

# SENIOR HIGH CURRICULUM GUIDE

*Lackawanna Trail Junior-Senior High School*



2016-2017 School Year

This

Curriculum Guide has been updated and revised in order to assist you with the course selection process. It is reflective of the current standards and requirements of the Lackawanna Trail School Board of Education and the Pennsylvania State Department of Education along with Federal education requirements.

It is important for you to include parents, teachers, and guidance counselors, in choosing your classes. Your communication with those individuals will help to ensure that you have the necessary information to select appropriate courses for academic study in order to meet your academic and professional aspirations.

The years that you spend in high school will prepare you for the challenges that lie ahead in college, career, and/or military service. It is critical that you not only plan your courses wisely, but also commit yourself to mastering the skills and content knowledge that will be presented to you during your studies—education is not the key to success: learning is.

We also encourage you to extend your studies beyond the school day and become an active member of a club, sport, or musical ensemble. Research has shown the many benefits (i.e. higher grades, performance on standardized tests, college acceptance, eventual career satisfaction, etc.) of participating in school-based activities, and Lackawanna Trail has a lot to offer you.

Please take time to read over this material with your parents and school counselors before you make your final course selections. We look forward to meeting with you at class meetings to discuss additional activities which are available to you.

On behalf of the Lackawanna Trail faculty and staff, we wish you all the best for a successful year at the Lackawanna Trail Jr. Sr. High School.

Sincerely,

Dr. Mark P. Murphy  
Principal

Mr. Brian J. Keamey  
Assistant Principal

## Table of Contents

Senior High Schedule	4
Graduation Requirements	5
Career / Post-Secondary Timeline	6
Advanced Placement / Honors Courses	7
Honor Roll	8
Dual Enrollment	8
Class Standing	8
Senior High Regulations	9
Academic Honors	10
Independent Study	10
Grades / Report Cards	10
PA Graduation Requirements / Keystone Exams	11
Online Grade System MMS	11
Senior High Course Descriptions	12
Vocational / Technical Education	39

### HIGH SCHOOL SCHEDULE

Regular Schedule			Advisory Schedule		
Period 1	7:45-8:32		Period 1	7:45-8:13	
Period 2	11:35-9:17		Period 2	8:26-9:04	
Period 3	5:20-10:02		Period 3	9:07-9:45	
Period 4	10115-1047		Period 4	9:43-10:26	
Period 5	10:61.11:91	1st Lunch	Period 5	10:29-1004	1st Lunch
Period 6	11:28-1031		Period 6	11:07-11:10	
Period 7	11:34.12:09	2nd Lunch	Period 7	11:13-11:48	2nd Lunch
Period 8	12:17-1215		Period 8	11:51-11:54	
Period 9	12:18-12:53	3rd Lunch	Period 9	1131-12:32	3rd Lunch
Period 10	12:56-138		Period 10	1035-1:13	
Period 11	041-2:23		Period 11	1:16-1:54	
			Period 12	1:57-2:23	Academic Mentoring

### 2 Hour Delay Schedule

Period L	9:45-10:12		Period 9	12:23-12:56	3rd Lunch
Period 2	10:15-10:40		Period 10	12:59-1:24	
Period 3	1043-1108		Period 11	1:27-1:52	
Period 5	11:11.11:44	1st Lunch	Period 4	1:55-2:23	
Period 7	11:47-12:20	2nd Lunch			

Lunch Example: a student eating lunch during 7th period would be in a 5/6 combined class and a 8/9 combined class.

Early Dismissals: will take place at 11:15am. Students will attend periods one through four on early dismissal days. Period 4 will be extended.

The Academic Mentoring Program offered during 12<sup>th</sup> period is a focused period of time in which the faculty mentor provides a small group of students, with whom they are authentically paired, timely information pertaining to their academic progress and refers that information to various invention programs when necessary. Academic mentors will get to know their students, both as learners and as individuals and build positive relationships which are focused on learning, academic success, and authentic connections between the school and the student.

The 12 period schedule is also used for special presentations and assemblies, such as pre rallies and holiday concerts, to occur without missing one or more academic periods. 12 period days are



Microsoft



advertised to the students by homeroom teachers and during morning announcements.

### **SENIOR HIGH SUBJECT SELECTION GUIDELINES** **GRADUATION REQUIREMENTS**

To be eligible to graduate, a student must complete a minimum of 26.08 units of work. Students are encouraged to complete more than the minimum requirement. All programs require:

- Four (4) units of English (Including one unit at each grade level)
- Four (4) units of Mathematics
- Three (3) units of Social Studies (2 units American History and 1 unit of World History)
- Four (4) units of Science
- One and one-third (1 1/3) units of Physical Education with one third (1/3) attempted each school year.
- One (1/2) unit of Health
- One-quarter (1/4) unit of Consumer Science
- One (1) unit of Computer Science
- One (1) unit of Arts/Humanities
- Seven (7) electives to complete the required number of units indicated above.
- Proficient Keystone Exam Score (Bio, Lit., Alg. 1) beginning 2016- 2017
- Students who must take a Keystone Enhancement Course will have their credits reduced by 1/2 in that subject area (Math/Sci.)

### **GUIDE TO SELECTING YOUR SUBJECTS**

**When you select your subjects for the next school year keep in mind the following:**

- Establish personal goals with the assistance of your guidance counselor.
- Have specific educational, occupational, and personal objectives that you are working towards.
- Evaluate your personal strengths, interests, aptitudes, and needs.
- Learn the requirements for the college or technical school you plan to attend or the kind of work you plan to do after graduation.
- During the summer prior to your senior year try to visit the college, technical school or place of employment in which you may be interested.
- Consult your parents, talk with your teachers, and confer with your guidance counselor to get the benefit of their experience and information.
- Select the subjects to be included in your course of study that will contribute most towards helping you achieve the goals you establish.

### **CAREER / POST-SECONDARY TIMELINE**

Please find below a timeline of suggestions to assist students who are preparing for their post-secondary plans.

#### **Freshmen Year**

- Become familiar with the resources in the Career Center.
- Consult with your guidance counselor for future planning and the scheduling of a demanding and challenging course selection.
- Attend the annual Lackawanna Trail Career Day

#### **Sophomore Year**

- Take the PSAT offered in mid October.
- Use Career Center resources to actively research career and professional information.
- Attend the annual Lackawanna Trail Career Day

#### **Junior Year**

- Take the PSAT offered in mid October.
- Take advantage of the free SAT prep classes offered by the school.
- Take the ASVAB (Armed Services Vocational Aptitude Battery) if you are interested in any of the various branches of the military.
- Attend school's annual College Alumni Program.
- Attend school's annual Financial Aid Night in early January.
- Attend the annual Lackawanna Trail Career Day
- Career Cruising-create an account with this career/college information program.
- Take SAT and/or ACT at least once in the spring.
- Register with scholarship searches, such as [fastweb.com](http://fastweb.com) and [educationplanner.com](http://educationplanner.com).
- Use your summer vacation to visit your schools of choice and gather all the relevant information regarding the schools.

#### **Senior Year**

- Meet with your guidance counselor early in the year to discuss your plans.
- Attend the annual Lackawanna Trail Career Day
- Take the October SAT, ACT, and/or SAT II if necessary.
- Take the ASVAB (Armed Services Vocational Aptitude Battery) if you are interested in any of the various branches of the military.
- Prepare college applications carefully. Follow instructions and pay close attention to deadlines! Try to have all college applications submitted before Thanksgiving.
- Attend the annual College Alumni Program.

- Attend the annual Financial Aid Night in early January.
- Beginning in January, complete all necessary financial aid forms, which will include the FAFSA (Free Application for Federal Student Aid).
- Senior project completed by June (through 2015-16).
- Periodically visit the Career Center and apply for any local scholarships for which you are eligible.

