech.edu	Construction Trades Welding Technology	Up to 11.5 credits Up to 14.5 credits
Empire Beauty Academy 30 Baldwin Blvd Suite 50 Shamokin Dam, PA 17876 (570) 486-4368 www.empire.edu	Cosmetology	Earn State Board hours
University of Northwestern Ohio 1441 N. Cable Road Lima, OH 45805 (419) 998-8889 www.unoh.edu	Auto Technology	Up to 6 credits

Course Descriptions

Automotive Technology

The program teaches knowledge of the automobile and skills enabling students to diagnose problems. The major areas of study in the Automotive Technology program are: fuel and ignition systems, PA State Inspection

certification, brake systems, four-wheel alignment, steering and suspension systems, engine repair, engine performance and drivability, automotive electronics, general automotive maintenance and service. Any student who applies himself in this industry can be ready for Automotive Service Excellence (ASE) certification.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"> S/P2 Automotive S/P2 Safety & Pollution Prevention Valvoline Motor Oil Certification 	

Collision Repair Technology

This program is designed to provide entry-level training for persons interested in learning to repair damaged vehicles. Emphasis is placed on the latest techniques in repairing damaged vehicles. Down draft paint booth and a Chief Frame Machine are used for hands-on practical experience. Students will master the technique of frame repair, welding, painting, dent removal and detailing.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"> S/P2 Automotive S/P2 Safety & Pollution Prevention Valvoline Motor Oil Certification 	

Construction Trades

This program prepares individuals to apply knowledge and skills in the construction technology field. Instruction is provided in the basic skills in a variety of areas associated with building construction such as carpentry, masonry, plumbing, heating and electrical. Instruction includes but is not limited to blue print reading; cost estimating; uses of hand and power tools; cutting, fitting, fastening and finishing various materials; and applying technical specifications and knowledge concerning the physical properties of materials.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"> S/P2 Construction Residential Construction Academy OSHA 30 (Construction) 	

Cosmetology

The program provides instruction in such tasks as nail care, skin care, shampooing, hair cutting, hair styling perm waving, chemical relaxing, curl reformation, hair coloring, and other tasks related to overall grooming and personal appearance. Application of these skills is performed at the school's on-site salon clinic. Students who successfully complete a 1250-hour course will be eligible to apply for a State Board of Cosmetology examination for licensure.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"> PA State Board of Cosmetology S/P2 Cosmetology 	<ul style="list-style-type: none"> Barbicide

Culinary Arts

The Culinary Arts program prepares students to become food handlers, cooks, servers, bakers, and cake decorators. Food preparation, storage, safety, new food products, and changes in eating habits are addressed.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"> S/P2 Culinary 	

<ul style="list-style-type: none"> • ServSafe • ProStart 	
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Healthcare Occupations

This program is designed for students who are interested in pursuing a career in the medical or health sciences field. The program is designed to prepare the student to perform the duties and tasks assigned to a variety of health care professions in the care of patients and to develop the physical, social, and emotional characteristics necessary for the successful completion of these tasks and duties. This program includes instruction in the function and interrelationship of the body systems, effective communication skills and human growth and development. Other areas of study include career exploration, medical terminology, patient rights, medical ethics, principles of disease and injury, patient care skills, and emergency procedures outside the classroom activities includes field trips, shadowing health care professionals and extended internship opportunities.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"> • Basic Life Support • First Aid • EKG Technician • Home Healthcare 	

Occupational Child Care

The program is designed to prepare students to enter a number of fields related to the care and guidance of children or to prepare them to continue their education in elementary or special education, physical or recreational therapy, and social work. This program includes instruction in the planning and supervision of developmentally appropriate activities for children. Other areas of study include safety practices, first aid, human growth and development, community and social problems, basic psychology, nutrition, special needs, program management and professionalism. Students will receive 600 hours of training required by Department of Public Welfare to be an assistant group supervisor in a day care center.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"> • Basic Kid Care – Center Based Safety • Heartsaver CPR • First Aid 	

Protective Services

This program offers students training in law enforcement, emergency medical care, and firefighting. The law enforcement course covers criminal justice theory, patrol operations, and crime scene investigation. The emergency medical services program provides state-certification as an EMT-Basic. Paramedic assistant skills and basic anatomy and physiology are also included. The firefighting course provides introductory level training in basic firefighting and rescue operations. General physical fitness training will be conducted as part of the program to prepare students for pre - employment fitness standards.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"> • Basic Life Support • OC Spray • Expandable Baton • Tactical Handcuffing • Personal Defense 	<ul style="list-style-type: none"> • FEMA Emergency Management certificates

Welding Technology

Program provides training in the most common welding and cutting techniques: shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, oxyacetylene welding, oxy fuel cutting and plasma cutting. In most welding applications, filler materials are melted and added to the weld puddle to give the joint greater strength. It is the job of the welder to control the amount of heat and the size of the melted area, and to add the proper amount of filler material in order to form a strong joint. Students learn use of welding tools, materials, safety procedures, lay out and fit-up of materials.

PDE-Recognized Industry Certification(s)	Additional Certification(s)
<ul style="list-style-type: none"><li data-bbox="180 401 358 430">• S/P2 Welding<li data-bbox="180 436 467 466">• AWS Entry Level Welder	