SOUTHERN LEHIGH
HIGH SCHOOL

2020-2021

PROGRAM OF STUDIES

SOUTHERN LEHIGH HIGH SCHOOL

5800 Main Street ~ Center Valley, PA 18034 ~ www.slsd.org
Phone: (610) 282-1421 ~ Fax: (610) 282-2965 ~ CEEB Code: 390-830

Administration

Mrs. Kathleen Evison……Superintendent
Dr. Michael Roth……Assistant Superintendent
Mrs. Beth Guarriello……Principal
Mr. Thomas Ruhf……Assistant Principal, A-M
Ms. Jennifer Brinson……Assistant Principal, N-Z

Guidance Department

Mrs. Christina Piascik (A-G)……Ext. 7555
Mrs. Tamme Westbrooks (H-O)……Ext. 7556
Mrs. Lynne Kelly (P-Z)……Ext. 7557
Mr. Cotie Strong, School Psychologist……Ext. 7558

General Information

Accredited by the Middle States Association of Secondary Schools and Colleges and the PA Dept. of Education

Grades……9 -12
Enrollment……1,108
Class of 2019 Size……271
Marking Periods……4
Type of School……Public
Length of School……2 Semesters
Periods per Day……4 Periods
Class Periods……77 Minutes

School follows an A/B block schedule with 4 periods per day. Two semesters; four marking periods, minimum 45 days each.

Graduation Requirements: 27.5 TOTAL CREDITS

4.0 Credits……English
3.0 Credits**……Soc Stud (Civics & Gov, US Hist, World Cult)
3.0 or 4.0 Credits*……Mathematics (Alg I & Geom Req.)
3.0 or 4.0 Credits*……Science (Biology and Chem or Physics)
1.0 Credit……Health
2.0 Credit……Physical Education
0.5 Credit……Driver Education (Theory)
1.0 Credit……Humanities (Art, Music, World Lang.)
1.0 Credits……Technology Education (Foundations, CTA)
8.0 Credits……Elective

*Students must take either 4.0 credits of Math or 4.0 credits of Science for a total of 7.0 credits in Math and Science.
**Beginning with the class of 2020, Alg II is no longer required.

Grade Point Average

All subjects are used to calculate GPA. Each course has a credit value which is multiplied by the quality points. The total is divided by the credits attempted.

Weighting

Honors courses/programs are given an additional 0.5 quality point and Advanced Placement courses are given an additional 1.0 quality point. Weighted grades are used for both the GPA.

Class rank was eliminated beginning with the class of 2019.

Grading Scale

Letter Grade	% Range	Quality Points
A	93-100	4.0
A-	90-92	3.6
B+	87-89	3.4
B	83-86	3.0
B-	80-82	2.6
C+	77-79	2.4
C	73-76	2.0
C-	70-72	1.6
D+	67-69	1.4
D	63-66	1.0
D-	60-62	0.6
F	0-59	0.0

SAT Scores

Class	EBRW	Math	EBRW *Took Essay	Math *Took Essay
2019	580	574	606	594
2018	582	575	617	604
2017	589	583	~	~

Further Education

Class	4-Year Colleges	Less than 4 -Years	Total
2019	68.2%	21.2%	89.4%
2018	61.0%	21.0%	82.0%
2017	64.8%	17.9%	82.1%

National Merit Scholarship Program

Class	Finalist/ Semifinalist	Commended
2019	1	4
2018	1	5
2017	3	6

Honors Courses (14)

English
- Honors English 9, 10, 11, 12

Science
- Honors Anatomy & Physiology
- Honors Biology
- Honors Chemistry
- Honors Physics

World Language
- Honors Spanish Comm. & Lit.

Math
- Honors Calculus
- Honors Algebra 2*
- Honors Geometry
- Honors Pre-Calculus

Social Studies
- Honors Civics & Government

Honors Programs (1)

- Emerging Health Professionals

Advanced Placement Courses (21)

English
- AP English Lang. & Comp.
- AP English Lit. & Comp.

Social Studies
- AP Gov. & Politics US
- AP Psychology
- AP US History
- AP World History

Math
- AP Calculus AB
- AP Calculus BC
- AP Computer Science A
- AP Comp. Sci. Principles
- AP Statistics

Science
- AP Biology
- AP Chemistry
- AP Environmental Science
- AP Physics I
- AP Physics II
- AP Phys. C Mech./E & M**

World Language
- AP Spanish Lang. & Culture
- AP Spanish Lit. & Culture**

Electives
- *AP Art History***
- AP Music Theory

**Honors Algebra 2 was not offered in the 2016-17 school year*

*** AP Art History has not been offered since the 2012-2013 school year; AP Physics C and AP Spanish Lit are not offered in the 2019-2020 school year.*

Honors and AP courses have prerequisites that students must meet to enroll in those courses.
Please refer to the SLHS Program of Studies booklet for further information on course prerequisites.

2019 Senior Class Weighted Cum. GPA

Grade	# of Students	% of Students
4.00-4.50	38	13.71 %
3.50-3.99	76	27.43 %
3.00-3.49	77	27.79 %
2.50-2.99	44	15.88 %
< 2.49	42	15.16 %

2019 AP Scores

Score	# of Exams	% of Exams
5	63	17.69 %
4	101	28.37 %
3	120	33.70 %
Total	284	79.77 %
Scores of 3, 4, or 5 (College Ready)		

Special Programs

ELearn 21: eLearn21 is an online education program offered through Intermediate Unit 21. Courses taken through eLearn21 are indicated as "CYBER" on the transcript.

Emerging Health Professionals: Emerging Health Professionals is a highly selective, honors-weighted program in which students take two science courses (Physiology & Anatomy) at Penn State University-Lehigh Valley campus, or at Lehigh Carbon Community College two days a week and participate in a challenging health curriculum three days a week at the Lehigh Valley Hospital and other locations. Students also have the opportunity to shadow professionals in the medical field.

High School Scholars: The High School Scholars Program is a highly selective program that enables academically talented seniors to take college courses tuition free at local colleges such as DeSales University and Lehigh University. Acceptance into the program is based on GPA, strength of schedule, SAT/PSAT scores, application essay, and counselor/teacher recommendations.

Spanish Immersion: The Southern Lehigh School District offers a Spanish immersion program in which students are taught all of their core subjects (except for English) in Spanish throughout elementary school. At the high school level, immersion students take Spanish Culture & Communication, Honors Spanish Communication & Literature, AP Spanish Language, and AP Spanish Literature.

4-Year College Matriculation List for Class of 2018 & Class of 2019

Binghamton University
Bloomsburg U of PA
Boston College
Boston University
Bucknell University
Cabrini University
Cairn University
Campbell University
Carnegie Mellon University
Cedar Crest College
Cedarville University
Chestnut Hill College
Coastal Carolina University
College of William & Mary
Colorado State University
Delaware Valley University
DeSales University
Dickinson College
Drexel University
Duquesne University
East Carolina University
Elizabethtown College
Elon University
Embry-Riddle Aeronautical Univ- Daytona Beach
Fairfield University
Fordham University
Franklin & Marshall Coll
Georgetown University
Gettysburg College
Gwynedd Mercy University
High Point University
Hofstra University
Houghton College
Indiana University of PA
James Madison University
Jefferson (Phil U + Thomas Jefferson U)
Johns Hopkins University
Johnson & Wales U
Juniata College
Kent State University
King's College
Kutztown University of PA
La Salle University
Lafayette College
Lancaster Bible College
Lehigh Carbon Comm Coll
Lehigh University
Liberty University
Loyola Univ Maryland
Mansfield University of PA
Marist College
Maryland Inst Coll of Art
Marywood University
Messiah College
Methodist University
Metro Beauty Academy
Michigan State University
Millersville Univ of PA
Misericordia University
Mississippi State University
Monmouth University
Moravian College
Mount Aloysius College
Northampton Comm Coll
Nova Southeastern Univ
Ohio University
PA State University
Point Park University
PrattMWP
Purdue University
Quinnipiac University
Reading School of Health Sciences
Rensselaer Polytechnic Inst
Rider University
Rutgers University
Saint Joseph's University
Seton Hall University
Shippensburg Univ of PA
Slippery Rock Univ of PA
Stevens Inst of Technology
Suffolk County Comm Coll
SUNY Broome Comm Coll
SUNY College of Envi Science and Forestry
SUNY Oswego
Susquehanna University
Syracuse University
Temple University
The George Washington U
The Ohio State University
The University of Akron
The University of Alabama
The University of NW Ohio
The University of Scranton
The University of Tampa
The University of the Arts
Towson University
Univ of Alaska Fairbanks
University of California
University of Colorado
University of Delaware
University of Maryland
University of N Carolina
University of Pittsburgh
University of Rochester
University of S Carolina
University of the Sciences in Philadelphia
University of Vermont
University of Virginia
Ursinus College
Virginia Tech
Wake Forest University
Washington College
West Chester Univ of PA
West Virginia University
Westmont College
Wheaton College IL
Widener University
Wilkes University
York College of PA

To the Parents, Guardians and Students of Southern Lehigh High School:

This Program of Studies describes the many courses available for the upcoming school year. It was prepared to help you learn about and choose which courses you will take next year. At Southern Lehigh High School we strive to develop well-rounded students and citizens. As such, when making course selections, we encourage you to expose yourself to experiences and activities that will inspire you and help you to reach your fullest potential. Enrolling in classes that support your future plans and goals is extremely important. Please take time to examine the offerings described within this book and consult with your parent/guardian(s), teachers, and counselors before making your final selections. Personal interest, willingness to accept the challenge to study and learn, and your individual career goals should guide you in your course selections.

Teachers will make recommendations for appropriate placement and course prerequisites will be followed. After viewing the teachers' recommendations, students and parents will electronically submit course requests. Parental input and approval of the choices are important. Following the submission, students will meet individually with their counselors to review and finalize their course requests. Late in the spring, we will send home a tentative schedule. Parents should check that sheet to see that the courses and levels are correct. If a change is requested, it is important to contact your student's counselor promptly. **These changes are due to the counseling office no later than July 1st.**

The administration reserves the right to withdraw a course offering if a reasonable number of students do not elect the course or if staffing is not available. When a course is oversubscribed, priority for enrollment will be given to seniors, then juniors, then sophomores, etc. Students who are unable to be enrolled in a course will be offered alternative courses. While we hope to offer as many of the courses in this Program of Studies as possible, the actual course offerings will depend on budget and staffing. We build the entire schedule and assign faculty based on information we receive from students and parents in the winter and spring about course choices. Usually we can accommodate changes that are submitted during the spring. However, requests for changes after that time will only be honored after school personnel have carefully considered the reasons for the proposed changes and only if space and resources are available. Requests for change such as disliking a course, underestimating the course expectations, selecting or deselecting a specific teacher, wishing to take an easier course, not realizing what the course would be like, or wanting to be in a class with friends are inappropriate reasons for a schedule change and will not be honored. This policy has been developed to prevent staffing, scheduling, and teaching and learning problems that result from late schedule changes. Once the school year has begun, schedule conflicts, oversubscription, and other factors may make certain courses unavailable. **We cannot stress enough the importance of carefully considering and selecting courses in the spring.** Avoid schedule problems in the summer and fall by making wise, thoughtful choices now. `

Remember, building a balanced schedule is one of the most important things you can do as a high school student. Challenge yourself to try new things and expand your horizons. After all, this is what high school should be all about. We hope you have a successful school year and we are here to help guide you in any way we can.

Sincerely, SLHS Administration

Course Selection Process Timeline:

- **Late January: Counselors** will provide an overview of course selection information to students in grade level meetings during Spartan Period.
- **Late January: Teachers** will discuss course options with students in class and will enter course recommendations in Sapphire for each student.
- **Early February: Students** will have a one week window of time to input course requests into Sapphire for next school year. During this time, students should speak with their parents/guardians regarding course requests and should carefully consider teacher recommendations & course prerequisites.
- **February-May: Students** will have the opportunity to discuss course requests with their counselor.
- **June: Students** will be provided with a tentative schedule.
- **July 1: Deadline for students to make changes to schedules.**

IMPORTANT INFORMATION:

- Please note that Math & Science teacher recommendations are based on performance in current classes only. Grade prerequisites for courses taken in previous years will be verified by the guidance office.
- Core subject teachers will be recommending courses directly in Sapphire.
- You will need to enter your courses directly into Sapphire
- You must schedule a **MINIMUM OF 7 CREDITS** and may select a maximum of 8 credits.
- Please read the course descriptions in the ***Program of Studies*** and be aware of course prerequisites.
- Courses marked with "DE" indicates a dual enrollment course and those marked with an "*" indicates a weighted course.
- ***ALL SCHEDULE CHANGES MUST BE MADE BY JULY 1st***

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GUIDELINES FOR PROGRAM PLANNING

Planning a program of study each academic year is one of the most important tasks a student will complete throughout their four years at Southern Lehigh High School. Students will be guided through this process by faculty, counselors and administrators, as they closely follow graduation requirements. Counselors will present an overview of the program of studies book, highlighting prerequisites and course sequences. In addition, all teachers will review the content for next year's courses and provide guidelines to assist with selection in their specific areas. Listed below are some basic guidelines to follow when selecting courses for the next academic school year:

1. Motivation, interest and aptitude are important factors to consider when selecting courses. Students are encouraged to challenge themselves with the most demanding course of study they can successfully complete in a given academic year.
2. Previous levels of achievement should be reviewed to determine possible course selection. When selecting a sequential course, students must meet course prerequisites.
3. Graduation requirements will be reviewed each year to determine appropriate progress in all required subject areas.
4. **Students are required to schedule a minimum of 7 credits per year.**

Teacher recommendations are valued in helping to guide the student through the correct course sequence and appropriate level. As a team, the student, parent, teacher and counselor will work together to select a challenging, appropriate academic program of studies.