### **ADVANCED PLACEMENT COURSES**

In addition to the regular academic program, Lackawanna Trail High School offers Advance Placement Courses. Carefully read the program of study to determine the AP courses that are offered. Courses in Advanced Placement are college level courses. They require a great amount of study on the part of the student. They carry 1 full academic credit. In addition, AP course grades are weighted 110 percent of the grade achieved. A student who enrolls in an Advanced Placement course is strongly encouraged to take the AP Exam in that subject. Students who take the exam and receive a grade of 3 or higher, on a scale of 1 - 5, normally will receive college credit for the course once they are enrolled in college. Students should investigate to determine if the college or university they wish to attend awards credit for AP courses. This research is the responsibility of the parents and students and the information is usually found in the college's catalogue. There is a fee for taking the exam. AP Courses include: AP English, AP Calculus, AP US History, AP US Government and AP World History.

### **HONORS COURSES**

Another addition to the regular academic program is the honors program. Honors courses, which are more academically challenging than regular courses, are weighted at 108 percent of the grade achieved. Students who select an honors course must meet the following criteria to enroll.

#### **Honors English, Honors Math, Honors Science, & Honors Social Studies:**

- 93% average or better in last related general subject course and/ or 85% average or better in a related honors subject course
- Teacher Recommendation
- Appropriate performance (proficient or better) on applicable PSSA/Keystone Exam
- Parent Waivers will not be considered

### **HONOR ROLL**

Honor roll will be issued at the conclusion of each marking period.

1. Students must have an 87 or higher average with no grade at or below a 76.
2. Students may not have an incomplete in any subject. Incompletes must be made up within 2 weeks of the end of the marking period.
3. Students will be awarded High Honors if they have a 93 or higher average in major subjects and meet additional guidelines.

**Note:** Students qualifying for Honors Recognition must have an overall G.P.A. of 87 or higher with no failing or incomplete grades. Honors Banquet selection will be based 1st, 2nd and 3rd marking period grades.

If a parent does not wish to have his/her child's name published as part of the Honor Roll, a written request should be submitted to the guidance office at the beginning of the school year. A new request is required each year.

### **DUAL ENROLLMENT WITH KEYSTONE COLLEGE**

Dual Enrollment allows students to take college courses and earn postsecondary credit while completing high school graduation requirements. Lackawanna Trail offers several dual enrollment courses including AP English, AP US History, AP US Government, AP World History, Honors English IV, Honors World History, Honors Psychology, Honors Chemistry, Honors Physics II, Honors Physics, Honors Statistics, Honors/AP Calculus, Honors Anatomy and Physiology, and Honors Spanish IV. Contact the Guidance Department for more information about these courses.

### **CLASS STANDING**

To be eligible to be listed as a sophomore, a freshman student must earn a minimum of five and one-third (5 1/3) units. To be eligible to be listed as an junior, a sophomore student must earn a minimum of eleven and two-thirds (11 2r3) units. To be eligible to be listed as a senior, a student must schedule the proper subjects to graduate at the end of the senior year. All AP and Honors courses utilize weighted grades as a calculation for Grade Point Average and Class Rank.

## **SCHEDULE CHANGE REQUESTS**

Course selections should be firm decisions, which are thoughtfully made by students after careful consultations with parents, teachers, and counselors. Prior successes, failures, special individual interest, aptitudes, and future college and/or career plans should be taken into consideration when you plan your course sequence. Any request for a course change must be made within the first week of school and are not always guaranteed because of teacher and/or seat availability.

Changes often are requested because of a student's preference for a certain teacher, desire for a reduction of course load, because of academic difficulties, outside employment, the desire to be placed with friends or change of mind as to personal preference for course content. Consequently, the only changes that will be considered are those that meet two or more of the following criteria:

- A change in a student's educational plan requires a change of electives.
- A student is in need of meeting credit requirements for promotion/ graduation.
- The request is the result of courses taken during the summer.
- The request is submitted because of the student's wish to add a subject or to select a more demanding elective.
- The request is made during the first week of the school year.
- The teacher and/or counselor determine a student is placed in an inappropriate class.

The start of school is a very busy time. It is important that requests are not made for insignificant reasons. If you feel that you have a valid request, as previously outlined, the request must be made in writing and signed by your parent/guardian. The guidance department will review your request after consultation with your parent/guardian. A form for schedule changes can be found in the Guidance Department.

## **SENIOR HIGH REGULATIONS**

A student shall have a minimum course load of six (6) units of credit per year, plus required subjects, for example, Physical Education. Only major subjects which meet every day will meet the requirements toward six (6) credits for the entire year.

- 0 A number of courses have prerequisites or recommendations. These prerequisites or recommendations are designed to improve your chances of success.

- 0 If a course is repeated to obtain a higher grade, although that, course had not been failed, the student cannot count both courses for credit. The higher of the two grades, however, will count in the cumulative average in determining class rank.

## **ACADEMIC HONORS**

Top students in each department will be honored at graduation. The high school principal will nominate three students to speak at graduation exercises. (Valedictorian, Salutatorian, Commended Student.)

## **INDEPENDENT STUDY/COLLEGE COURSES**

The following circumstances may qualify a student for independent study:

- 0 A desire for enrichment.
- 0 Curriculum areas not offered by Lackawanna Trail.
- 0 Scheduling difficulties.

To qualify for taking a course on an independent study basis, a student must:

- 0 Request permission from the Guidance Office.
- 0 Receive approval from the teacher, guidance counselor and principal.
- 0 Minimum requirements will be established by the teacher.
- 0 The course must be completed prior to the close of the school year in which it is initiated.
- 0 Only senior high students are eligible.
- 0 Students taking independent study/college courses will receive a grade and credit for the work done.

## **GRADING SYSTEM**

A numerical grading system is used at the Jr. Sr. High School. The specific earned percentage will be reported to parents and students on the report card. The scale is:

- 93 -100 - Superior - A
- 85 - 92 - Above Average - B
- 77 - 84 - Average - C
- 70 - 76 - Below Average - D
- Below 70 - Failure

## **REPORT CARDS**

Students will receive a report card each quarter. Major courses that run the entire year will be graded according to the following:

- Quarter 1 average
- Quarter 2 average

- Quarter 3 average
- Quarter 4 average

Courses may include a Mid-Term Exam, a Final Exam, or Final Project, which is factored into the quarter average. Teachers determine the level of comprehensiveness tested on their mid-term and final exams.

### **PENNSYLVANIA'S NEW GRADUATION REQUIREMENTS**

Pennsylvania now requires students to demonstrate successful completion of secondary-level course work in Algebra I, Biology, and English Literature. The Keystone Exams are one component of Pennsylvania's new system of high school graduation requirements and are end-of-course assessments designed to assess proficiency in those subject areas. Lackawanna Trail will also require students to achieve proficiency on these Keystone Exams as a graduation requirement (stand-alone exam) beginning with the Class of 2017.

### **ABSENT STUDENT HOMEWORK POLICY**

If your child is expected to miss three (3) or more consecutive days of school due to illness or other excused absence, you may utilize the guidance office staff to help collect your student's missed assignments by calling 570-945-7202. All requests for work should be made before 10 a.m. on the day of the request to allow adequate time to collect materials and assignments. If your child is expected to miss 1 or 2 days of school, please utilize the fusion pages of your student's teachers located on the Lackawanna Trail High School website [www.ltsd.org](http://www.ltsd.org).

### **ONLINE GRADE SYSTEM (MMS1)**

Below are the procedures for parents/guardians to access Student grades on MMS. Click on the MMS for schools Link on the high school webpage:

1. On the parent sign on screen, click to create a new account. (You must have a current e-mail address on file.)
2. Enter First Name and Last Name of the Primary Parent, as well as their student's ID number. (5 digit number on student schedule)
3. Create a personal user name and submit.
4. A temporary password will be sent to the email provided.
5. Click to return to the log in screen and enter the user name created, and the temporary password.
6. After this step, the system will prompt you to change your password.
7. In MMS, a screen will show your child's name. Click on it.

Although your child's schedule and grade to date will be visible at this point, be mindful that your child's teacher can take up to seven days to grade and upload the grade into the MMS system. Daily assessments and minor projects with a weight of less than 10% of the quarterly grade will be reflected at the end of the marking period.

If you have problems accessing and using the MMS system, we ask for you to call the high school office number at 570.945.5181. If you need feedback on an assessment, you can always call or email your child's teacher. Our hope is that the MMS system will be an effective tool for better communication between school and home.

### **SENIOR HIGH COURSE DESCRIPTIONS**

*\*\*Some elective courses require mandatory attendance after the school day. These elective courses will be indicated by an asterisk (\*\*) before the course name. These elective courses should be discussed with the guidance counselors and teachers to best determine if you can fulfill the obligations of these elective course.*

### **ART**

#### **Art I 1 Credit**

This course initiates a comprehensive introduction to the visual arts, designed for all students in grades 9-12, and is not limited to the artistically talented. Creative studio project units in drawing, painting, printmaking, sculpture, ceramics, crafts and computer graphics are integrated with lessons in the basic language known as the Elements of Art. Artists and works of art are also linked to lessons in order to familiarize students with the way art is created, its history and diversity, and its pervasive impact on our lives. Art related careers are also explored. Student portfolios will be introduced and developed to establish a record of personal progress in and through art learning, understanding and hands-on activities.

#### **Art II - 1 Credit**

Recommendation - successful completion of Art I. This course is designed for students who wish to broaden and enrich a continuing interest in art. We will review and build upon the Art Elements foundation established in Art I. Learning and understanding will expand to include the Principals of Art and Design integrated with creative expressions, using a variety of traditional art media. Student art portfolios will continue to record progress in art studio and art-related knowledge and understanding.

### Honors Art 111/IV - 1 Credit

Students who schedule this advanced art class will be challenged to more complex skills, techniques and understanding in the visual arts. Over this two-year curriculum, studio work in two- and three dimensional media will incorporate the Elements and Principals of Art, and will be coordinated to a comprehensive study of the history of art. Other important components of this course include sketch -journals, portfolio development, independent studio work, art research projects, Art Criticism, post -secondary art schools, and art related careers. This course is weighted at 108 percent of the grade achieved.

## **BUSINESS TECHNOLOGY**

### Word Processing - 1 Credit

This course is designed for those students who have limited experience with computers and will begin with the basics of computer use. Students will learn correct keyboarding techniques with an emphasis on both speed and accuracy. Students will learn the correct formatting of various business documents. Both Micro Type and Microsoft Word software will be used for this course.

### Computer Applications - 1 Credit

Since Microsoft *Word* is the number one selling word processing program in the world, this course is designed to teach students to create documents that can be enhanced to perfection using the many features that *Word* offers. After mastering *Word*, students will learn how to use Microsoft *Excel* to set up and manipulate spreadsheets. Next, students will learn how to create presentations using Microsoft *PowerPoint*. *PowerPoint* is the most widely used presentation software in the world today and is considered to be among the most prevalent form of persuasion technology. Lastly, students will complete a number of projects using the Internet to gather information and conduct research using various search engines.

### Computer Programming-1 Credit

This course is designed to teach the fundamentals of computer programming. The first semester will be spent using the Visual Basic programming language. Students will learn the basics of object-oriented programming and event-driven programming by working with forms, controls, and properties. Time will be spent completing hands-on projects covering topics such as calculations, data, variables, decision making, looping, menus, and graphics. During the second semester students will be

introduced to the world of web page design. They will use HTML and JavaScript for the creation of web pages. They will learn to search for and retrieve information using the internet. Internet safety will also be addressed.

### Accounting I - 1 Credit

Students receive preparation for the real business world by being given an insight into the operation, function, and internal workings of business enterprise. The course will introduce basic accounting concepts, principles, and procedures. Students will complete accounting cycles for a service business operating as a proprietorship and a merchandising business operating as a corporation. This course will help to prepare students to enter college as a business major.

### Accounting 11-1 Credit

This advanced course in accounting is designed to increase the competency of the student dealing with situations on a higher level. It provides the student with the opportunity to apply the basic principles that were learned in the first-year course to a variety of accounting systems and methods that are commonly found in business. Departmentalized accounting systems will be emphasized.

### Desktop Publishing I - 1 Credit

Required—Graphics Communication II: This course will provide hands-on experience in the creation of electronically produced, printed materials with emphasis placed on original design and layout. Typical assignments will include flyers, charts, greeting cards, pamphlet covers, newspaper articles, photo manipulation, yearbooks, and PowerPoint Presentations. This course will introduce the latest release publishing computer software-Adobe CS products. Assessment will be achieved through evaluation of software knowledge and application, completed assignments and testing. Outside class time is often required for members of the yearbook staff, and all staff members must recognize they represent Lackawanna Trail High School.

## **ENGLISH**

### English I - 1 Credit

This English course is divided into four aspects: Literature, grammar, vocabulary, and composition, with oral activities related to all four. Literature covers both American and World literature, including units on the short story, non-fiction, poetry, drama, and the novel. Outside reading is based on young adult literature and classical novels. Grammar is integrated with composition and

vocabulary whenever possible and students work on individual units on some occasion. Some vocabulary words are taken from literature or current affairs, with emphasis on relating the topics to the students' own lives. Students are encouraged to consider long-range purposes for developing their reading, writing, and speaking skills.

#### Honors English I - 1 Credit

This course is offered to students in who choose to begin the accelerated study of English. The course will concentrate on grammar and vocabulary skills by using writing techniques and assignments. Short stories, drama, novel, poetry, and non-fiction will be studied. This course is weighted at 108 percent of the grade achieved.

#### English II - 1 Credit

Literature in the tenth grade will concentrate on a deeper study of All genres including, fiction and non-fiction, poetry, short stories and novels. There will be an emphasis on literary techniques as applied to reading and writing skills. Writing will be in various forms, including research. Vocabulary will also be part of the course of study, along with speaking and listening skills. Grammar lessons will be incorporated into writing activities. The Keystone Literature Exam is administered at the conclusion of English II.

#### Honors English 11-1 Credit

This course is offered to college-minded sophomores who would like an accelerated study of English. Students will read literary works in various genres including fiction and non-fiction, drama, poetry, short stories, and novels. Literature will be analyzed for historical information, plot, theme, and style. There will be an emphasis on literary techniques as applied to reading and writing skills. Writing will be in various forms, including research. Vocabulary will also be part of the course of study, along with speaking and listening skills. Grammar lessons will be incorporated into writing activities. This course is weighted at 108 percent of the grade achieved. The Keystone Literature Exam is administered at the conclusion of Honors English II.

#### English Language Arts Keystone Enhancement - .5 Credit

The English Language Arts (ELA) Keystone Enhancement course will be given to students who do not demonstrate proficiency on the Keystone Literature Exam. The ELA Keystone Enhancement course will focus on content and test taking strategies for the Pennsylvania Keystone Exam in Literature. The focus on content will include student deficiencies from the Keystone Exam in

Literature. Students required to take the ELA Keystone Enhancement course will have their graduation requirements in English reduced to three credits.

#### English III - 1 Credit

This course is offered to juniors to help prepare them for college. This course is designed to familiarize students with the concepts and skills associated with English by developing oral and written skills. These skills will be developed through a study of American literature, composition, vocabulary and grammar. Research skills and the proper development of a research paper will be examined. Remedial topics will be included for students who do not score proficient on the Keystone Literature Exam.

#### Honors English III - 1 Credit

Honors English is offered to juniors who would like an accelerated study of English to help prepare them for college. A proficient score or better on the Keystone Literature Exam is required as a prerequisite. English skills will be developed through a study of American literature, composition, vocabulary and grammar. Research skills and proper development of research papers will be developed in this course. This course is weighted at 108 percent of the grade achieved.

#### English IV - 1 Credit

Academic English IV is offered to seniors to help prepare them for college. A proficient score or better on the Keystone Literature Exam is required as a prerequisite. This course is designed to familiarize students with the concepts and skills associated with English by developing oral and written skills. These skills will be developed through a study of English • literature, composition, vocabulary, and grammar. Research skills and the proper development of a research paper will be examined.

#### Honors English IV - 1 Credit

Honors English IV is offered to seniors who would like an accelerated study of English to help prepare them for college. A proficient score or better on the Keystone Literature Exam is required as a prerequisite. This course is designed for students who have an Honors English background. English skills will be developed through study of English literature, composition, vocabulary, and grammar. Research skills and proper development of research papers will be developed in this course. This course is weighted at 108 percent of the grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement).