Note: Required course equipment and fees can be provided for individual students based on demonstrated need.

COUNSELING SERVICES

School counselors are an excellent resource when concerns or questions arise regarding course selection and post-secondary planning. Conferences can be requested if students are not achieving at levels commensurate with a student's ability and academic progress is not being made. In addition, counselors are available to work with students who exhibit at-risk behaviors or face adjustment or transition problems. Appointments can be scheduled by contacting the respective counseling offices of each school.

Southern Lehigh High School (610) 282-1421
Southern Lehigh Middle School (610) 282-3700

SCHEDULE CHANGE POLICY

Students initially register for the following school year's courses during February of each year. Based upon course requests, administration builds a master schedule that reflects interest, demands and teacher availability. The entire process takes several months with the objective of attempting to meet the highest percentage of students' course requests. Requests made by **July 1st** will be processed at the request of the student and parent. Any errors, conflicts, omissions, or additions to a student's schedule will be resolved as soon as possible. The following guidelines exist for all other schedule changes requested after **July 1st:**

1. Student-initiated schedule changes must be supported by parent/guardian.
2. Schedule changes will be considered for valid educational reasons only. Schedule changes will not be made to accommodate requests for lateral moves within the same subject area.
3. **Semester courses** will not be dropped after September 15th for fall semester and February 1st for spring semester.
4. **Full year courses** will not be dropped after September 30th
5. Students moving from an Honors or Advanced Placement course to a CP level course will not receive the weighted grade when the grades are transferred.

The following requests for drop/add, to/from a course will be honored (as long as the master schedule can facilitate):

- Computer or clerical error
- Block missing from schedule
- Core subject missing from schedule (Math, Science, English, Social Studies, World Language)
- A course was made up during summer school
- Transfer to a more challenging course
- Change in a LCTI program as approved by both the LCTI and SLHS

Requests that will not be honored include:

- Change in teacher
- Lunch (move to another block)
- Rearranging classes to different blocks
- If the student requested, meets the prerequisites and was recommended for the course

Withdrawals from a course will not become part of the student record if the course is dropped by **September 30th of a full-year class** and by **September 15th** or **February 1st of a semester class**. Either a "WP" (Withdraw Passing) or "WF" (Withdraw Failing) will be noted on the student transcript dependent on the grade at time of withdrawal.

CAREER PATHWAYS

"Career Pathways" is a comprehensive program of career awareness, exploration, and preparation/application. K-12 in nature, Career Pathways establishes a curriculum with two different, yet equal, programs of study. Both the "Traditional Academic" pathway and the "Technical Academic" pathway offers a rigorous, practical education which helps students focus on a non-binding career cluster in high school and guides them in the selection of course sequences necessary to achieve their educational and career objectives. Southern Lehigh's goal is to meet the individual needs of students while, at the same time, preparing them to find success as an adult.

The Career Pathways program aims to achieve the following objectives:

1. To raise the level of learning and meaning for all students
2. To prepare all students for lifelong learning
3. To provide for an improved system of counseling and management for students
4. To provide for flexibility in career choice and focus in course planning

How Does Career Pathways Work?

By the middle of eighth grade, students will have been introduced to the four broad career clusters that form the basis of the Career Pathways model. They are as follows:

1. Arts and Humanities
2. Business and Communication Technology
3. Industrial and Engineering Technology
4. Health Sciences and Human Services

Students will then choose their academic focus by enrolling in the "Traditional Academic" program, which is for students whose plans include study at a traditional four-year college or university, junior college, or community college, or the "Technical Academic" program, which is for students whose interests lie in the pursuit of a career through study at a vocational-technical school, trade school, business school, or initial entry into the world of work. Students will then focus on a flexible career plan within their chosen path.

CAREER PATHWAYS OVERVIEW: The four pathways are described below. Once you have found a pathway that interests you, review the descriptions and options for suggested courses, activities and career opportunities.

4 PATHWAYS	Health & Social Services	Science, Technology, Engineering, & Math	Arts, Humanities & Communications	Business, Finance & Law
	This is a pathway that includes a large and diverse group of careers. **Human services** involves careers that help people and families meet their needs, including education, social services, and mental health needs. The **health and medicine** career pathway includes careers that promote health, wellness, and diagnosis as well as treat injuries and diseases. Some of the careers involve working directly with people while others involve research into diseases or collecting and	**Engineers and technicians** design and build things. They are critical in all kinds of manufacturing, especially at the earliest stages when products and processes are being created and refined. A career in **science** is exciting, challenging, and ever-changing. Learners who pursue one of these career fields will be involved in planning, managing, and providing scientific research and professional and technical services including laboratory and testing services, and	Careers in the **Performing Arts, Visual Arts** or certain aspects of **Journalism, Broadcasting and Film** are careers that tap students' creative talents. **Audio-Video Communications Technology, Telecommunications or Printing Technology** require strong backgrounds in computer and electronic-based technology and a solid foundation in math and science. All pathways require the ability to communicate effectively in both oral and written form.	The Business, Finance, and Law pathway includes careers in planning, organizing, directing and evaluating **business functions** essential to efficient and productive business operations. The **finance** portion of this pathway involves careers in financial and investment planning, banking, insurance and business financial management. The legal system impacts us in many ways, from buying a home to safely driving a car.

	formatting data and information. Work locations are varied and may be in hospitals, medical or dental offices or laboratories, cruise ships, medevac units, sports arenas, space centers or within the community.	research and development services. The **agriculture** pathway prepares learners for careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services.	**Information technology** careers involve the design, development, support and management of hardware, software, multimedia and systems integration services. The IT industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society.	Careers in **law** keep the legal system running smoothly and includes **public services**, jobs that serve and protect people, including law enforcement, firefighting, legal services, and the military.

POSSIBLE ELECTIVES FOR SPECIFIC CAREER PATHWAYS: Courses will vary with interest of students. The courses listed below are suggestions for discussion between the student, parent, teacher and counselor.

Health & Social Services	**Science, Technology, Engineering, & Math**	**Arts, Humanities & Communications**	**Business, Finance & Law**
Intro to Business	Accounting I & II	Web Page Design I & II	Accounting I & II
Business Law	Business Concepts	Business Law	Business Concepts
Business Concepts	Web Design I & II	Financial Literacy	Business Law
Financial Literacy	Business Law	Creative Writing	Financial Literacy
Marketing	Financial Literacy	Newspaper Journalism	Intro to Business
Web Page Design I & II	Intro to Business	Public Speaking	Marketing
Newspaper Journalism	Marketing	Intro to Video, TV & Film	Web Page Design I & II
Public Speaking	Public Speaking	Adv Video, TV & Film Prod	Public Speaking
Intro to Video, TV & Film Prod	Intro to Video, TV & Film Prod	Yearbook	AP Computer Science
Adv Video, TV & Film Prod	Adv Video, TV & Film Prod	AP Statistics	AP Computer Science Principles
Yearbook	AP Computer Science	Statistics & Probability	Intro Comp Sci I & II
AP Computer Science Principles	AP Computer Science Principles	AP Computer Science Principles	AP Statistics
AP Calculus AB & BC	Intro to Comp Sci I & II	College Algebra	Statistics & Probability
AP Statistics	AP Calculus AB & BC	Psychology- all levels	College Algebra
Honors Calculus	AP Statistics	Contemporary American Issues	AP Calculus AB & BC
Pre Calculus - all levels	Honors Calculus	Global Issues	Honors Calculus
Statistics & Probability	Pre Calculus - all levels	Sociology	Pre Calculus – all levels
Algebra III	Statistics & Probability	Chinese- all levels	AP Gov & Politics
Biology- all levels	Biology- all levels	French- all levels	Contemporary American Issues
Chemistry- all levels	Chemistry- all levels	Spanish- all levels	Economics
Physics- all levels	Physics- all levels	AP Music Theory	Global Issues
Hon Anatomy & Physiology	Hon Anatomy & Physiology	Piano I & II	Sociology
Forensic Science	Forensic Science	Theatre	Psychology- all levels
Kinesiology	Kinesiology	Concepts in Clothing	Administrative Office Technology/ Accounting
AP Gov & Politics	Zoology	Family & Consumer Sciences	Computer Information Technology
Contemporary American Issues	Ecology	All Art Courses	Computer & Networking Technology
Economics	Genetics & Biotech	Housing & Interior Environments	Marketing & Business Education
Global Issues	Health	Independent Living	Web Design / Web Programming

Sociology	Sports Medicine	Multicultural Foods	Microsoft Skills for College & Career
Psychology - all levels	Chinese- all levels	Nutrition	
Health	French- all levels	Parenting & Young Child	
Sports Medicine	Spanish- all levels	AP Art History	
Chinese - all levels	Graphic Design	Ceramics I & II	
French- all levels	Arch Design & Drafting	Graphic Design	
Spanish all levels	Engineering Design & Develop	Drawing	
Parenting & Young Child	Foundations of Tech I	Foundations of Art	
Family & Consumer Sciences	Manufacturing Technology	Methods & Materials	
Family Living	Algebra III	Painting	
Independent Living	Survey of Statistics	Photography	
Multicultural Foods	Electromechanical/ Mechatronics Technology	Portfolio Preparation & portfolio II	
Nutrition	Electronics Technology / Nanofabrication	Three- Dimensional Design	
Applied Horticulture	Precision Machine Tool Technology	Painting & Decorating	
Commercial Baking	Pre-Engineering & Engineering Technology	Advertising Design/ Commercial Art	
Cosmetology	Supply Chain Management & Logistics Technology	Commercial Photography / Electronic imaging	
Criminal Justice	Welding Technology	Print Technology/ Graphic Imaging	
Culinary Arts	Computer Aided Drafting & Design	Microsoft Skills for College & Career	
Dental Technology	Auto Body/ Collision Repair		
Early Care & Education of Young Children	Auto Technology		
Emerging Health Professionals	Cabinetmaking & Millwork		
Exercise Science & Rehabilitation Services	Carpentry		
All Art Classes	Diesel Medium & Heavy Truck Technology		
Survey of Statistics	Electrical Technology		
Trigonometry	Heating/Air Conditioning & Refrigeration		
Microsoft Skills for College & Career	Heavy Equipment Operations		
	Masonry		
	Plumbing & Heating		
	Small Engines/ Recreational Vehicle Repair		
	Trigonometry		
	Microsoft Skills for College & Career		

EXAMPLE CAREER OPPORTUNITIES FOR SPECIFIC CAREER PATHWAYS

	Health & Social Services	Science, Technology, Engineering, & Math	Arts, Humanities & Communications	Business, Finance & Law
Advanced Coursework	▪ Physician ▪ Pharmacist ▪ Dentist ▪ Physical / Occupational Therapist or Counselor	▪ Engineer ▪ Architect ▪ Security Analyst ▪ Computer Scientist ▪ Research Scientist ▪ Research Professor	▪ Post-Secondary Professors ▪ Political Scientist ▪ Systems Engineer	▪ Financial Analyst ▪ Auditor ▪ Certified Public Accountants ▪ Chief Executives ▪ International Business ▪ Lawyer
College Course Work	▪ Registered Nurse ▪ Physician's Assistant ▪ Medical Lab Tech ▪ Social Worker ▪ Medical Assistant ▪ Teacher	▪ Construction Manager ▪ Statistician ▪ Meteorologist ▪ Chemist ▪ Teacher	▪ Teacher ▪ Musician ▪ Journalist / Editor ▪ Technical Writer ▪ Information Technology Specialist	▪ Actuary ▪ Insurance ▪ Underwriter ▪ Financial Advisor ▪ Teacher
College and / or Career Course Work	▪ Dental Assistant ▪ Licensed Practical Nurse ▪ Medical Records Technician ▪ Emergency Medical Technician ▪ Dental Hygienist ▪ Vet Technician ▪ Nurses Aide	▪ Drafter ▪ Engineering Technician ▪ Master Electrician ▪ Automotive Technician ▪ Cost Estimator ▪ Lab Technician ▪ Welder ▪ Precision Machinist ▪ Armed Services	▪ Preschool Teacher ▪ Fashion Design ▪ Web Designer ▪ Cosmetologist ▪ Horticulturist ▪ Commercial Artist ▪ Photographer ▪ A/V Tech ▪ IT Support	▪ Loan Officer ▪ Paralegal ▪ Real Estate Agent ▪ Billing Clerk ▪ Administrative Assistant ▪ Bank Teller ▪ Bookkeeper ▪ Police Officer ▪ Firefighter
Career Course Work	▪ Home Health Aide ▪ Nurses Aide ▪ Pharmacy Technician	▪ Carpenter ▪ Mason ▪ Electrician ▪ Manufacturer ▪ Plumber ▪ HVAC Tech	▪ Cook ▪ Receptionist ▪ Advertising Sales Agent	▪ Claims Adjuster ▪ Retail Sales Clerk ▪ Office Clerk ▪ Janitor & Cleaner ▪ Secretary

COLLEGE PLANNING CALENDAR

THINGS TO CONSIDER ALL 4 YEARS:

- Select challenging courses that make sense given your strengths, weaknesses, and available time; balance is most important.
- Meet with your school counselor annually to review future plans, graduation progress, and course requests.
- Finalize your course requests for the upcoming school year, final deadline is July 1st.
- Work hard and earn the best possible grades.
- Athletes who want to play a Division I or II sport in college need to adhere to the NCAA guidelines to ensure eligibility. For more information see www.eligibilitycenter.org and/or talk to your school counselor.