### English 12-1 Credit

This course is offered as an alternative to English IV. The content will include communication, language arts, and essential English skills. These skills will be developed through a study of English literature from the Middle Ages to the present. There will also be various writing activities including research. Vocabulary and oral communication skills will also be emphasize. Remedial topics and/ or a project-based assessment will be included for students who do not score proficient on the Keystone Literature Exam.

### Theatre Arts - 1 Credit

This class is for students who are serious minded in their pursuit of the theater. There will be pantomimes, improvisations, extemporaneous talks, discussions, along with dialogue for scenes and play performances, which will require memorization. All projects are taken seriously with careful, mature preparation in planning, organizing and rehearsing for class presentation.

### Creative Writing-1 Credit

Open to juniors, seniors and invited sophomores, Honors Creative Writing I is an advanced English course that focuses on producing manuscripts for print in fiction, nonfiction, poetry, and drama genres. Students will read masters of the craft and study genres of creative writing including narrative non-fiction, Young Adult, Science Fiction/Fantasy, epics, romance, poetry, and graphic novels, while exploring the conventions of writing in each genre. A discussion of publishing will provide students with practical information for submitting their work for publication. Students must have earned a minimum average of 85% in their previous year's English course. This class is designed for students who have a passion and talent for writing and seriously want to improve their work.

### Honors Creative Writing II - 1 Credit

This honors course will be offered jointly with Honors Creative Writing I and is open to students who have successfully completed that course over the previous year. In addition to the usual writing assignments, students in Creative Writing II will earn their honors credit by participating in the class blog, work on a novel or screenplay, or through a portfolio evaluation of the students' best work. Students who plan to write for publication as part of a future career are encouraged to select this class.

### Advanced Placement English - 1 Credit (Offered 201 6-201 7)

This course is designed to develop the student's ability to read selected poems and passages analytically. Students will also write

critical or analytical essays based on given critical statements, poems, and prose passages that are one of the following: narrative, exposition, or argument. A great deal of independent reading and writing is required. This course is designed to be the equivalent of the general English course usually taken during the first year of college. A proficient score or better on the Keystone Literature Exam is required as a prerequisite. Students completing the course will take the Advanced Placement Examination. Research skills and proper development of research papers will be developed at the end of this course. This course is weighted at 110 percent of the grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement. There is a fee to take the AP test which is a requirement of this course.)

## **FAMILY AND CONSUMER SCIENCE**

### Parenting and Family —1 Credit

This course involves practical applications of the family and consumer science field. Students will learn the basics of household management, child-rearing, and budgeting. Students will further understand how to develop a family budget and to manage the money in the household. Hands-on activities such as trips to local establishments will supplement instruction in the classroom. This class is open to junior and senior students.

### Interior Design - 1 Credit

This course is designed to acquaint the student with the basic elements of design in order to create a home that reflects a personal sense of style. The aim of the course is to emphasize the importance of a home to a person's physical and mental well being. It provides practical tips to ensure a pleasant and safe home while exploring design, economy, and organization within the confines of feasibility for home improvement projects. Topics will include: wall covering techniques, fabric selection, color palette and a comprehensive home design as a final project.

### Food Science and Nutrition - 1 Credit

This course addresses the nutritional implications of dietary choices. It provides the student with a basis for making healthy decisions regarding diet and lifestyle. It examines the dietary requirements for optimum health and the consequences of the lack of proper nutrition. Balanced meal planning, shopping for food within a budget and healthy weight management are some of the topics explored, as well as nutrient requirements for age/weight, nutritional causes for physical ailments and comparison of food

composition, i.e. fast food vs. home cooked food and actual vs. recommended food portions.

#### Consumer Science — 1/4 Credit

This course is designed to empower students to manage the challenges of living in a diverse, global society. The focus of this course is to address the functioning of families and their interrelationships with work, community and society. Attention is given to the reoccurring, practical problems of individuals and families. Comprehensive classroom experiences allow students to develop the knowledge and skills needed in making choices to meet their personal, family and work responsibilities.

### **FOREIGN LANGUAGE**

#### Spanish I - 1 Credit

This course is devoted to developing basic habits and skills in language learning. Listening, speaking, reading, and writing are emphasized. The culture of the target language is interwoven in the dialogues, in the narratives and in the related vocabulary. The cultural emphasis at this point is to give students an understanding of the way in which the people of the Hispanic world live.

#### Spanish II - 1 Credit

This course continues to develop the habits and skills in listening, speaking, reading and writing Spanish. The development of a better understanding and appreciation of Spanish speaking countries is achieved by utilizing closely related dialogues and narrative materials. The cultural emphasis, therefore, is to give students an understanding of and appreciation for, the customs of Hispanic people.

#### Honors Spanish III - 1 Credit

This course continues developing habits and skills in the target language in greater depth and complexity. The cultural and appreciative aspects of the language are an integral part of the materials utilized. This course is weighted at 108 percent of the grade achieved.

#### Honors Spanish IV - 1 Credit

This course continues to reinforce the development of proficiency in listening, speaking, understanding, and appreciation of Hispanic culture by studying its related literature. This course is weighted at 108 percent of the grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement).

#### French I - 1 Credit

This course begins the study of the French language. Emphasis is placed on listening, speaking, reading, and writing. Reading selections summarize grammatical constructions of each lesson and deal with various aspects of French geography and culture. Dialogue situations are emphasized in order to strengthen students' abilities to carry on conversations in the target language. Guided compositions are used to begin to develop good writing skills.

#### French II - 1 Credit

This course continues to expand the four basic skills of language study. Vocabulary items become more varied, and a greater emphasis is placed on reading and writing. Grammar is studied in more depth, and is taught with an emphasis on oral and written forms. Reading selections are provided in the target language to further the student's knowledge of culture and history. Students continue to practice writing skills in the French language by means of guided compositions, dialogues, and some simplified free-style work.

#### Honors French III - 1 Credit

This course uses real-life conversational situations, contemporary French literary works, and practical reading selections as the basis for vocabulary and grammar study. Listening, speaking, reading, and writing skills are emphasized in greater depth. Students progress from writing guided compositions to free form. Culture studies are concerned primarily with everyday life in French-speaking society. In addition, dialogue situations are introduced by means of which students may express themselves in style and content of today's culture. This course is weighted at 108 percent of the grade achieved.

#### Honors French IV - 1 Credit

This course is a history/literary/cultural approach to the study of French civilization and culture. Students are introduced to the some of the high points of French history, as well as the culture of the French-speaking world. Independent reading of novels, plays, etc. is encouraged. Grammar, conversations, and composition offer students opportunities for expression in the target language. This course is weighted at 108 percent of the grade achieved.

### **HEALTH EDUCATION**

#### Health 9 —1/2 of Credit

The course will take a wellness approach to several areas of

health as it pertains to the student, both now and in the future. Responsible behaviors that impact the student, others, and the environment will be discussed. This course is designed to promote a healthy lifestyle and good decision-making as it pertains to this lifestyle. Topics covered in this curriculum are physical fitness, nutrition, weight loss and weight management, personal hygiene, alcohol, tobacco, drugs (both legal and illegal), and non-communicable diseases, human reproduction and sexuality (with an emphasis on responsible decision-making). Youth suicide awareness prevention will also be covered.

#### Health II - 112 of Credit

Students will learn about the process used to achieve a healthy lifestyle, which will include the need for health promotion, protection and prevention of healthy and risk behaviors. Focus will be on responsible decision making which will lead to self-discipline and commitment on making total wellness a priority. Course content will include: self-responsibility for wellness, understanding the human body, human reproduction and sexuality (an emphasis on responsible decision-making and communication skills). A CPR unit will be incorporated into the course. Youth suicide awareness prevention will also be covered.

### **MATHEMATICS**

#### Personal Finance-1 Credit, Elective

This course is designed to introduce students to various personal finance and practical life skills that will be pertinent in the very near future. Through numerous practical applications, students will gain knowledge of financial fundamentals, long and short term funding sources, banking institutions, school loans, credit and finance charges, real estate and mortgages, car loans (buying), taxes and insurances, health insurance, understanding the stock market, and saving for the future. This course will also focus on job employment techniques and strategies (resume writing and interview skills) which will become vital in a highly competitive work world. This course is an elective and cannot be used to fulfill the mathematics graduation requirement.

#### SAT Preparation-1/2 Credit

This course prepares students in test-taking strategies, pacing strategies and subject specific techniques for taking the SAT and the ACT. In this class, students will familiarize themselves with the SAT and ACT and learn strategies to maximize their scores. Students will gain In-depth information on each section of the SAT, as well as the overall test format. They will then apply this

information to learn how the SAT "thinks" and to develop relevant strategies. Finally, students will gain readiness skills and longer-term preparation techniques to be utilized outside the classroom.

#### Math Essentials-1 Credit

Students will be exposed to the mathematics of voting and apportionment, geometry as it applies to various real world applications, statistics, consumer math topics such as credit card interest, bonds, stock, student loans, and home buying. Prerequisites for the class: Students must have at least a Math 3 background and be a senior. Familiarity with computers, PowerPoint, Microsoft Word, and Microsoft Excel would be helpful.

#### Algebra/Geometry Concepts I — 1 Credit

Prerequisite Math 8. This is the first in a three course series. The topics covered in the initial course include functions, linear equations/ inequalities, graphing techniques, geometric constructions, properties of two and three dimensional shapes, geometric transformations, operations on real numbers, estimation, measures of central tendency, statistical graphs, and basic sampling techniques.

#### Algebra/Geometry Concepts 2 — 1 Credit

This course will further develop the concepts covered in Math I, with an introduction to new topics which include solving systems of equations, inequalities, matrix operations, polynomial equations and functions, deductive/inductive proofs, linear regression, experimental design techniques, identifying and using varying distributions to describe populations. The Keystone Exam may be administered at the conclusion of this course.

#### Algebra/Geometry Concepts 3 — 1 Credit

The final course in this series is intended to complete the development of the concepts introduced in Algebra/Geometry Concepts 1 and Algebra/Geometry Concepts 2. The Keystone Exam may be administered at the conclusion of this course.

#### Algebra I - 1 Credit

Prerequisite - Pre-Algebra or Math 8. Algebra is the study of the properties and relations of symbols representing numbers. The student develops an understanding of algebraic structure so as to build a foundation of principles related to the real number system. Sets, the number line, operations with polynomials, linear and quadratic equations and roots are all covered. The Keystone Exam is administered at the conclusion of Algebra I.

### Honors Algebra 1 — 1 Credit

This course includes the study of sets, equations, inequalities, functions, number systems, polynomials, quadratic equations, factoring and rational expressions. This course is weighted at 108 percent of the grade achieved. The Keystone Exam is administered at the conclusion of Honors Algebra I.

### Algebra I Keystone Enhancement - .5 Credit

The Algebra I Keystone Enhancement course will be given to students who do not demonstrate proficiency on the Keystone Algebra Exam. The Algebra I Keystone Enhancement course will focus on content and test taking strategies for the Pennsylvania Keystone Exam in Algebra. The focus on content will include student deficiencies from the Keystone Algebra Exam. Students required to take the Algebra I Keystone Enhancement course will have their graduation requirements in math reduced to three credits.

### Geometry - 1 Credit

Prerequisite - Algebra I. This course includes plane, solid, and coordinate geometry along with an introduction to trigonometry. Units of study include form and logical structure, geometric figures, logic and problem solving.

### Spatial Geometry/Honors Geometry - 1 Credit

Prerequisite - Algebra I, a proficient score or better on the Keystone Algebra I Exam. This course includes the study of plane, solid and coordinate geometry along with an introduction of trigonometry. Units of study include angles, triangles, polygons, inductive and deductive reasoning, standard theorems and proofs. This course is weighted at 108 percent of the grade achieved.

### Algebra II/Trigonometry - 1 Credit

Prerequisite - Geometry, a proficient score or better on the Keystone Algebra I Exam. This is a second course in Algebra for students with average and above average mathematical ability. It assumes an understanding of the set of real numbers and algebraic expressions in one variable. Main units of study are polynomial, rational, exponential, and logarithmic functions and their properties. Linear and quadratic functions are studied with particular emphasis on graphing in two dimensions. The course includes the fundamental concepts of matrices and determinants, sequences and series, permutations and combinations, probability and mathematical induction.

### Honors Algebra II/Trigonometry - 1 Credit

Prerequisite - Geometry, a proficient score or better on the Keystone Algebra I Exam. This course includes the study of the structures of mathematics, sets, number systems, linear and quadratic equations and inequalities. Other topics include systems of equations, rational expressions, functions, logarithms, complex numbers, and conic sections. This course is weighted at 108 percent of the grade achieved.

### Trigonometry/Pre-Calculus - 1 Credit

Prerequisite - Algebra II, a proficient score or better on the Keystone Algebra I Exam. This course is designed for academic students who will take higher level math courses in college. Main topics of study are the periodic nature of the circular function which relates angles with real numbers, relationships among circular functions, identities and trigonometric equations. Vectors are studied as ordered pairs of real numbers. Coordinate geometry of two dimensions, gives emphasis to the study of conic sections, is also covered.

### Honors Trigonometry/Pre-Calculus - 1 Credit

Prerequisite - Algebra II, a proficient score or better on the Keystone Algebra I Exam. This course is a study of trigonometry combined with an introduction to calculus. Topics from trigonometry include the trigonometric functions, graphs, identities, and the solution of triangles. Topics from calculus include functions, limits, differentiation, and the applications of derivatives. This course is weighted at 108 percent of the grade achieved.

### Advanced Placement/Honors Calculus — 1 Credit (Offered 2016-2017)

This course is intended for students who wish to major in mathematics, engineering, science, or business administration. Included in the study are functions, limits, continuity, differentiation and integration, parametric equations and infinite series. This course is weighted at 108 percent of the grade achieved. The course curriculum will be reflective of the current AP requirements in Calculus. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement.)

### Statistics - 1 Credit

Prerequisite - Algebra I and Geometry, a proficient score or better on the Keystone Algebra I Exam. The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inferences.

### Honors Statistics - 1 Credit

Honors Statistics is a course focused on four broad areas: Exploring Data: Describing patterns. Sampling and Experimentation: Designing and conducting a study. Exploring Random Events: Using probability theory and simulation to study and anticipate patterns. Statistical Inference: Estimating population parameters leading to formulating and testing hypotheses. Prerequisite: Must meet or exceed honors requirement for Honors Algebra II/Trigonometry. Course will be offered based on enrollment. This course is weighted at 108 percent of the grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement)

## MUSIC

*\*\*Numerous attendance commitments outside the posted school hours are to be expected and will be integrated as a mandatory element of music courses; this will include a minimum of 3 performances per year, attendance at other musical events both inside the district and outside the district (i.e.: Lackawanna Trail Choral concerts and Elementary Center concerts), in addition to extra after school rehearsals. In the event of extreme hardships or situations, alternate assignments may be presented to the student. These assignments will be designed to provide a similar educational experience and will be comprehensive in nature. Pennsylvania State Standards will be presented and upheld throughout the course of study.*

### \*\*Concert Band — 1 Credit

This is an elective credit course open to interested students with an intermediate to advanced background in the performance and study of instrumental music of the band genre. Students without said background may request entrance in the course and will be considered by the Director of Bands on a case by case basis. The course will prepare the students to engage in and successfully execute a musically mature concert band program; the students will be trained in the art of small ensemble music and will be guided towards successful performance on their individual instrument as well as unified performance as an ensemble. The guidance will include individual playing tests, memorization, and individual practice, in accordance with the Pennsylvania State Standards. Students will be assessed through alternative assessment techniques such as self-critiques and group ensemble evaluations. Scale tests, playing tests, and more formal evaluations will also take place. Daily practice is to be considered homework.

### 'Chrysalis (Women's Chorus) - 1 Credit

This ensemble meets daily. Membership is chosen by audition only. Vocal ability, as well as an interest in choreography is an essential requirement. Once accepted in to this ensemble, students are required to attend all public performances and adjudications. Chrysalis performs contemporary music in many styles such as jazz, blues, pop, Broadway and rock. Music chosen will develop the vocal style known as the "Broadway belt" with emphasis on proper vocal production and breath support.