FRESHMAN YEAR

- Begin to think about future plans (2 or 4 year college/university, trade/technical school, military, employment)
- Focus on grades, study habits, organization skills, and getting involved.
- Start a resume or log of school & community activities, volunteer hours, employment and awards/honors.
- Utilize Naviance to become familiar with its many career & college planning features. Students will be introduced to Naviance in Freshman Academy during the fall.
- Think about touring LCTI and visit during the fall open house event (typically held in November).
- Choose sophomore year courses based on teacher recommendation, freshman year grades, graduation requirements and interests. Meet with school counselor to review course selection.

SOPHOMORE YEAR

- Continue to build your resume or log with school & community activities, volunteer work, employment, and awards/honors. Begin to take on leadership roles when they arise.
- Continue to participate in school and community activities.
- Consider taking the PSAT in October for practice.
- Continue to explore Naviance to assist in identifying potential careers and colleges. Students will utilize Naviance in Careers & Technology Applications class.
- Research and explore summer educational opportunities (college enrichment programs, camps, summer courses, employment).
- Visit college campuses.
- Select junior year courses based on teacher recommendation, sophomore year grades, graduation requirements and interests. Increase rigor where appropriate. Meet with school counselor to review course selection.

JUNIOR YEAR

Keep in mind that colleges look for the following:

- Challenging coursework
- GPA
- How your free time is spent i.e. employment, volunteer work, activities in school and in the community
- An overall upward trend (increasing rigor and performance throughout high school)

FALL

- Identify colleges you are interested in exploring
  - List the factors that matter most to you (location, size, major, public/private, etc.)
  - Utilize Naviance SuperMatch and other college search programs (College Board, Niche, etc.).
- Attend the college information programs and financial aid night offered at SLHS.
- Sign up in Naviance to meet with college representatives when they visit SLHS during Spartan period.
- Discuss your future goals and plans with your parents and school counselor.
- Sign up to take the PSAT offered in October (qualifying juniors are eligible for the National Merit Scholarship program).
- Register to take the AP (Advanced Placement) tests for courses you are currently taking.
- Plan to attend the local PACAC college fair (usually held at Northampton Community College in Oct.) and/or the NACAC college fair (usually held at the PA Convention Center in Philadelphia, PA in Oct.).
- Review your PSAT scores to identify which areas you may need to improve upon. Connect your College Board account with Khan Academy in order to access free SAT prep customized for you based on your PSAT results.
- Create a testing plan that works for you, and register to take the SAT or ACT (note that SLHS offers the SAT in March, August and October each year).

- Evaluate SAT/ACT Prep options, as needed.

SPRING

- **Sign up for the COLLEGE PREP FOR JUNIORS Spartan Period offered by the SLHS counselors to help you prepare for the college application process**
- Continue to update your resume with school & community activities, volunteer work, employment, and awards/honors/leadership roles.
- Continue your college search:
    - Gather as much information as you can (majors offered, price, financial aid available, private/public, internship opportunities, etc). Keep in mind that the college should match your personality, GPA and test scores.
    - Determine admission requirements for both admission to the college AND admission into the specific program you wish to study.
- Start to visit colleges that interest you. Visiting while college is in session provides a different perspective than a visit over the summer.
- Attend college fairs in the area (Emmaus High School College Fair in May).
- Athletes planning to play Division I or Division II sports need to register with the Eligibility Center, and submit an NCAA transcript release (found on SLHS guidance website) to the guidance office.
- Register and take either SAT or ACT (as well as subject tests IF required- some highly selective colleges require subject tests)
    - Utilize the 4 free score reports when registering to take the test. See your school counselor if you have concerns about sending your scores to colleges.
    - Prospective NCAA athletes must send SAT or ACT scores to the NCAA (code: 9999)
- Begin looking for summer employment opportunities in your career area of interest. Consider volunteering.
- If the colleges you are interested in applying to require letters of recommendation, ask one to two teachers who know you well if they are willing to write a recommendation letter for you.
- Fill out the teacher recommendation questionnaire in Naviance.
- Choose senior year courses based on career interest, future goals, teacher recommendation, grades, and graduation requirements. Increase rigor where appropriate. Meet with school counselor to review course selection.

SUMMER

- Continue to visit colleges and solidify a list of schools to which you will apply.
    - TIP: Call ahead to schedule appointments with the financial aid and admissions counselors. Find out if you can sit in on a class, meet with a professor and/or spend a night in a dorm. While on campus, make it a point to speak with students about the college.
- Begin completing applications (August 1st):
    - Determine HOW you will apply to college (either utilizing the Common Application, the Coalition, or the individual college website)
    - Look over the essay prompts and begin writing. Deciding what to write is often the most difficult task!
    - Have a teacher, parent, and others review your essays for grammar, punctuation, readability and content.
- Decide if you are going to apply to a college's early action or early decision programs (Early Decision is a binding agreement - if accepted, you must attend. You can only apply to ONE school Early Decision).
- Determine if you need letters of recommendation. Schools have different requirements. Some require teacher letters, some require both teacher and counselor letters, other colleges require no letters at all.
    - Complete the Teacher Recommendation Questionnaire and/or Counselor Recommendation Questionnaire in Naviance if you need recommendation letters for the colleges you are applying to.

SENIOR YEAR

FALL

- **Sign up for the COLLEGE APPLICATION PREP 12 Spartan Period offered by the SLHS counselors to assist you with college applications.**
- Request in Naviance teacher and/or counselor recommendation letters if necessary for the colleges on your list.
- Take SAT or ACT again, if necessary, and utilize the 4 free score sends.
- Sign up to meet with college admission representatives when they visit the high school.
- Create a spreadsheet or list of colleges with deadlines for applications and financial aid to stay organized.
- Complete college application process (ideally by Thanksgiving):
    - Consult the "College Application Checklist" posted in Naviance and on the guidance website.
    - Submit student application online via the individual college website, the Common Application, or the Coalition application.
    - Send SAT or ACT scores to the colleges directly from collegeboard.org or act.org.
    - If using the Common Application, "match" Naviance with Common Application (see school counselor for help).
    - Request transcript in Naviance (this is done AFTER you submit your application).
- Focus on grades- many colleges will request to see Q1 or midyear grades.
- Register to take the AP (Advanced Placement) tests for courses you are currently taking.
- Begin to search for scholarships on college websites and using databases.
- Attend financial aid night at SLHS.
- Complete the FAFSA for financial aid.

SPRING

- In Naviance, request midyear grades to be sent to any colleges who need them.
- Complete scholarship applications available in Naviance (located on the "colleges" tab; filter by local scholarships).
- Compare college acceptance letters and financial aid/scholarship offers.
- Make your college decision no later than May 1st.
- Notify other schools that you are not planning to attend.
- Be mindful of any deadlines regarding housing, orientation, etc. at your chosen college
- If you were placed on a waitlist, notify the college to let them know if you are still interested in attending.
- In order for your final transcript to be sent to your college, please select the college you will be attending in Naviance (located in "colleges I'm applying to").
- Write thank you notes to the people who wrote letters of recommendation.

GRADUATION PROJECT

The faculty and administration of Southern Lehigh School District believe that a Graduation Project will challenge our students to go beyond what is learned in the regular high school curriculum. The Graduation Project is a learning process with student-centered research revolving around Pennsylvania Career Education and Work Standards and ending with a formal presentation. Projects will provide an avenue for creativity and demonstration of individual talents. It is our goal to significantly improve student achievement and to help all students explore career paths and become lifelong learners.

Working individually under the direction of their Careers and Technology Applications teacher, the student is required to complete a Graduation Project. Students attending half-day LCTI will complete the project under the direction of their English teacher. Although each student will be given direction during this project, the responsibility for completion lies with the student.

GRADUATION REQUIREMENTS

The regulations instituted by the Pennsylvania Department of Education shall be the minimum requirements for graduation from Southern Lehigh High School. Credit units for courses passed during the ninth, tenth, eleventh and twelfth grades shall be counted towards the necessary credits for graduation. To receive a diploma, each student shall have earned passing grades in all required subjects. Required courses are signified by a:

AP Courses are signified by a:

The minimum requirements are:

DEPARTMENT:	CREDITS:
English	4.0
Social Studies	3.0
Mathematics	3.0 to 4.0 **
Science	3.0 to 4.0 **
Physical Education	2.0
Health	1.0
Driver Education	0.5
Arts & Humanities*	1.0
Technology	0.5
Business	0.5
Electives or LCTI	8.0

*Arts and Humanities includes World Language, Fine Arts, and Music courses.
**Each student must take a total of 7.0 credits of Mathematics and Science.

Beginning with the 2018-2019 school year, all Health Education, Physical Education, and Driver Education courses will be awarded 0.5 credits. Therefore, total credits required for graduation have been adjusted as follows:

Class of 2021: 27.1 credits
Class of 2022 and beyond: 27.5 credits

Please note: The total number of courses required for graduation DID NOT change. All classes after 2021 will be required to achieve 27.5 credits in order to graduate.

GRADE POINT AVERAGE

Grade point average is determined by multiplying the course credit value by the achieved course grade quality points. Honors courses are weighted an additional .5 and AP courses are weighted an additional 1 quality point towards the calculation with the exception of grades lower than a C-. The sum of all course quality points is then divided by the total number of credits. Please see the SLHS Profile, located on pages 1 and 2 for more information.

KEYSTONE EXAMS

Keystone exams are state-mandated end-of-course assessments designed to assess proficiency in the subject areas of Algebra I, Biology, and Literature. Currently, the Pennsylvania Department of Education requires that students in the Class of 2022 and beyond demonstrate proficiency on these exams as one path to graduation. Students who do not pass will be offered multiple opportunities to retake the Keystone exams or

demonstrate proficiency through various pathways as outlined by the state. Detailed information about the Keystone exams can be found at: http://www.pdesas.org/Page/Viewer/ViewPage/8.

KEYSTONE EXAM	BELOW BASIC	BASIC	PROFICIENT	ADVANCED
Algebra 1	1200-1438	1439-1499	1500-1545	1546-1800
Biology	1200-1459	1460- 1499	1500-1548	1549-1800
Literature	1200-1443	1444-1499	1500-1583	1584-1800

Honor Roll

Recognition will be given each marking period to students who meet the following scholastic standards:

Principal's List **-** Attainment of a 4.0 average with no grade lower than B-.
High Honors - Attainment of a 3.5 average with no grade lower than B-.
Honors **-** Attainment of a minimum 3.25 average with no grade lower than C-.

Final Grades

Final grades are determined by averaging the 4 marking periods and the final exam/final project, each worth 20% of the final grade. Within the final exam/final project category, the final exam grade is worth 60% and the final project grade is worth 40%.

DUAL ENROLLMENT

Southern Lehigh High School affords qualified students the opportunity to enroll in college-level courses in the following ways:

1. Sign up for one of the courses listed below taught by SLHS faculty who are approved adjunct faculty members for Lehigh Carbon Community College:

   a. College Algebra (2242) = LCCC MAT 160
   b. Introduction to Computer Science II (2600E) = LCCC CIS 155
   c. Public Speaking (1700E) = LCCC ENG 111

Registration information for Introduction to Computer Science and Public Speaking/Speech is disseminated to students in class during the first week of the semester the course is taken. For College Algebra, ALL students must take the LCCC placement exam as an in-class assessment (mid-December) in order to determine eligibility to take the course for dual enrollment credit. Students must meet LCCC's prerequisites to take the courses for dual enrollment, submit an online application to LCCC, and submit a paper registration form along with payment to the guidance office after the 3rd week of class (for College Algebra, registrations are processed during the second semester). Upon completion of the semester or school year, students must login to the LCCC student portal to verify their final grade has posted. Please see your school counselor if you have additional questions.

2. Seniors may be eligible to take a course or courses at a local college or university. Please note that the only credit(s) that will count towards high school credit are electives and LCCC's English 105 Research & Composition course.

Several local colleges and universities accept high achieving seniors on a part-time basis, affording them the opportunity to take college courses that are independent of their high school transcript and have no impact on the student's eligibility for graduation from Southern Lehigh High School. It is a great opportunity for seniors to acclimate themselves to college-level courses as they begin the transition from high school to college. Eligible seniors can take one or more college courses during the senior year while also taking courses at SLHS. Students are able to schedule classes during the school day or after school hours. For each college course, students may miss two SLHS courses during the same block. It is the student's responsibility to provide his/her college schedule to the appropriate SLHS school counselor so it can be placed on his/her SLHS schedule. Students must inform their counselor regarding their intent to enroll in dual enrollment for the fall semester of their senior year by the end of their junior year. Final approval is at the discretion of the high school principal.

Transportation costs as well as tuition and other fees are the responsibility of the student. College and university course grades are not calculated into the SLHS GPA. Students are responsible for exploring the transferability of dual enrollment credits to the college they will be attending.

HIGH SCHOOL SCHOLARS PROGRAM

The High School Scholars Program is a highly selective program that enables a limited number of students to take tuition-free courses during their senior year at local colleges such as DeSales University, Lehigh University and Moravian College. Acceptance into the program is based on the following: GPA/Class Rank, strength of schedule, SAT/PSAT scores, application essay and teacher/counselor recommendation letter. In the spring, applications for these programs are available in the guidance office for current juniors. Completed applications are then sent to the colleges for review.

FIRE FIGHTING & EMERGENCY MEDICAL TECHNICIAN COURSES

Through partnerships with local community colleges, the local volunteer fire departments, and ambulance corps, students will be able to earn graduation credit for taking firefighting and EMT courses. Students, ages 16 and older, can register for the Junior Fire Fighting Course and/or the EMT Course to gain credit toward high school graduation. The Fire Fighting course involves attending class and hands-on training at the local fire department. The EMT Course involves approximately 160 hours of education. Students should contact their local fire companies or the Ambulance Corps for additional information before registering for either of these courses. Upon successful completion of these programs, students are eligible to receive 1 credit towards high school graduation.

SUMMER COURSES FOR ENRICHMENT OR ACCELERATION

Southern Lehigh students are able to further or enhance their educational experiences during the summer months by enrolling in pre-approved course work. After successful completion, courses will be noted on the student's transcript with a “P” for the final grade and the appropriate credit earned, with no impact to grade point average.

Guidelines for Course Credit and Acceleration:

- Students must complete the green Enrichment or Acceleration Form with their parents. Please note: courses taken through eLearn 21 do not require completion of this form.
- Approval must be granted in writing by the SLSD curriculum director and high school principal prior to the student enrolling in the course
- Students who take enrichment or acceleration courses must satisfy Southern Lehigh course prerequisites for acceleration when standards and curriculum are comparable and the minimum grade is attained.
- Summer acceleration registration forms will be available in the guidance office in May.

For students moving on to the next level in mathematics or science:

- Students are required to take Southern Lehigh High School’s final exam in addition to the completion of the approved course.
- The grade that the student earns in the requested course will account for 80% of the final grade, with the SLHS final exam counting as 20% of the final course grade.
- The final grade must meet the prerequisite requirements of the subsequent course in order to accelerate on to the next desired course.
- The student is responsible for providing an official transcript of his/her performance to Southern Lehigh High School for verification.

SUMMER SCHOOL

Students failing required subjects are encouraged to make up those course credits in the summer. Students may enroll in the district’s Cyber program to make up courses during the summer in any given year. Making up credits as soon as possible is highly recommended so that students will meet course prerequisites and can continue in upper level courses. Information concerning summer school can be obtained by contacting the guidance office. Students lacking sufficient credit for graduation will not be able to graduate with their class or participate in the commencement ceremony. A failing grade is not removed from the student's record by passing a remedial summer

school course. Successful completion of the remedial course is indicated in the student's record and credit is then awarded. Summer school courses are noted as pass/fail on the student's transcript and are not included in grade point average calculation.

SPECIAL PROGRAMS

Diversified Career Occupations (DCO)
Grade 11,12

Students may enroll in DCO during their 11th and/or 12th grade years. Those students who are in good standing academically and on track for graduation may be released from school for half days to work. Students are required to work a total of 15 hours per week. The DCO program allows participants to split their time between academic courses and part-time work in career fields that interest them. Students are required to meet weekly with a certified, professional school-to-career coordinator from LCTI who helps them develop 21st century skills such as collaboration, critical thinking and problem solving. Weekly competency-based instruction takes place at SLHS with the LCTI coordinator and students are formally evaluated by both the LCTI coordinator and the employer each marking period. Students who participate in DCO receive credit towards graduation. Background checks are required for employer mentors who hire minors in the DCO program.

Emerging Health Professionals Program
Grade 12 Honors Level Program

The Emerging Health Professional Program approved by PDE and offered through Lehigh Career & Technical Institute, Penn State University, and Lehigh Valley Hospital and Health Network, provides highly motivated high school seniors with an opportunity to experience a variety of health care careers. Students take Anatomy and Physiology in the fall and spring semesters at Penn State University, Lehigh Valley campus or at LCCC two days per week and spend the remaining three days per week rotating among the various departments in the hospital and receiving health care instruction at LCTI. Students have the opportunity to work and interact with staff from all departments of the hospital, including: critical care units, radiology, respiratory care, pharmacy, physical therapy, clinical laboratories, emergency unit, medical and surgical units, general medicine and more. The classroom portion of the program provides students with instruction in a variety of patient care skills and hospital procedures to enable them to participate in patient care activities during the clinical portion of the program. In addition to these basic skills, students are given an overview of the healthcare profession, different healthcare systems, health insurance, and other health-related issues.

Interested students should see their school counselor for more information.

NCAA ELIGIBILITY

Student-athletes who intend to participate in Division I or II collegiate athletics are required to meet National Collegiate Athletic Association (NCAA) eligibility standards, which include the completion of high school courses. (Note that Division III colleges do not use the NCAA Clearinghouse. Only courses that have been approved by the NCAA can count toward fulfilling these requirements. The NCAA determines eligibility of courses on an ongoing basis. Be sure to look at Southern Lehigh's list of NCAA-approved courses on the Eligibility Center's website (**eligibilitycenter.org**) to make certain that core courses being taken have been approved. Enter Southern Lehigh's school code: **390830** for a complete list of approved courses.

The following is a timeline for prospective student-athletes:

<u>Grade 9:</u>

- Take the right courses and earn the best grades you can.
- Ask your counselor for a list of your high school's NCAA approved core courses/find your high school's list of NCAA core courses online.

<u>Grade 10:</u>

- **Register** with the NCAA Eligibility Center at **eligibilitycenter.org** (students interested in Division III or those unsure about where they want to compete can create a "profile page")
- If you fall behind, ask your counselor for help with finding approved courses you can take.

Grade 11:

- Check with your counselor to make sure you are on track to graduate on time and complete the required number of NCAA approved courses.
- Take the **ACT or SAT** and **submit your scores to the NCAA** by using **code 9999**.
- Research what schools you want to apply to that are the best fit for your academic and athletic goals.
- At the end of the year, turn in an NCAA **transcript release form** to the guidance office (forms available in guidance) and select **NCAA on your Naviance** account to record your transcript request.

Grade 12:

- Complete your final NCAA core courses as you prepare for graduation.
- Take the ACT or SAT again, if necessary, and make sure to send scores using code 9999.
- Request your final amateurism certification beginning April 1 (fall enrollees).
- After you graduate, ask your counselor to upload your final official transcript with proof of graduation.
- Only students on an NCAA Division I or II school's certification request list will receive a certification.

**Students are encouraged to speak with their school counselor to assist with any NCAA related questions.*

NONDISCRIMINATION POLICY

Southern Lehigh School District is an equal opportunity educational institution and will not discriminate on the basis of race, religion, age, color, national origin, sex, handicap or limited English proficiency in its activities, programs or employment practices as required by Title VI, Title IX and Section 504. For information regarding civil rights or grievance procedures, contact Mrs. Kathleen T. Evison, Title IX and Section 504 Coordinator at the Southern Lehigh School District Administration Building, 5775 Main Street, Center Valley, PA or call (610) 282-3121. For information regarding services, activities and facilities that are accessible to and usable by handicapped persons, also contact Mrs. Evison.

In compliance with state and federal law, the Southern Lehigh School District will provide to each protected handicapped student, without discrimination or cost to the student or family, those related aids, services or accommodations which are needed to provide equal opportunity to participate in and obtain the benefits of the school program and extracurricular activities to the maximum extent appropriate to the student's abilities. In order to qualify as a protected handicapped student, the child must be of school age with a physical or mental disability which substantially limits or prohibits participation in or access to an aspect of the school program. These services and protections for "protected handicapped students" are distinct from those applicable to all eligible or exceptional students enrolled (or seeking enrollment) in special education programs.

The Southern Lehigh School District, in conjunction with the Lehigh Career and Technical Institute, offers a variety of programs. Admission to these programs is available to all students. Criteria for admission are limited to academic aptitude, achievement, and available space.

NONBINDING NOTE

This booklet describes all courses contained in the Southern Lehigh High School program of studies; however, all courses may not be offered during the school year.

The school reserves the right to cancel or postpone courses for which insufficient enrollment, lack of physical facilities, or unavailability of teaching personnel necessitates such action.

ENGLISH

"Every vital development in language is a development of feeling as well." --T.S. Eliot

The study of English emphasizes three interrelated categories: language, communication arts, and literature.

Language is a dynamic entity whose structure, syntax, character, and standard of "correctness" are shaped and modified by the development of the indigenous culture.

Communication arts are the utilization of language in speech and writing for the purpose of conveying thoughts, ideas, concepts, and emotions successfully.

Since language is man's primary instrument for interacting with his fellow beings, the English student is encouraged to become involved with language through reading, writing, speaking, and listening. Individual and group progress is assessed by the evaluation of meaningful writing assignments which are an outgrowth of class involvement and relevant to the literature.

1091 APPLIED ENGLISH 9 	
3 days per cycle	Full Year
1.00 Credit	Required

Within this course, students will focus on the fundamentals of reading and writing through the Read 180 curriculum. Vocabulary and grammar will be taught within the context of both writing and literature. Students will also study non-fiction, short stories, drama, poetry and novels, which will provide them with a survey of literature genres. The emphasis in writing will include the organization of coherent ideas in persuasive, narrative, and informative writing. **Summer reading list is available on the district and teacher websites.**

1092 ENGLISH 9 	
3 days per cycle	Full Year
1.00 Credit	Required

Within this course, students will focus on the fundamentals of reading, writing, vocabulary and grammar. They will read and study short stories, drama, novels, poetry and non-fiction. In addition, students will practice analyzing literature through reading strategies and writing MLA formatted narrative, informative, and persuasive essays to demonstrate their findings/claims. **Summer reading list is available on the district and teacher websites.**

1093 *HONORS ENGLISH 9 	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Grade of A- or higher in LANGUAGE ARTS 128 (on level course) OR a B or higher in LANGUAGE ARTS 138 (advanced level course) OR LANGUAGE ARTS 148 (Gifted Level).

Within this rigorous course, students will focus on the fundamentals of reading through the use of reading strategies, various forms of writing, literary devices, context-based vocabulary, and grammar. Students will be expected to read and analyze a play, a variety of short stories, novels, poems, historical nonfiction texts, and articles. As this is an honors course, students will read much of these works independently, followed by teacher-led class discussion and activities. The curriculum will focus on narrative, informative, and argumentative writing. **Summer reading list is available on the district and teacher websites.**

1101 APPLIED ENGLISH 10 	
3 days per cycle	Full Year
1.00 Credit	Required

APPLIED ENGLISH 10 is the second course in an applied sequence offered within the English Department. The literature will include short stories, novels, current events, and poetry. In part to emphasize preparation for the state Keystone examination study will concentrate on reading strategies for literature and non-fiction, vocabulary development, writing skills, and speaking and listening. **Summer reading list is available on the district and teacher websites.**

1102 ENGLISH 10 	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Final passing grade in ENGLISH 9 OR final grade of an A- or higher in APPLIED ENGLISH 9.

In part to emphasize preparation for college entrance examinations and the state Keystone examination, study will concentrate on reading strategies for literature and non-fiction, vocabulary development, writing skills, and speaking and listening. The curriculum offers a variety of works by American writers and includes examples of short stories, novels, plays, poems, essays, and biographies. Approaches to this study of American literature will include a cultural/historical perspective, as well as a thematic perspective. Students will also complete a research project focusing on a controversial topic. **Summer reading list is available on the district and teacher websites.**

1103 *HONORS ENGLISH 10 	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Course grade of B or higher in preceding year's Honors course OR a course grade of A- in preceding College Prep Course.

This course will help students develop higher level thinking skills; intense reading and writing will take place, with an emphasis on American literature. Students will analyze literature and contemporary issues on many levels. Throughout the course students will analyze development of American identity through 20th century literature and 21st century short stories and poems. Emphasis will also be placed on preparation for the Keystone exam. **Summer reading list is available on the district website.**

1111 APPLIED ENGLISH 11 	
3 days per cycle	Full Year
1.00 Credit	Required

APPLIED ENGLISH 11 is a course designed to teach students the communication skills that will be required in the workplace of today and tomorrow. In addition to the traditional academic expectations, students learn by utilizing materials designed to develop the oral, written, visual, and non-verbal communication skills necessary for future success. Concise writing skills along with relevant research are emphasized.

1112 ENGLISH 11	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Final passing grade in ENGLISH 10 OR final grade of an A- or higher in APPLIED ENGLISH 10.

Through a series of absorbing experiences while reading literature, analyzing literary and thematic forms and devices, and reflecting on historical development, students will gain a heightened awareness of World Literature. The course will focus on the following thematic concepts: the triumph of the human spirit, the value of individuality and human nature, the conflict of fate vs. free will, and the effects of chaos and violence in society. Students will study the human search for final answers through the evaluation of both traditional and modern contexts enabling them to define their personal positions regarding the quality and nature of existence. A strong emphasis will be placed on critical reading and elements of writing. Students will learn how to identify and use rhetorical devices. Students will be expected to complete a research paper in MLA format. **Summer reading list is available on the district website.**

1113 *HONORS ENGLISH 11	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Course grade of B or higher in preceding year's Honors course OR a course grade of A- in preceding College Prep Course.