- This ensemble will perform publicly at least 2 times each academic year at Lackawanna Trail High School.
- Participation in each performance is mandatory and will be recorded as an exam grade. Failure to participate in a public performance will require a make-up exam. Exam requirements will be outline in the course syllabus.
- Each student will be asked to purchase a performance t-shirt to be worn for performances, field trips and other special events.
- Any invitations to perform for the community will be regarded as an additional mandatory performance. All students are required to participate.
- Grades are based on daily participation, monthly vocal exams, vocabulary quizzes and public performances.
- While the ensemble meets every day, additional practicing at home may be required.
- Students are required to attend performances given by other Lackawanna Trail ensembles in the Fall and Spring.

### \*\*Chor Leon (Men's Chorus) 1- Credit

This ensemble meets daily and is open to any young man in grades 9 —12. Any student who enjoys singing is invited to participate in this ensemble. Vocal ability as well as a desire to develop sight reading proficiency is an essential requirement for admission. The chorus will perform music in unison and two part as chosen from the guidelines of Music Educators National Conference and American Choral Directors Association. Students interested in participating should be aware of the following requirements:

- This ensemble will perform in public. Public performance dates will be announced to the chorus 4 weeks prior to the event.
- Participation in each performance is mandatory and will be recorded as an exam grade.
- Failure to participate in a public performance will require a make-up exam. Exam requirements will be outlined in the course syllabus.

- Each student will be required to purchase a polo shirt to be worn for performance, field trips and other special events.
- Grades are based on daily participation in class, monthly vocal exams, all public performances, in class assessments, and occasional theory tests.
- Music rehearsed and performed will be of the highest caliber, be from all periods of music history and will require the student to commit to musical excellence. Practicing at home maybe required.
- Students will be required to attend concerts by other Lackawanna Trail ensembles, either at the high school or at the elementary center.
- Any student interested in becoming a member of this ensemble must see the choral director before registering with the guidance office.

#### \*\*Madrigal - 1 Credit

This ensemble meets daily. Membership is chosen by audition only. Vocal ability as well as a desire to develop sight reading ability is an essential requirement for admission. Once accepted in to this ensemble, students are required to attend all public performances and adjudications. The Madrigal Singers perform music on the highest caliber from all periods of music history. Repertoire includes pieces in English as well as foreign languages. Music chosen will develop vocal technique, sight reading ability, and expose young performers to styles and forms found historically. Repertoire will be SAB and as well as SATB music as recommended by Music Educators National Conference and American Choral Directors Association.

- This ensemble will perform publicly at least 3 times each academic year.  
Participation in each performance is mandatory and will be recorded as an exam grade.
- Failure to participate in a public performance will require a make-up exam. Exam requirements will be outlined in the course syllabus.
- Each student will be required to purchase a polo shirt to be worn for performances, field trips and other special events.
- Grades are based on daily participation in class, monthly vocal exams, all public performances, in class assessments, and occasional theory tests.
- The music rehearsed and performed will be of the highest level, be from all periods of music history and will require the student to commit to musical excellence. Practicing at home

maybe required.

- Students will be required to attend concerts by other Lackawanna Trail ensembles, either at the high school or at the elementary.

#### 'Concert Chorus (mixed ensemble)- 1 Credit

This ensemble meets daily and is open to any student in grades 9 – 12 interested in singing. Vocal ability as well as an interest in performing in public is necessary. The chorus will perform music in many voicings and will include music from all eras and musical styles as chosen from the guidelines of Music Educators National Conference and American Choral Directors Association. Students interested in this ensemble should be aware:

- This ensemble will perform in public 2 times each academic year.
- Participation in each performance is mandatory and will be recorded as an exam grade.
- Failure to participate in a public performance will require a make-up exam. Exam requirements will be outlined in the course syllabus.
- Each student will be required to purchase a polo shirt to be worn for performance, field trips and other special events.
- Grades are based on daily participation in class, monthly vocal exams, all public performances, and in class assessments.
- Any student interested in becoming a member of this ensemble must see Ms. Rinehimer before registering with the guidance office.

#### Music Theory/Appreciation-1 Credit

This course is designed for student enrichment in the principles underlying written music from the Common Practice Period (1650 – 1900). Students will study the history of the Common Practice Period and composers from said period. Music from other periods is also studied. Students should expect homework assignments, in-class singing, and basic keyboard studies. The final exam for the class is a written homophonic original composition and performing in class.

At the end of the course, students will be able to:

- Notate pitch and rhythm in accordance with standard notation practices.
- Read melodies in treble, bass and movable C clef.
- Write, sing, and play major scales and all three forms of minor scales
- Recognize by ear and by sight all intervals within an octave.

- Use the basic rules that govern music composition.
- Harmonize a melody with appropriate chords using good voice leading.
- Analyze the chords of a music composition by number, name, and letter name.
- Express musical ideas by composing and arranging.
- Understand and recognize basic musical forms: ternary, binary, rondo, etc.
- Transpose a composition from one key to another.
- Identify musical composition periods by style
- Write simple rhythmic, melodic, and harmonic ear training.

### **PHYSICAL EDUCATION**

#### Physical Education - 1/3 of Credit

This course is designed to help students improve their skills in, and their knowledge of various athletics and lifetime sports activities. Knowledge of rules and physical techniques will be explored. Class activities will directly involve students in experiences related to various sports and personal fitness techniques with an emphasis on a wellness approach for lifetime health and fitness. This course is mandatory until 4 courses have been completed.

### **SCIENCE**

#### Physical Science - 1 Credit

This course will introduce the chemical and physical aspects of matter. Upon learning basic properties of matter, students will apply their knowledge in laboratory experiments. Emphasis will be placed on logical and critical thinking skills. After completion of this class, students will be better prepared to make everyday decisions in life or continue their study of matter in chemistry or physics.

#### Honors Physical Science — 1 Credit

This course will introduce students to foundations in Physics and Chemistry. Emphasis will be placed upon reasoning skills and critical thinking. Unit One explores methods in experimental research and design. In unit two students are introduced to Newton's Laws of Motion. Unit Three explains how atomic structure influences chemical properties including the formation of chemical bonds. Unit four introduces concepts relating energy to waves, light and sound. Student will design conduct, interpret, and publish an Experimental Research Project. Student projects will be considered for presentation in the Junior Academy of Science.

This course provides a gateway into upper level science courses. This course is weighted at 108 percent of the grade achieved.

#### Biology I - 1 Credit

Students will explore fundamental concepts of cell structure, cell processes, genetics, evolution, cell energetics, biochemistry, and ecology. Students **will** further develop their ability to write, read, and speak in the language of science. The Biology Keystone Exam is administered at the conclusion of this course.

#### Honors Biology - 1 Credit

Students will investigate the concepts of cell structure, cell processes, genetics, evolution, cell energetics, biochemistry, and ecology. Students will engage in guided inquiry while developing scientific reasoning and analysis skills. This course is weighed at 108 percent of the grade achieved. The Biology Keystone Exam is administered at the conclusion of this course

#### Biology II - 1 Credit

This course is a more advanced level of biology. The course is designed to take a deeper approach to the relationships between the structure and function at all levels of organization, genetics, evolution, and ecology. The course will also explore current issues in biological sciences.

#### Keystone Biology Enhancement - .5 Credit

The Keystone Biology Enhancement course will be given to students who do not demonstrate proficiency on the Keystone Biology Exam. The Keystone Biology Enhancement will focus on content and test taking strategies for the Pennsylvania Keystone Exam in Biology. The focus on content will include student deficiencies from the Biology Keystone Exam as well as Module A: Cells and Cell Processes and Module B Continuity of Life. Students required to take The Keystone Biology Enhancement course will have their graduation requirements in science reduced to three credits.

#### Chemistry - 1 Credit

Prerequisite — Algebra I. This course in general chemistry is designed to meet the requirements of students intending to go on to college. The traditional topics of chemistry will be covered including atomic structure, periodic law, chemical bonding, chemical formulas and equations, stoichiometry, and phases of matter. Students will also use an inquire/discovery approach in experimentation.

#### Honors Chemistry - 1 Credit

Prerequisite — Algebra I. This course in general chemistry is

accelerated to meet the needs of the highly motivated academic student. The traditional topics of chemistry will be covered with an emphasis on mathematics and problem solving, using laboratory work for reinforcement of the topics. This course is weighted at 108 percent of the grade achieved.