Through a series of absorbing experiences in reading literature, analyzing literary, and thematic forms and devices, and reflecting on historical development, students will gain a heightened awareness of World Literature. The course will focus on the following thematic concepts: the triumph of the human spirit, the value of individuality and human nature, the conflict of fate vs. free will, the effects of chaos and violence and the resulting psychology in society, and the role of the hero. Students will study the human search for final answers through the evaluation of both traditional and modern contexts enabling them to define, in discussion and on paper, their personal positions regarding the quality and nature of existence. Students will also complete a literary criticism research paper in the MLA format. **Summer reading list is available on the district website.**

1114 *AP ENGLISH LANGUAGE AND COMPOSITION	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Prerequisite: Grade of B or higher in HONORS ENGLISH 10, or a grade of A in ENGLISH 10.

AP ENGLISH LANGUAGE AND COMPOSITION is offered to students eager to learn about the complexities of the English language. While students will examine traditional content that includes works of fiction like novels, dramas and plays, this college-level course will focus more on non-fiction texts and rhetorical techniques used by the authors. Students will use skills-based instruction to become tenacious critical readers and proficient writers of expository, analytical and argumentative essays. The course is designed to prepare students for the AP Exam in May and is intended as a substitute for entry-level college English. **Summer reading list is available on the district website.**

1121 APPLIED ENGLISH 12	
3 days per cycle	Full Year
1.00 Credit	Required

APPLIED ENGLISH 12 continues to develop the skills emphasized in Applied English 11. Concentration will include communicating with coworkers and superiors and evaluating job performance. Specific employment skills regarding securing, upgrading, and changing jobs will be addressed. Additionally, traditional academic expectations in the areas of oral, written and research presentations will be required. **Summer reading list is available on the district and teacher websites.**

1122 ENGLISH 12	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Final passing grade in ENGLISH 11 or final Grade of an A or higher in APPLIED ENGLISH 11.

ENGLISH 12 is designed for students to explore the diverse world around them through literature. Students will study a variety of genres and eras completing presentations, projects, and real-world activities that emphasize the importance of articulate communication. Students will complete writing assignments in a variety of modes and styles, also with an emphasis on real-world applications. **Summer reading list is available on the district and teacher websites.**

1123 *HONORS ENGLISH 12	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Grade of A- or higher in ENGLISH 11 or B- or higher in HONORS ENGLISH 11.

HONORS ENGLISH 12 is a writing intensive course with a focus on British literature spanning its emergence through the twentieth century. Students will read works including poetry, drama, and novels, as well as supplementary readings to enhance depth of understanding. Students will extensively read, analyze and critically respond to literature through discussion, writing, and projects that require the demonstration of higher-order thinking skills. Grammar will be addressed in the context of student writing, with an emphasis on preparing students for college-level writing. Assignments in this course will also include a college application essay at the start of the fall semester, and a research and presentation based course project. **Summer reading list is available on the district website.**

1124 *AP ENGLISH LITERATURE AND COMPOSITION	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Course grade of B or higher in HONORS ENGLISH 11 or AP ENGLISH LANGUAGE AND COMPOSITION or an A in ENGLISH 11.

AP ENGLISH LITERATURE course is designed for college bound seniors who intend to take the AP Exam for college credit. The course is the culmination of the English Honors program. Students who choose this course should be extremely skilled in literature analysis and should be writing on at least a "B" level in the eleventh grade Honors program. Students should also be diligent and responsible as well as strong readers and writers. Because of the demanding nature of this course, only students that are highly motivated and ready for the rigorous academic challenge of the course should take it. Students have the option of taking the AP exam for college credit at the end of the course at their own expense. **Summer reading list is available on the district website.**

1200E CREATIVE WRITING	
3 days per cycle	One-Half Year Grades 11-12
.50 Credit	Elective

In CREATIVE WRITING, students explore the limitless possibilities of storytelling. Students work to develop a personal style and voice through short stories, poetry, free writing, and major projects. Additionally, students will experiment with collaborative writing, writing for TV and long form writing. Students should be willing and eager to write frequently.

1400E KEYSTONE LITERATURE 	
3 days per cycle	Semester 1
.50 Credit	Elective

This is a semester or year-long course designed for students who have not yet achieved a score of proficient on the Literature Keystone Exam. This exam is administered to students at the end of the year in which they take tenth grade English. Students who have not achieved proficiency after three attempts will be required to take the Keystone Literature course. The Project Based Assessment is state administered and monitored by the course teacher. Proficiency in completing the project in the first semester will result in a student being placed in a 0.5 year elective of senior English during the second semester.

1600E NEWSPAPER JOURNALISM 	
3 days per cycle	Full Year Grades 9-12
1.00 Credit	Elective
Prerequisite	B or higher in previous year's English class

In this year-long course, students will continue to learn and develop journalism and multimedia skills as applied to the publication of the student newspaper, the *Spotlight.* Focus will be placed on writing, editing, and page design. Students will use technology on a daily basis to research, write, revise, edit, and publish. Those who possess strong writing skills, and who have an interest in current events and communications are well suited for this course. Students who wish to be considered for editorial positions on the *Spotlight* staff are required to take this course. This class may be taken more than once for credit.

1700E PUBLIC SPEAKING (LCCC ENG 111) DUAL ENROLLMENT 	
3 days per cycle	One-Half Year Grades 11-12
.50 Credit	Elective

The focus of this course will be on real life situations that demand effective communication. Students will learn strategies used for a variety of speaking situations, ranging from informative to How-To to persuasive speeches independently and in group settings.

1750E INTRODUCTION TO VIDEO, TV AND FILM PRODUCTION 	
3 days per cycle	One-Half Year Grades 10-12
.50 Credit	Elective

This elective course will allow students to express themselves in various forms of video, television and film production. Students will have the opportunity to write, produce, videotape, edit and reflect on both live and edited television and film productions. Students will apply video skills learned in class to their own personal interpretations and ideas in television and film. Students will also study the techniques of storytelling using audio and editing techniques, including special visual effects and visual composition. Emphasis for instruction will include a prescribed text and practical/performance demonstrations using the component equipment in the TV studio as well as the Final Cut 10 editing program. If you want to make your own videos look more professional, this course is a good starting point.

1751E ADVANCED VIDEO, TV AND FILM PRODUCTION	
3 days per cycle	One-Half Year Grades 10-12
.50 Credit	Elective
Prerequisites	Final grade of B or higher in INTRODUCTION TO VIDEO, TV & FILM PRODUCTION Teacher recommendation required from Introduction class instructor.

This elective course will allow students to express themselves in various forms of television and film production. Students will have the opportunity to write, produce, videotape, edit and reflect on both live and edited television and film productions. Students will supplement and enhance video skills learned in INTRODUCTION TO VIDEO, TV & FILM PRODUCTION class to craft their own personal interpretations and ideas into broadcast quality video, television productions and films. Students will increase their arsenal for storytelling using special effects, composition and advanced editing techniques learned in the introductory class using the Final Cut 10 editing program. Emphasis for instruction will include a prescribed text and individual and group projects. At the conclusion of the class, students should have the foundation of a solid resume tape to use in their advanced education.

1800E YEARBOOK	
3 days per cycle	Full Year Grades 9-12
1.0 Credit	Elective
Prerequisites	Course instructor recommendation. If you have taken yearbook previously, you must have earned a minimum grade of B.

Production of the yearbook by means of a desktop publishing computer program is this class's goal. Writing, revising copy, creating layouts, taking photographs, proofreading pages, selling advertising and staying on schedule require the cooperation and commitment of all students in this course. After school time is necessary in order to meet deadlines, including attending school events to photograph for the yearbook.

MATHEMATICS

"The perfection of mathematical beauty is such...that whatsoever is most beautiful and regular is also found to be most useful and excellent."
--Sir D'Arcy Wentworth Thompson

The Mathematics Department believes the mathematics curriculum, in addition to developing basic mathematical competencies and self-discipline, should develop in the student's ability to think logically and to work independently as well as with others. We further believe the nature of the offerings of the department should be broad and varied, so students will be encouraged to study mathematics as well as be made aware of and prepared for a variety of career choices. The successful completion of at least three mathematics credits is required for graduation.

TRANSITIONING FROM MIDDLE SCHOOL MATHEMATICS TO HIGH SCHOOL MATHEMATICS

Course taken in 8th Grade: (2019-2020)	**Course to be taken in 9th Grade: (2020-2021)**
Algebra 1A (aligned to Grade 8 PA Core Standards)	**An Algebra I course (according to prerequisites)**
Algebra 1B* (aligned to High School Algebra I Standards)	**A Geometry course (according to prerequisites)**
Algebra 1* (aligned to High School Algebra I Standards)	**A Geometry course (according to prerequisites)**
Geometry (aligned to High School Geometry Standards)	**An Algebra II course (according to prerequisites)**

*** A student who has not earned a passing score on the Algebra I Keystone Exam will be required to take an Algebra I course in 9th Grade, according to established prerequisites.**

2091 APPLIED ALGEBRA I	
3 days per cycle	Full Year
1.00 credit	Required

APPLIED ALGEBRA I focuses on developing students' skills and accuracy in algebraic techniques and their applications. There is an emphasis on the connection between theory, practical, and technical skills necessary to be successful in life. This course includes a study of number properties, equations, inequalities, polynomials, and linear functions. Concepts are developed in a flexible, application-based mode that provides for hands-on understanding of the relationships of algebraic concepts through authentic applications. Emphasis is placed on the development of conceptual understanding, logical reasoning, problem solving, and procedural fluency. **This is a Keystone course where students are required to take the Keystone Algebra I exam at the end of the course**. Throughout the course, students will be enrolled in a mandatory Spartan Period for Keystone Algebra I exam preparation.

2092 ALGEBRA I	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisite	Earn a minimum grade of a C in Grade 8 MATHEMATICS

ALGEBRA I focuses on developing students' skills and accuracy in algebraic techniques and their applications. This course is designed to develop understanding of the real number system. It includes a study of number properties, equations, inequalities, polynomials, and linear functions. Emphasis is placed on the development of conceptual understanding, logical reasoning, problem solving, and procedural fluency. Concepts are developed through authentic applications. **This is a Keystone course where students are required to take the Keystone Algebra I exam at the end of the course.**

2101 APPLIED GEOMETRY	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Successful completion of an ALGEBRA I course.
Required	Scientific Calculator

APPLIED GEOMETRY utilizes an investigative approach to develop an understanding of the attributes and relationships of geometric objects. It provides an integrated study of congruence, similarity, geometric transformations, geometric measurement and dimension, right triangles, introductory trigonometry, circles, parallelism, and spatial relationships. Both abstract and practical aspects of geometry are addressed. Throughout this course, inductive and deductive reasoning are emphasized in both mathematical and non-mathematical situations. Students will construct conditional statements and conjectures.

2102 GEOMETRY	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisites	Earn a minimum grade of a B in APPLIED ALGEBRA, a C in ALGEBRA 1, OR successful completion of a middle school ALGEBRA 1 course
Required	Scientific Calculator

GEOMETRY utilizes an investigative approach to develop an understanding of the attributes and relationships of geometric objects. It provides an integrated study of congruence, similarity, geometric transformations, geometric measurement and dimension, right triangles, introductory trigonometry, circles, parallelism, and spatial relationships. Both abstract and practical aspects of geometry are addressed. Throughout this course, inductive and deductive reasoning are emphasized in both mathematical and non-mathematical situations. Students will construct conditional statements, conjectures, and written justifications. Additionally, students will explore an introduction to geometric proofs.

2103 *HONORS GEOMETRY	
3 days per cycle	Full Year
1.00 Credit	Required
Prerequisite	Earn a minimum grade of an A- in ALGEBRA 1 OR an A- in a middle school ALGEBRA 1 course.
Required	Scientific Calculator

HONORS GEOMETRY focuses on developing an understanding of the attributes and relationships of geometric objects. This course is designed for students who have achieved high levels in math. It provides an integrated study of congruence, similarity, geometric transformations, geometric measurement and dimension, right triangles, introductory trigonometry, circles, parallelism, and spatial relationships. Both abstract and practical aspects of geometry are addressed. Throughout this course,

inductive and deductive reasoning are emphasized in both mathematical and non-mathematical situations. The major principles of logic are emphasized, while developing the method and meaning of mathematical proof. Students will construct conditional statements, conjectures, and written justifications. Both direct and indirect proofs are used to provide an understanding of two- and three-dimensional relationships. **Summer work is required for this course**

2111 APPLIED ALGEBRA II	
3 days per cycle	Full Year
1.00 Credit	
Prerequisite	Successful completion of a GEOMETRY course.
Required	Scientific Calculator

In APPLIED ALGEBRA II students will apply their prior mathematical knowledge to develop a more extensive understanding of algebraic concepts. There is an emphasis on the connection between theory, practical, and technical skills necessary to be successful in life. Topics will focus on the study of the complex number system, properties of linear and nonlinear functions and their graphs, equations and inequalities, as well as statistics and probability. Students will be introduced to matrices and determinants to aid in the solution of systems of equations with multiple variables. Concepts are developed in a flexible, application-based mode that provides for hands-on understanding of the relationships of algebraic concepts through authentic applications.

2112 ALGEBRA II	
3 days per cycle	Full Year
1.00 Credit	
Prerequisites	Earn a minimum grade of a B in APPLIED GEOMETRY, a C in GEOMETRY, OR successful completion of a middle school GEOMETRY course.
Required	Scientific Calculator

In ALGEBRA II students will apply their prior mathematical knowledge to develop a more extensive understanding of algebraic concepts. Topics will focus on the study of the complex number system, properties of linear and nonlinear functions and their graphs, equations and inequalities, as well as statistics and probability. Students will be introduced to matrices and determinants to aid in the solution of systems of equations with multiple variables.

2113 *HONORS ALGEBRA II	
3 days per cycle	Full Year
1.00 Credit	
Prerequisites	• Earn a minimum grade of an A in Geometry, an A- in Honors Geometry, or a B+ in a middle school Geometry course; AND • Earn a minimum grade of an A in Applied Algebra I, an A- in Algebra I, or successful completion of a middle school Algebra I course (Grade Algebra 1, or 8th Grade Algebra 1)
Required	TI-84 Plus or TI-Nspire Calculator

HONORS ALGEBRA II is designed for students who have earned high levels of achievement in mathematics. Students will apply their prior mathematical knowledge to develop a more extensive understanding of algebraic concepts. Topics will focus on an in-depth study of the complex number system, properties of linear and nonlinear functions and their graphs, equations and inequalities, as well as statistics and probability. Students will be introduced to matrices and determinants to aid in the solution of systems of equations with multiple variables. Periodic functions and trigonometry will be studied while utilizing the unit circle in degrees and radians. **Summer work is required for this course.**

2242 COLLEGE ALGEBRA (LCCC MAT 160) DUAL ENROLLMENT	
3 days per cycle	Full Year
1.00 Credit	
Prerequisites	A minimum grade of a C in ALGEBRA II and a C in GEOMETRY or C- in HONORS GEOMETRY
Required	TI-84 Plus Calculator

This course is offered to college bound juniors and seniors. Success in college level mathematics begins with a good understanding of algebraic concepts. The goal of this course is to help students develop this understanding. Topics covered include: special products, factoring, radicals, rational exponents, and linear and quadratic equations and inequalities. These concepts are then applied to topics such as: complex numbers, rational polynomials, exponential functions, and higher degree equations

2252 PRE-CALCULUS	
3 days per cycle	Full Year
1.00 Credit	
Prerequisites	Earn a minimum grade of a A in APPLIED ALGEBRA II, a B in ALGEBRA II, or successful completion of HONORS ALGEBRA II.
Required	Scientific Calculator

PRE-CALCULUS is designed to prepare students for the study of calculus. A more complex understanding of prior mathematical knowledge will be applied to algebraic and geometric concepts. Content will include linear, polynomial, rational, exponential, logarithmic, and trigonometric functions, as well as their graphs. The six trigonometric functions will be investigated. Students will deepen their knowledge of systems, matrices and determinants.

2253 *HONORS PRE-CALCULUS	
3 days per cycle	Full Year
1.00 Credit	
Prerequisites	Earn a minimum grade of a A- in ALGEBRA II or a B+ in HONORS ALGEBRA II.
Required	Scientific and Graphing Calculator

HONORS PRE-CALCULUS is designed for students who have earned high levels of achievement in mathematics. This course is designed to prepare students for the study of calculus. A more complex understanding of prior mathematical knowledge will be applied to algebraic and geometric concepts. Content will include linear, polynomial, rational, exponential, logarithmic, and trigonometric functions, as well as their graphs. The six trigonometric functions will be investigated. Students will deepen their knowledge of systems, matrices and determinants. Additional topics in analytic geometry, conics and polar coordinates, sequences and series, limits and continuity will be investigated. **Summer work is required for this course**

2300 CALCULUS	
3 days per cycle	Full Year
1.00 Credit	Elective
Prerequisites	Successful completion of PRE-CALCULUS course
Required	Scientific Calculator

CALCULUS is designed for students who are interested in an introduction to basic calculus concepts. Content focuses on functions, limits, methods and applications of differentiation. Students who may want to take calculus in college would benefit from taking this course.

2313 *HONORS CALCULUS	
3 days per cycle	Full Year
1.00 Credit	Elective
Prerequisites	A minimum grade of C+ in PRE-CALCULUS, or C- in HONORS PRE-CALCULUS.
Required	TI-84 Plus or TI-Nspire Graphing Calculator

HONORS CALCULUS is designed for students who have earned high levels of achievement in mathematics. Content focuses on functions, limits, methods and applications of differentiation and integration. Students who are interested in pursuing careers in business, science, mathematics, engineering, or related areas would benefit from taking a calculus course.

2314 *AP CALCULUS AB	
3 days per cycle	Full Year
1.00 Credit	Elective
Prerequisite	A minimum grade of B+ in PRECALCULUS or B in HONORS PRECALCULUS.
Required	TI-84 Plus or TI-Nspire Graphing Calculator

The AP CALCULUS AB course is designed for the study of mathematical topics comparable to a first year calculus course in most colleges and universities. Upon successfully completing the AP exam at the end of the course, some institutions might offer full credit for the first semester of calculus while others might give credit for the entire year and begin students in the second-year of the college sequence. Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and ready for such work. Students are advised to consult with their parents, teachers, and school counselors before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense. **Summer work is required for this course.**

2324 *AP CALCULUS BC	
3 days per cycle	Full Year
1.00 Credit	Elective
Prerequisite	Successful completion of AP CALCULUS AB or a score of 3 or higher on the AP CALCULUS AB Exam.
Required	TI-84 Plus or TI-Nspire Graphing Calculator

AP CALCULUS BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topics of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the fundamental theorem of calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and ready for such work. Students are advised to consult with their parents, teachers, and school counselors before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense.
Summer work is required for this course.

2334E *AP STATISTICS	
3 days per cycle	Full Year
1.00 Credit	Elective
Prerequisite	A minimum grade of B+ in ALGEBRA II or a B+ in PROBABILITY & STATISTICS.
Required	TI-84 Plus or TI-Nspire Graphing Calculator

The AP STATISTICS course is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to four broad conceptual themes: exploring data; planning a study; anticipating patterns; and statistical inference. Upon successful completion of the AP examination at the end of the course, some institutions might offer full credit for the first semester of Statistics.
Summer work is required for this course.

Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and ready for such work. Students are advised to consult their parents, teachers, and school counselors before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense.

2404E *AP COMPUTER SCIENCE	
3 days per cycle	Full Year
1.00 Credit	Elective
Prerequisite	INTRODUCTION TO COMPUTER SCIENCE II with a minimum grade of B+.

JAVA is receiving a great deal of attention as a highly portable programming language suitable for developing Internet applications and is one of the computer programming languages recommended by the College Board Commission. This course teaches students to use the standard JAVA library classes from the AP®JAVA subset delineated in Appendices A and B of the AP COMPUTER SCIENCE course description. Concepts such as classes, objects, inheritance, polymorphism, and code reusability are studied. Hands-on laboratory work helps solidify each concept.
It can also be used as a general-purpose object-oriented language. This course covers specifics of writing programs in JAVA including attention to console output, arrays, data types, implementing classes, field variables, methods, constructors, inheritance, graphical user interface, and events.

Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and ready for such work. Students are advised to consult their parents, teachers, and guidance counselors before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense.
Summer work is required for this course.

2414E *AP COMPUTER SCIENCE PRINCIPLES	
3 days per cycle	Full Year
1.00 Credit	Elective
Prerequisite	GEOMETRY with a minimum grade of B, or HONORS GEOMETRY with a minimum grade of B- or APPLIED GEOMETRY with a minimum grade of A-

The AP COMPUTER SCIENCE PRINCIPLES course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world. Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and ready for such work. Students are advised to consult with their parents, teachers, and school counselors before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense. **Summer work is required for this course.**

2232E STATISTICS AND PROBABILITY	
3 days per cycle	Full Year
1.00 Credit	Elective
Prerequisite	A minimum grade of an A- or higher in APPLIED ALGEBRA II, a C in Algebra II, or successful completion of Honors Algebra II.
Required	TI-84 Plus or TI-Nspire Calculator

STATISTICS AND PROBABILITY introduces students to foundational concepts and logic of statistical reasoning. It provides students introductory level practical ability to choose, generate, and properly interpret appropriate descriptive and inferential statistical methods. In addition, the course helps students gain an appreciation for the diverse applications of statistics and its relevance to their lives and future fields of study. Fundamental and advanced topics including the counting principle, permutations, combinations and the Central Limit Theorem will also be covered. A graphing calculator will be an integral part of this course.

2262E SURVEY OF STATISTICS	
3 days per cycle	Half Year
.50 Credit	Elective
Prerequisite	Successful completion of a GEOMETRY course

SURVEY OF STATISTICS introduces students to data collection and interpretation. Students will explore study design, sampling techniques, data analysis, and inference. The course presents statistics in an investigative approach helping students gain an appreciation for the diverse applications of statistics and its relevance to their lives and future fields of study.

2272E ALGEBRA III	
3 days per cycle	Half Year
.50 Credit	Elective
Prerequisite	Successful completion of an ALGEBRA II course.

ALGEBRA III is designed to extend student learning in the areas of algebra. Content will include linear, polynomial, rational, exponential, and logarithmic functions, as well as their graphs. Students will deepen their knowledge of systems, matrices and determinants.

2282E TRIGONOMETRY	
3 days per cycle	Half Year
.50 Credit	Elective
Prerequisite	Successful completion of a GEOMETRY course

TRIGONOMETRY is a study of the theory and application of periodic functions related to angles and lengths of a triangle. students will expand their knowledge of the basic trigonometric functions and go beyond what they have previously learned in mathematics courses. Students will explore additional trigonometric functions and their connection to each other, both graphically and algebraically. A variety of trigonometric applications will be explored. The use of fundamental trigonometric identities, double and half angle formulas, graphs of circular functions and problems involving oblique triangles will also be covered.

2291E ECONOMIC APPLICATIONS OF MATHEMATICS 	
3 days per cycle	Half Year
.50 Credit	Elective
Prerequisite	Successful completion of a GEOMETRY course

ECONOMIC APPLICATIONS OF MATHEMATICS is designed for students who have successfully completed Algebra II. It stresses the applications of mathematical concepts related to economic principles. Throughout the course topics focus on budgets, investments, savings, loans, and mortgages.

2600E INTRODUCTION TO COMPUTER SCIENCE I 	
3 days per cycle	One-Half Year
.50 Credit	Elective

This course explores and develops computer science concepts commonly used in software development. This course will cover the basic syntax, logic, and operations of a structured programming language. In this course students will develop algorithms and applications and are fully responsible for writing, implementing, documenting, and evaluating their solutions. Students will be responsible for defining problems using prior mathematics, logic, and problem solving skills, writing pseudo code, analyzing data, testing, debugging, and modifying programs in order to solve real world problems.

2610E INTRODUCTION TO COMPUTER SCIENCE II (LCCC CIS 155) DUAL ENROLLMENT 	
3 days per cycle	One-Half Year
.50 Credit	Elective
Prerequisite	INTRODUCTION TO COMPUTER SCIENCE I with a minimum grade of B- or successful completion of AP COMPUTER SCIENCE PRINCIPLES or concurrent enrollment in AP COMPUTER SCIENCE PRINCIPLES

This course will cover the basic syntax, logic and operation of the C++ language. In this course students will create programs and be fully responsible for writing, implementing, documenting, and evaluating their solutions using the C++ programming language. Students will be responsible for defining problems, writing pseudo code and creating flowcharts. Students will test, debug and modify programs in order to solve real world problems.

2700E KEYSTONE ALGEBRA 	
3 days per cycle	Semester 1
.50 Credit	Elective

This is a semester course designed for students who have not yet achieved a score of proficient on the Algebra I Keystone Exam. The State of Pennsylvania requires passing grades on the Algebra, Biology and Literature exams OR the Project Based Assessment as a requirement for graduation. This course is where students will complete the required Project Based Assessment under the supervision of a content area certified teacher.

SCIENCE

"True science teaches us to doubt and to abstain from ignorance."
--Claude Bernard

The science curriculum consists of those courses and activities designed to meet the individual student's educational needs related to science. Emphasis is placed on the process of scientific inquiry by students so that they can discover and interpret scientific knowledge; develop desirable attitudes, interests, and appreciation related to science and scientists; and recognize that these behaviors can be applied to the solution of current and future problems in a scientific age. Opportunities are provided for students to apply methods and knowledge of science to the solution of societal problems related to science. Inquiry is stimulated through various means, using the laboratory as a focal point for learning.

Each course offered in the science curriculum includes laboratory experiences, which may involve the use of potentially dangerous chemicals and apparatus. All students will be given instruction in science laboratory safety.

3091 APPLIED BIOLOGY 	
3 days per cycle	Full Year
1.00 credit	Required

In APPLIED BIOLOGY students will explore the study of life. The following topics are addressed: Scientific Method, Scientific Tools, Metric System, Characteristics of Living Things, Chemistry of Living Things, Cell Structure and Function, Photosynthesis, Cellular Respiration, Cell Cycle, Meiosis, Genetics, DNA, RNA and Protein Synthesis, Human Heredity, Genetic Engineering, Evolution, Evolution of Populations, and Ecology & Human Impact on the Environment. Students will perform experiments that will enhance and supplement concepts studied throughout this course. Students will then apply learned concepts in lab reports and other assessments. **APPLIED BIOLOGY is a Keystone course where students are required to take the Keystone Biology exam at the end of the course.**

3092 BIOLOGY 	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisite	Earn a minimum grade of a C+ in Grade 8 SCIENCE.