#### Honors Chemistry II — 1 Credit

Prerequisite – Honors Chemistry I. This general chemistry course is a continuation of Honors Chemistry I. Traditional chemistry topics will be covered with an emphasis on mathematics and problem solving, using laboratory work for reinforcement of the topics. This course is weighted at 108 percent of the grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement)

#### Physics - 1 Credit

Prerequisite – Algebra I, Geometry, and enrolled in Algebra II. The classical topics in physics will be covered with a strong emphasis on mathematical problem solving. These topics will include energy, vectors, velocity and acceleration, concurrent and parallel forces, motion and momentum, and fluid dynamics.

#### Honors Physics I - 1 Credit

Prerequisite – Algebra I, Geometry, and enrolled in Algebra II. This course is designed for the college-bound student who will need a background in classical physics. With supportive experimentation, much emphasis is placed on the mathematical approach in understanding the topics. Topics to be covered include energy, vectors, velocity and acceleration, concurrent and parallel forces, motion and momentum, and fluid dynamics. This course is weighted at 108 percent of the grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement)

#### Honors Physics 11-1 Credit

Prerequisite-Honors Physics I. This course is a continuation of Honors Physics I. Topics to be covered include thermodynamics, waves, optics, electrostatics, and electrodynamics. This course is weighted at 108 percent of the grade achieved.

#### Earth and Space Science-1 Credit, 11th/12th Grade Elective

This course is designed to build on students' knowledge from previous science courses and apply that knowledge in understanding the complex systems of the Earth, the solar system, and the universe. Students will use research, technology, projects, and hands-on activities to explore topics ranging from the

basic properties of energy and matter to the formation of the solar system. Special attention will be given to understanding the processes that continually shape the Earth and investigating the relationships between its many living and non-living systems.

#### Honors Anatomy and Physiology - 1 Credit

Prerequisite - Biology, and it is recommended to have a grade of 85 or better in a previous science class. Advanced Science is for senior students who have both "interest" and ability in the science area. Emphasis will be on a biochemical/ anatomical approach to the biological sciences. This course is weighted at 108 percent of the grade achieved. \*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement).

#### Environmental Science– 1 Credit

This course will cover components of forestry and wildlife. The forestry component will cover dendrology and classification, tree coring, forest regeneration and succession, measuring forest volume, forest products, orienteering, the history of Penn's Woods and the future of Penn's Woods. The wildlife portion of the course will cover both individual and population ecology of different species of wildlife in Pennsylvania. An in depth study will be done on the white tail deer, black bear, PA elk, and wild turkey and other species found in PA. A variety of activities, investigations, worksheets, field trips, audio-visual materials, and use of our outdoor woodlots will be used to explore these topics.

### **SOCIAL STUDIES**

#### American History I — 1 Credit

This course examines the historical origins of the United States from the period of Discovery until the Civil War. Students will learn about the important political and economic factors that influence colonization and contributed to the American Revolution as well as the consequences of the Revolution, including the writing and key ideas of the U.S. Constitution and the frameworks of American democracy. This course will continue with the events that contributed to the political, economic, and social changes that existed in the U.S. in the 19th century concluding with the Civil War.

#### Honors American History I - 1 Credit

This course examines the historical origins of the United States in great depth and at an accelerated pace from the period of



Discovery to the Civil War. Students will learn about the important political and economic factors that influenced colonization and contributed to the American Revolution as well as the consequences of the Revolution, including the writing and key ideas of the U.S. Constitution and the frameworks of American democracy. This course will continue with the events that contributed to the political, economic, and social changes that existed in the U.S. in the 19th century concluding with the Civil War. A variety of primary and secondary resources will be utilized to convey the events of U.S. History. Students are also expected to complete an analysis of two novels related to early American History. This course is weighted at 108 percent of grade achieved.

#### American History II - 1 Credit

This course provides special attention to the social, economic, and political aspects of American History. Much of the material presented is organized in a topical rather than a chronological manner, and the inquiry approach is used to a great extent. The course begins with an examination of the Civil War and Reconstruction and moves along at a brisk pace to America today. The course focuses a great deal of attention on America's rise as an industrial and world leader, and finishes up by looking at where America is headed in the 21st century. A combination of textbook reading, lectures, films, maps, and outside readings are used throughout the course.

#### Honors American History II - 1 Credit

This course is similar to American History II. Differences include a faster pace, the opportunity to study in greater depth topics of special interest and opportunities for students to do research and write a research paper as well as to debate a question of special interest to the student. This course is weighted at 108 percent of the grade achieved.

#### World History -1 Credit

This course covers the major events and achievements from the Renaissance and Reformation to the modern world. Emphasis is on the growth of European nations, exploration, the Enlightenment and revolution, the Industrial Revolution and the New Global Age, World Wars and revolutions and the world since 1945.

#### Honors World History - 1 Credit

This course will cover the major events and achievements from the Renaissance and the Reformation to the modern world. Emphasis is on the growth of the European nations, exploration, the Enlightenment, and the revolution, the Industrial Revolution

and the New Global Age, World Wars and revolutions, and the world since 1945. This class will study specific events and individuals to greater depth using a variety of research techniques and various primary sources. This instruction will be done on a quicker pace than the general World History course. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement)

#### Law and Government - 1 Credit

We interact with different divisions of our federal, state, and local governments on an almost daily basis. Young adults should know how their government works, their roles as citizens in our country, and why they play such an important role in our government process, along with every other American citizen. This course teaches students how our democratic system of government operates, the role of the electoral process, and how the government impacts on their daily lives. Yet we must realize that ours is a law-based society. Citizens, especially young adults, want to know their rights and responsibilities under the law. This course also allows students to develop a better understanding of the American legal system and their rights and responsibilities under the law. Some of the other areas to be covered include criminal and juvenile justice, torts, and individual rights. This course is designed to allow students to develop their problem solving abilities, and uses newspapers and magazines to supplement the text to make discussions especially timely.

#### Honors Law and Government-1 Credit

This course prepares students to interact with current government organizations and understand the impact of local, state, and federal government on the lives of everyday citizens. It teaches students how our democratic system operates, the role of the electoral process, our criminal justice system, civil law, individual liberties, and our rights as citizens under the law. There will be an emphasis on case studies to develop a better understanding of the legal process. This course is weighted at 108 percent of the grade achieved.

#### Psychology - 1 Credit

This course is designed to introduce the student to the various methods, principles, and theories of psychology as applied to the understanding of human thought, emotions, and behavior. Topics discussed include research methods, physiological foundations of behavior, growth and development, personality, stress and adjustment, social interaction, and psychological disorders and treatment.

### Honors Psychology-1 Credit

This course is designed to introduce the student to the various methods, principals, and theories of psychology as applied to the understanding of human thought, emotions, and behavior. Topics discussed include research methods, physiological foundations of behavior, growth and development., personality, stress and adjustment, social interaction, and psychological disorders and treatment. These is an independent component of this course and students are expected to research and meet various deadlines for assignments. Many primary sources and professional readings will be utilized to present the theories of psychology. This course will be weighted at 108 percent of grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement)

### Advanced Placement U.S. History - 1 Credit (Offered 2016-2017)

This course has been developed to prepare students for the College Boards Advanced Placement Test in American History. Students will utilize primary source materials in order to develop understandings of how individuals have altered the course of American History. Students will develop understandings of not only what happened, but how and why it happened, and how it impacted (both positively and negatively) on future events in our nation's history. As the Advanced Placement exam relies heavily on student performance on essay questions, students will be expected to develop their essay writing skills throughout the year, always pointing toward the Advanced Placement test, which can earn students college credits. This course includes a summer assignment, which includes two book review that are to be completed for the beginning of the school year. This course is weighted 110 percent of the grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement). There is a fee to take the AP test which is a requirement of this course.

### Advanced Placement U.S. Government - 1 Credit (Offered 2017-2018)

This course has been developed to prepare students for the College Board's Advanced Placement Test in Government and Politics. Students will utilize primary source materials as well as texts in order to develop understandings of a variety of political and governmental systems, and students will understand the arguments that both support and critique each of these systems. More importantly, students will understand the basic writings that form the foundation of our own governmental system, and will understand how these writings have impacted upon our governmental system today. As the Advanced Placement Test

relies heavily on student performance on essay questions, students will be expected to further develop their essay writing skills throughout the year, always pointing towards the Advanced Placement test, which can earn students college credits. This course is weighted at 110 percent of the grade achieved. \*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement). There is a fee to take the AP test which is a requirement of this course.