In BIOLOGY students will explore the study of life. Students are expected to independently read high-level texts, take notes, and process concepts both in and out of the classroom. The following topics are addressed: Scientific Method, Scientific Tools, Metric System, Characteristics of Living Things, Chemistry of Living Things, Cell Structure and Function, Photosynthesis, Cellular Respiration, Cell Cycle, Meiosis, Genetics, DNA, RNA and Protein Synthesis, Human Heredity, Genetic Engineering, Evolution, Evolution of Populations, and Ecology & Human Impact on the Environment. Students will perform experiments that will enhance and supplement concepts studied throughout this course. Students will then have to display mastery of these concepts in lab reports and other assessments. **BIOLOGY is a Keystone course where students are required to take the Keystone Biology exam at the end of the course.**

3093 *HONORS BIOLOGY 	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisite	Earn a minimum grade of a B+ in Grade 8 SCIENCE.

In HONORS BIOLOGY students will explore the study of life. It is designed for students who have earned high levels of

achievement in math, science, and literacy. Students are expected to independently read high-level texts, take notes, and process concepts both in and out of the classroom. The following topics are addressed: Scientific Method, Scientific Tools, Metric System, Characteristics of Living Things, Chemistry of Living Things, Cell Structure and Function, Photosynthesis, Cellular Respiration, Cell Cycle, Meiosis, Genetics, DNA, RNA and Protein Synthesis, Human Heredity, Genetic Engineering, Evolution, Evolution of Populations, and Ecology & Human Impact on the Environment. Students will perform experiments that will enhance and supplement concepts studied throughout this course. Students will then have to display mastery of these concepts in lab reports and other assessments including an evening presentation at the science fair. **HONORS BIOLOGY is a Keystone course where students are required to take the Keystone Biology exam at the end of the course.**

3101 APPLIED CHEMISTRY	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisites	Successful completion of BIOLOGY course; AND Successful completion of ALGEBRA I course.

APPLIED CHEMISTRY is designed for students to explore the fundamental principles of chemistry, including the properties of matter and the changes it undergoes. Students will perform various hands-on applications of the course concepts and conduct experiments. Students will then have to apply learned concepts in lab assignments and assessments. The following topics are discussed and studied throughout the APPLIED CHEMISTRY course: states of matter, phase changes, atomic structure, bonding, chemical compounds, chemical reactions, periodic laws, and gas laws. These concepts will be applied to authentic situations and the application of chemistry will be emphasized throughout the course. Algebra will be used throughout the course. Students will engage in laboratory investigations to further develop their reasoning and problem solving skills.

3102 CHEMISTRY	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisite	Successful completion of BIOLOGY course; AND Earn a minimum grade of B- in APPLIED ALGEBRA I, a C- in ALGEBRA I or a C- in a middle school ALGEBRA I course.
Required	Scientific Calculator

In CHEMISTRY students will study the properties of matter and the changes it undergoes. The study of chemistry is essential for students considering careers not only in chemistry, but also biology, engineering, and all medically related fields. Topics addressed in this course include: states of matter, phase changes, atomic structure, bonding, chemical compounds, chemical reactions, periodic laws, gas laws, and stoichiometry. Students will engage in laboratory investigations to further develop an understanding of topics in CHEMISTRY.

3103 *HONORS CHEMISTRY	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisites	Earn a minimum grade of a B+ in BIOLOGY or a B in HONORS BIOLOGY; AND Earn a minimum grade of a B+ in ALGEBRA I or a B+ in a middle school ALGEBRA I course
Required	Scientific Calculator

HONORS CHEMISTRY offers students an intensified introduction to the discipline of chemistry, including the properties of matter and the changes it undergoes. The study of chemistry is essential for students considering careers not only in chemistry, but also biology, engineering, and all medically related fields. Students will explore topics in depth that include: states of matter, phase changes, atomic structure, bonding, chemical compounds, acids and bases, chemical reactions, periodic laws, gas laws, nomenclature, and stoichiometry. There will be emphasis placed on inter-relationships between the topics and problem solving. In the solution of problems, students will need to employ high levels of mathematical concepts and abstract reasoning skills. Students will engage in laboratory investigations to further develop an understanding of topics in this course. HONORS

CHEMISTRY is designed for students who have earned high levels of achievement in math and science. Students are expected to independently read high-level texts, take notes, and process concepts both in and out of the classroom.

3111 APPLIED PHYSICS	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisites	Successful completion of a GEOMETRY course; AND Successful completion or concurrent enrollment in an ALGEBRA II course.
Required	Scientific Calculator

APPLIED PHYSICS offers students an introduction to the laws that govern motion. This course is highly recommended for students considering careers in engineering, technology, or any science. Students will learn how the entire universe can be analyzed and categorized as Matter, Forces, and Energy. Utilizing various disciplines in math, students will discover how to interact with the universe. Students will engage in laboratory investigations as they apply these analysis techniques to the topics of velocity, acceleration, gravity, Newton's Laws of Motion, vectors, momentum, energy, waves, and optics. This course provides hands-on learning experiences where students develop an understanding of concepts through labs. The students' background in mathematics is considered in determining appropriate instructional techniques and classroom applications.

3112 PHYSICS	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisites	Earn a minimum grade of a B+ in APPLIED GEOMETRY, or a C in GEOMETRY, or successful completion of HONORS GEOMETRY or middle school GEOMETRY; AND Successful completion or concurrent enrollment in an ALGEBRA II course.
Required	Scientific Calculator

PHYSICS offers students a study of the laws that govern motion. This course is highly recommended for students considering careers in engineering, technology, or any science. Students will learn how the entire universe can be analyzed and categorized as Matter, Forces, and Energy. Utilizing various disciplines in math, students will discover how to interact with the universe. Students will engage in laboratory investigations as they apply these analysis techniques to the topics of velocity, acceleration, gravity, Newton's Laws of Motion, vectors, momentum, and energy. This course provides hands-on learning experiences where students design and implement experiments to solve challenges.

3204 *AP PHYSICS I	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisite	B in HONORS ALGEBRA II.

AP PHYSICS I is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion) work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Because of the demanding nature of this course, it should only be taken by students that are highly motivated and ready for the rigorous academic challenge of the course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense.

3210 *HONORS PHYSICS	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisites	Earn a minimum grade of an A- in GEOMETRY, a B in HONORS GEOMETRY, or a B in middle school GEOMETRY; AND Successful completion or concurrent enrollment in an ALGEBRA II course.
Required	Scientific Calculator

HONORS PHYSICS offers students an in-depth study of the laws that govern motion. This course is highly recommended for students considering careers in engineering, technology, or any science. Students will explore how the entire universe can be analyzed and categorized as Matter, Forces, and Energy. Utilizing various disciplines in math, students will discover how to interact with the universe. Students will engage in laboratory investigations as they apply these analysis techniques to the topics of velocity, acceleration, gravity, Newton's Laws of Motion, vectors, momentum, energy, heat, sound, light, electricity, magnetism and more! HONORS PHYSICS is designed for students who have earned high levels of achievement in math and science. Students are expected to independently read high-level texts, take notes, and process concepts both in and out of the classroom. This course provides hands-on learning experiences where students utilize advanced analysis techniques in laboratory experiments.

3214 *AP PHYSICS II	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	A in PHYSICS I or C in AP PHYSICS I.

AP PHYSICS II is an algebra-based, college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory, PV diagrams and probability, electrostatics, electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Because of the demanding nature of this course, it should only be taken by students who are highly motivated and ready for the rigorous academic challenge of the course. It is recommended that a student have strong skills in writing analysis, geometry, and unit conversion. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense.

3304E *AP BIOLOGY	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	Successful completion of one course in high school biology (BIOLOGY I or HONORS BIOLOGY) AND one course in high school chemistry (CHEMISTRY I or HONORS CHEMISTRY) with a minimum grade of B- in each course.

AP BIOLOGY is designed to be the equivalent of a full year college introductory biology course usually taken by biology majors during their first year. The course includes topics regularly covered in a college biology course and the four big ideas as defined by the College Board. Because of the demanding nature of this course, it should only be taken by students that are highly motivated and ready for the rigorous academic challenge of the course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense.

3354E *AP CHEMISTRY	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	CHEMISTRY I with a grade of B+ or higher or B or higher in HONORS CHEMISTRY and a grade of B or higher in ALGEBRA II, or B- or higher in HONORS ALGEBRA II.
Co-requisite	PRE-CALCULUS OR CALCULUS
Required	Scientific Calculator

AP CHEMISTRY is designed to be equivalent to a general chemistry course usually taken during the freshman year of college. The course includes topics covered in college chemistry and covers four major areas of study: structure and properties of matter, chemical reactions and their rates, thermochemistry and the equilibrium state. It is a rigorous and demanding course and as a college-level course, students will be held to high expectations and mature responsibilities just as college freshmen would be. Students should be self-motivated and able to work both independently and collaboratively to solve science-related problems. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense.

3404E *AP ENVIRONMENTAL SCIENCE	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	B or higher in BIOLOGY I, CHEMISTRY I, AND ALGEBRA I. Students will need Excel skills (graphing/charting).

The AP ENVIRONMENTAL SCIENCE course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing these problems. AP ENVIRONMENTAL SCIENCE is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense. For those planning on taking the AP test, a strong mastery of written expression is highly recommended.

3454E *AP PHYSICS C (CALCULUS-BASED)	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	A grade of B+ or higher in PHYSICS I or B or higher in AP PHYSICS I
Co-requisite	CALCULUS
Required	Scientific Calculator, Graphing Calculator recommended

The AP PHYSICS C program (calculus-based) is intended to form the first part of the college sequence, which serves as the foundation in physics for students majoring in engineering or the physical sciences. It is an intensive and analytic course with emphasis on problem solving that requires calculus. The subject matter is mechanics and electricity and magnetism, with approximately equal emphasis on these two areas. Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and ready for such work. Students are advised to consult with their parents, teachers and school counselors before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense.

3460E PHYSICS: ELECTRICITY AND MAGNETISM	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	Successful completion of a PHYSICS course.
Required	Scientific Calculator

PHYSICS: ELECTRICITY AND MAGNETISM offers students a continuation to the study of physics. This course is recommended for students considering careers in engineering, technology, or any science. In this course, students will apply the analysis techniques gained in the previous physics course to various phenomena of the universe. Utilizing Matter, Forces and Energy, students will engage in investigations of Fluid Behaviors, Thermal Dynamics, Circuits, Magnetism, Electrostatics, Inductance, Capacitance, and Optics as we study the technology of our modern world! This course provides hands-on learning experiences where students design and implement experiments to solve challenges.

3503 *HONORS ANATOMY & PHYSIOLOGY	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	Earn a minimum grade of a B in APPLIED BIOLOGY, a C in BIOLOGY, or successful completion of HONORS BIOLOGY; AND earn a minimum grade of a B in APPLIED CHEMISTRY, a C in CHEMISTRY, or successful completion of HONORS CHEMISTRY.

HONORS ANATOMY & PHYSIOLOGY is designed for students who have earned high levels of achievement in science and mathematics. Students interested in understanding human body systems in preparation for careers in health fields would benefit from this course. It will emphasize, in detail, metabolism, histology, support, movement, communication, control, and integration. In this course students will experience lecture and discussion, report writing, computer-aided instruction, handling human skeletons, and a variety of dissections, which may include various sheep organs, the earthworm, and a detailed dissection of the cat.

3510 ENVIRONMENTAL SCIENCE	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	Successful completion of a BIOLOGY course; AND Successful completion of a CHEMISTRY course.

This course examines the environment and human impact on it. Students who take ENVIRONMENTAL SCIENCE will develop an understanding of what an ecosystem is and the elements that determine the types and numbers of organisms that live there. Students will look at the atmosphere (air), the hydrosphere (water) and the lithosphere (soil) and how they sustain the biosphere (life). Students will also explore the role humans have in changing each of these spheres and the impact these changes have had on the world. The students will be asked to define different problems facing the world today. They will research the problems and propose possible solutions and potential obstacles to the implementation of these solutions. Topics may change due to current events. Students should be prepared to engage in the in-depth research of current ecological topics and design long-term projects related to these topics. Students will also create projects to improve awareness of relevant ecological issues and implement lifestyle changes related to this awareness. These activities and projects will be oriented towards collecting data, implementing action, analyzing the information and drawing conclusions that are supported by the data to create their solutions.

3602E FORENSIC SCIENCE	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	Successful completion of a BIOLOGY course AND Successful completion of a CHEMISTRY course.

FORENSIC SCIENCE will provide an introduction to criminalistics and forensics, including topics such as: fingerprints; DNA analysis; fiber and hair analysis; ballistics; document and handwriting analysis; drugs and toxicology; analysis of human (including skeletal) remains; and evidence from blood and other bodily fluids. This course will allow students to apply topics learned in biology and chemistry. It will include case studies and examination of reproduced evidence from actual crimes as well as laboratory analysis of evidence gathered at simulated crime scenes.