### Advanced Placement World History– 1 Credit (Offered 2017-2018)

The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts in different types of human societies. This understanding is advanced through a combination of factual knowledge and analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasized relevant factual knowledge considered in conjunction with leading interpretive issues and types of historical evidence. The AP World History course offers motivated students the opportunity to immerse themselves in the processes that, over time, have resulted in the knitting of the world into a tightly integrated whole. AP World History guides students through the steps a historian would take in analyzing historical events and evidence worldwide. The course offers balance global coverage with Africa, the Americas, Asia, and Europe all being represented. AP course grades are weighted at 110 percent of the grade achieved. (\*This course may be considered for credit at Keystone College as part of our Dual Enrollment Agreement). There is a fee to take the AP test which is a requirement of this course.

## TECHNOLOGY & INDUSTRIAL ARTS

### Woodworking-1 Credit

This course is designed to introduce students to elementary cabinet construction and the use of power and woodworking equipment. Emphasis will be on design, planning, construction, and work performance. Students will build a group project and select at least one individual project. This course will be useful to any student interested in increasing his/her whole life skills and their background regarding technology.

### Woodworking II and III - 1 Credit

This course is designed for students who are interested in gaining more experience in the use of woodworking equipment and cabinet construction. The purpose of this course is to direct

students towards the completion of more complex wood projects. Students are encouraged to use advanced joinery and craftsmanship during the fabrication and assembly of their group manufacturing project. The Woodworking III section of this course encourages further development of skills and abilities to solve woodworking problems. Students at this level will be allowed independent study and pursuit of special interests in woodworking.

#### Graphic Communications I- 1 Credit

This course is designed to introduce students to the various techniques and materials used in printing, commercial art, graphic communication, logo design, Image Manipulation and basic video editing. The main areas to be included in the course will be: silk screening, illustration, marketing, digital photo manipulation, and basic video editing. In each of these areas- artwork, image assembly, image carrier preparation, image transfer, and finishing procedures will be covered. Students interested in art, commercial art, communications, business, marketing, media printing and graphic design, need this course in his/ her background.

#### Graphic Communications II- 1 Credit

Prerequisites- Graphic Communication I. Students who choose this course will be able to further their knowledge in the Graphic Communication field. Advanced screen printing, advertising, design, and image manipulation will be addressed. Students taking this course should show an interest in pursuing a career in the Graphic Communication field.

#### Electronics I - 1 Credit

Prerequisite - Pre-Algebra. This survey course of electricity and electronics is designed to acquaint the student with many basic electrical — electronic principles and systems. Students design, produce, and evaluate individual/group electronic projects. Included in this course are the practical applications of electrical - electron theory, interactive computer controlled test — lab equipment, troubleshooting, schematic reading and building a variety of electronic projects.

#### Electronics II - 1 Credit

Prerequisite - Electronics I. This course is designed to allow students to experience alternating current and differentiate from direct current applications. Students will be involved in projects, which will reinforce problem solving skills through real-life industry examples and procedures. Included in this course are the practical applications of power transformers, interactive computer controlled test — lab equipment, troubleshooting, schematic reading and

building a variety of electronic projects.

#### Computer Aided Drafting I (CAD I) - 1 Credit

This course will provide an introduction to the use of AutoCAD software for Computer Aided Drafting. Projects will include the completion of several Orthographic Projection (3 view) and several Isometric Drawings (3D) in two-dimensional form, plus application of dimensioning techniques, and an introduction to AutoCAD's three-dimensional capabilities. Included in this course will be a study of the proper use of the Windows based workstation and network components as related to CAD. Students will be assessed through evaluation of computer skills, software knowledge and application, individual drawings and tests.

#### Computer Aided Drafting II (CAD 11)-1 Credit

Prerequisite— CAD I. This is a course which explains the use of AutoCAD 2012 variables providing advanced instruction in drafting principles and software application. Class activities may include auxiliary views, production drawings and 3-D designs. Emphasis will be placed on the mastery of AutoCAD's three-dimensional capabilities in the creation of solid objects and the application of rendering materials and lights. Students will be assessed through evaluation of computer skills, software knowledge and application, individual drawings and tests.

#### Architectural Computer Aided Drafting - 1 Credit

Prerequisite— CAD II. This course is designed to be a comprehensive introduction to the methods and procedures of Autodesk's Revit Architectural software. Students with interests in Architecture, interior design, landscape architecture, engineering, or industrial maintenance would greatly benefit from this course. Major components of the study will include Floor Plans, Building and Wall Sections, Elevations and Perspectives done completely in a 3 dimensional perspective. Assessment will be achieved through evaluation of software knowledge and application, completed drawings and testing.

#### Photography & Digital Media- 1 Credit

Prerequisites- Graphic Communication I. Students will learn to shoot digital photography and edit photos on photo editing software. They will work taking pictures of landscapes, portraits, and action shots. They will also create digital slideshows and photo books. Students will experiment with rudimentary computer animation techniques. Using digital video and editing software, students will film and edit short films focusing on a variety of areas such as personal biography, an interview and a school sponsored

activities. Maximum Enrollment is 10 students.

#### Basic Home Repair

This course is designed for students who have an interest in home ownership and basic maintenance that comes with owning your own residence. Topics covered will include: Basic plumbing (Copper, PVC, Pex); Drywall repair; Ceramic Tile Installation; Basic Electricity (Lighting, Electrical Outlets, Switches); Roof Repair; Flooring; Furniture Repair; other home repair topics as assigned. There are no pre-requisites in any of the Industrial Arts or Technology Education courses offered at Lackawanna Trail.

#### **VOCATIONAL-TECHNICAL CENTER OFFERINGS**

Lackawanna Trail students are eligible to apply for the vocational-technical program given at the Susquehanna County Vocational Technical School and/or Lackawanna County Vocational Technical Center beginning in the tenth grade. Students must apply and be admitted by the Vo-Tech Board. The students attend the Vo-Tech for half of the day and take their required courses at Lackawanna Trail during the other half-day. Students must maintain favorable academic, disciplinary, and attendance requirements to continue enrollment at Vo-Tech. It is still mandatory that required courses be scheduled and passed at the home school in order to obtain a high school diploma. Students and parents considering this option should consult with a guidance counselor to obtain individual programs of study at each Vocational Technical Center. Programs include:

- Auto body/Collision and Repair Technology
- Building and Property Maintenance
- Business Information Technology
- Carpentry and Cabinetmaking
- Commercial Art and Design
- Computer Maintenance Technology
- Cosmetology
- Culinary Arts
- Drafting and Design Technology
- Early Childhood Care and Development
- Electrical Construction and Maintenance
- Graphic and Printing Communications Technology
- Health Care Technology
- Horticulture and Landscaping
- Plumbing and Heating Technology
- Protective Services Occupations
- Trowel Trades
- Vehicle Maintenance and Repair (Small Engine Repair)
- Welding

## SCHOOL-TO-WORK

### Apprenticeship & Internship— 2-3 Credits

This program is for seniors who want to discover more about a particular career and apprentice a trade. The student is required to apply for, and be accepted into, a formal apprenticeship or internship program and work at least one day per week under the direct supervision of a master tradesman or trainer. The internship may last one or two semesters and may be paid or unpaid depending on the individual program offering the internship. Students may not be concurrently enrolled at a career or vocational center (i.e. SCCTC or LCCTC). Only established apprenticeship or internship experiences will be approved. All programs require administrative approval. Part-time employment position will not be considered. An LTHS vocational coordinator will serve as a site-base supervisor to evaluate a student's performance in relation to established Pennsylvania vocational competencies.

Dr. Mark P. Murphy, Principal  
Mr. Brian J. Kearney, Assistant Principal



28 Tunnel Hill Road  
Po Box 85  
Factoryville, PA 18419

Phone: 570-945-5181

Fax: 570-945-3832

[www.ltsd.org](http://www.ltsd.org)