3652E GENETICS AND BIOTECHNOLOGY 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	Earn a minimum grade of an A- in Applied Biology, a B in Biology, or a C in Honors Biology; AND Earn a minimum grade of a B in Chemistry or a C in Honors Chemistry

GENETICS AND BIOTECHNOLOGY offers students a study of heredity and the variable characteristics that arise through gene expression, and their application to industry. In this course, students will develop a greater understanding of the following topics: The Cell Cycle and Cancer, Meiosis and Cytogenetics, Gene Transmission, Genetic Recombination and Mapping, Structure and Function of DNA/RNA, Gene Expression, Gene Regulation, Mutation and Genetic Variation, Construction and Analysis of Clones, Applications of Biotechnology, Population Genetics, Behavioral Genetics, Immunology, and Genetic Diseases.

3700E KEYSTONE BIOLOGY 	
3 days per cycle	Semester 1
.50 credit	Elective

This is a semester course designed for students who have not yet achieved a score of proficient on the Biology Keystone Exam. This exam is administered to students at the end of the year in which they take the course. For many students the Biology Exam will be administered at the end of their 9th grade year. After specialized instruction, students will be expected to retake the Biology exam in the winter or spring testing window. In addition, the State of Pennsylvania requires passing grades on the Algebra, Biology and Literature exams as a requirement for graduation.

3752E KINESIOLOGY 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisites	Successful completion of a BIOLOGY course AND Successful completion of a CHEMISTRY course.

KINESIOLOGY is the study of movement of the human body. The study of KINESIOLOGY covers a broad range of topics, with multiple fields of study falling under the kinesiology umbrella. Areas of study include: human anatomy and physiology of the musculoskeletal system and neuromuscular systems, biomechanics, biochemistry of human metabolism, and neurobiology.

3902E ZOOLOGY 	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisite	Successful completion of a BIOLOGY course.

In ZOOLOGY students explore issues dealing with ecology, evolution, comparative anatomy, and biotechnology. In this course students will apply concepts learned in Biology and it is designed for students who are interested in broadening their knowledge of the biological sciences. Students will have the opportunity to enhance laboratory and research skills through the use of dissections, projects, and presentations in both group or individual explorations.

SOCIAL STUDIES

"Liberty without learning is always in peril and learning without liberty is always in vain."
--John Fitzgerald Kennedy

The social studies program is based upon the assumption that a democratic society depends upon citizens who make rational decisions consistent with basic democratic values and in the context of rapid cultural change.

4091 APPLIED CIVICS & GOVERNMENT 	
3 days per cycle	Full Year
1.00 credit	Required

This course examines the principles and documents that provide the foundation for both our federal government as well as the state government of Pennsylvania. Students will acquire an understanding of how the various branches of government operate and the role of the United States in addressing global issues. Special emphasis is placed on the practical aspects of the rights and responsibilities that citizens in our country possess and the many ways that individuals can play a role in government at the federal, state and local levels.

4092 CIVICS & GOVERNMENT 	
3 days per cycle	Full Year
1.00 credit	Required

This course examines the principles and documents that provide the foundation for both our federal government as well as the state government of Pennsylvania. Students will acquire an understanding of how the various branches of government operate and the role of the United States in addressing global issues. The course will also place an emphasis on the rights and responsibilities that citizens in our country possess and the many ways that individuals can play a role in government at the federal, state and local levels.

4093 *HONORS CIVICS & GOVERNMENT 	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisite	Minimum grade of A in 8th Grade US History.

This course examines the principles and documents that provide the foundation for our federal system of government. This course intends to foster an understanding of our civic institutions and highlights the multitude of ways that individuals can participate in shaping our democracy. This course is also designed to expose students to research and research-based writing.

4101 APPLIED UNITED STATES HISTORY: 1850 TO THE PRESENT 	
3 days per cycle	Full Year
1.00 credit	Required

10TH GRADE UNITED STATES HISTORY explores United States' history and culture from the onset of the Civil War through the dawn of the 21st Century. Special emphasis is placed on the practical aspects of the major political, cultural, economic and social themes and events that have shaped our nation's development during this time period.

4102 UNITED STATES HISTORY: 1850 TO THE PRESENT	
3 days per cycle	Full Year
1.00 credit	Required

10th GRADE UNITED STATES HISTORY explores United States history and culture from the onset of the Civil War through the dawn of the 21st Century. This course examines the major political, cultural, economic and social themes and events that have shaped our nation's development during this time period.

4104 *AP UNITED STATES HISTORY	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisites	A minimum grade of B- in HONORS CIVICS & GOVERNMENT OR B+ in CIVICS & GOVERNMENT OR Passing of previous AP HISTORY course.

The ADVANCED PLACEMENT course in UNITED STATES HISTORY is intended for qualified students who wish to complete studies equivalent to a college introductory course. The course covers the economic, cultural, intellectual, social, and political themes and events that shaped U.S. history from the colonial period in the 1600's to the late 20th Century. The course will focus on developing the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and committed to academic work. Students are advised to consult with their parents, teachers and school counselors before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense. Tenth grade students may elect this course in lieu of US CULTURES II. This is a weighted class.
Summer work is required for this course.

4111 APPLIED WORLD CULTURES	
3 days per cycle	Full Year
1.00 credit	Required

This course focuses on the events and themes that have shaped the cultures of Europe, Asia, Africa and Latin America from 1500 to the present. Special emphasis is placed on the practical aspects of examining and analyzing the political, economic and cultural forces that have led to the development of the modern world outside of the United States.

4112 WORLD CULTURES	
3 days per cycle	Full Year
1.00 credit	Required

This course focuses on the events and themes that have shaped the cultures of Europe, Asia, Africa and Latin America from 1500 to the present. Students will examine and analyze the political, economic and cultural forces that have led to the development of the modern world outside of the United States.

4114 *AP WORLD HISTORY	
3 days per cycle	Full Year
1.00 credit	Required
Prerequisite	A minimum grade of B+ in US HISTORY: 1850 TO THE PRESENT or C+ in AP US HISTORY.

AP WORLD HISTORY is a rigorous, college-level course designed to explore human history from 1200 C.E. to the present. The

course will be broken up into various time periods, with a focus on examining each time period through five themes central to the development of the modern world. This course devotes considerable time to the critical evaluation of primary and secondary sources, analysis of historiography and inquiry into global connections that have shaped our world. A special emphasis will be given to preparation for the AP Exam, including historical writing through essays and document based questions (DBQ) as well as objective evaluations and projects. Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and ready for such work. Students are advised to consult with their parents, teachers and school counselors before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense. Students may elect this course in lieu of WORLD CULTURES. This is a weighted class.
Summer work is required for this course.

4204E *AP GOVERNMENT & POLITICS 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	Minimum grade of B+ in WORLD CULTURES or C+ in AP WORLD HISTORY.

The AP US GOVERNMENT AND POLITICS course is designed to introduce the essential concepts at the core of American government through exploring the fundamentals of American political thought and culture. Students will also develop the analytical and evaluative skills necessary to interpret and question the various institutions, groups, beliefs and ideas that make up the US political landscape. Because of the demanding nature of this course, it should only be attempted by students that are highly motivated and ready for such work. Students are advised to consult with their parents, teachers and school counselor before selecting any AP course. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense. This is a weighted class. **Summer work is required for this course.**

4304E *AP PSYCHOLOGY 	
3 days per cycle	Full Year - Grades 11-12
1.00 credit	Elective
Prerequisite	Overall Cumulative GPA of 3.0 is required to take this course.

The AP PSYCHOLOGY course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. This course is open only to juniors and seniors. Students will have the option of taking the AP exam for college credit at the end of the course at their own expense. This is a weighted class.
Summer work is required for this course.

4412E CONTEMPORARY AMERICAN ISSUES 	
3 days per cycle	One-Half Year Grades 11-12
.50 credit	Elective

CONTEMPORARY AMERICAN ISSUES is a semester course that explores how issues such as Race, Poverty, Healthcare and Crime are being addressed in contemporary American society. Students will examine the current challenges these issues present to the United States along with analyzing the government policies that are in place to manage them. The goal of the seminar structure will be to facilitate student-centered investigation, discussion and problem solving in the 21st Century.

4502E ECONOMICS 	
3 days per cycle	One-Half Year Grades 11-12
.50 credit	Elective

ECONOMICS is a semester course, intended to equip students with the basic tools necessary to understand the modern economy and how it affects them. It investigates the decisions people and communities make each day about the use of their resources using real world examples. This course examines the basic theory of capitalism, real world consumer economics, a

comparison of global systems, globalization and personal economics. We will analyze national prosperity and economic growth, and government involvement in our economy.

4512E GLOBAL ISSUES 	
3 days per cycle	One-Half Year Grades 11-12
.50 credit	Elective

GLOBAL ISSUES is a semester course that explores how the International Community addresses current issues such as Education, Immigration, Terrorism and Genocide. Students will examine the current challenges these issues present to the United States and other nations along with analyzing the government policies that are in place to manage them, and how as a high school student they are affected. The goal of the seminar structure will be to facilitate student-centered investigation, discussion and problem solving in the 21st Century.

4602E PSYCHOLOGY 	
3 days per cycle	One-Half Year Grades 11-12
.50 credit	Elective

PSYCHOLOGY is a semester course that provides students with an opportunity to understand the behavior of humans as individuals. This is a half-year course which includes such topics as how we learn and how we can improve learning, intelligence and its measurement, personality and popularity, heredity versus environment, and mental health. An emphasis is placed upon observation, class participation, independent research and topical discussion with guidance.

4702E SOCIOLOGY 	
3 days per cycle	One-Half Year Grades 11-12
.50 credit	Elective

SOCIOLOGY is a semester course that studies human society and social behavior. This course deals with the social atmosphere that helps to make us who we are and how we behave. The key component of this course is to study who we are and the society that influences our behavior, with an emphasis placed on how the socialization process has been affected by various technologies over the last 100 years and how the continuing evolution of technology will impact our socialization in the future.

WORLD LANGUAGES

"Those who know nothing of other languages know nothing of their own."
--Johann Wolfgang von Goethe

A world language can prove to be a valuable asset to a career as well as fulfill entrance requirements for higher education. Language learning provides an interesting change of pace which develops higher level reasoning skills, increased vocabulary and improved understanding of one's native language.

5012 CHINESE I 	
3 days per cycle	Full Year
1.00 credit	Elective

CHINESEI I students will develop language skills in listening comprehension, speaking, reading and writing in the target language. Language is taught through thematic units that integrate cultural awareness. This course is appropriate for students pursuing a new language or beginning a language.

5022 CHINESE II 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	CHINESE I minimum grade of C- OR 70% accuracy on a proficiency exam and teacher approval

CHINESE II is appropriate for those students who completed a CHINESE I course. Students will continue to develop the four basic language skills of listening comprehension, speaking, reading, and writing in thematic units, while integrating cultural awareness.

5032 CHINESE III 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	CHINESE II minimum grade of C-

CHINESE III is an extension of the development of listening comprehension, speaking, reading and writing skills. Grammar and vocabulary activities are aimed at building comprehension and communication skills. Classes are conducted primarily in Chinese. Increased emphasis will be given to reading.

5042 CHINESE IV 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	CHINESE III minimum grade of C-

CHINESE IV, students will continue to apply the basic skills developed in previous levels. Classes are conducted primarily in Chinese. Course content includes grammar, oral communicative activities and writing assignments around thematic units. Additional emphasis is placed on reading and culture.

5052 CHINESE V 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	CHINESE IV minimum grade of B- or teacher recommendation

CHINESE V, students will continue to apply the skills developed in previous levels. Course content includes a grammar review, oral and written communication activities, readings of mini novels and short stories with an emphasis on Chinese culture. Classes will be taught in Chinese, with emphasis on content and accuracy in oral and written communication.

5112 FRENCH I 	
3 days per cycle	Full Year
1.00 credit	Elective

FRENCH I students will develop language skills in listening comprehension, speaking, reading and writing in the target language. Language is taught through thematic units that integrate cultural awareness. This course is appropriate for students pursuing a new language or beginning a language.

5122 FRENCH II 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	FRENCH I with a minimum grade of C- or 70% accuracy on a proficiency exam and teacher approval.

French II is appropriate for those students who completed the FRENCH I course. Students will continue to develop the four basic language skills of listening comprehension, speaking, reading and writing in units with themes on aspects of life in French speaking countries.

5132 FRENCH III 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	FRENCH II with a required minimum grade of C-.

FRENCH III provides practice and refinement of listening, speaking, reading and writing skills. Grammar and vocabulary activities are aimed at building comprehension and communication skills. Classes are conducted primarily in French. Increased emphasis will be given to reading and writing.

5142 FRENCH IV 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	FRENCH III with a required minimum grade of C-.

FRENCH IV, students will practice and refine basic skills in a variety of oral communication-oriented activities such as taped selections from native speakers and films in French. French culture will be examined in depth. Classes are conducted primarily in French. Course content includes grammar review, oral communication and reading of short stories and literary excerpts.

5152 FRENCH V 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	FRENCH IV with a required minimum grade of B- or teacher recommendation.

FRENCH V, students will continue to apply the skills developed in previous levels. Course content includes a grammar review, oral and written communication activities, readings of contemporary drama and short stories with an emphasis on French culture. Classes will be taught in French, with emphasis on content and accuracy in oral and written communication.

5212 SPANISH I 	
3 days per cycle	Full Year
1.00 credit	Elective

SPANISH I students will develop language skills in listening comprehension, speaking, reading and writing in the target language. Language is taught through thematic units that integrate cultural awareness. This course is appropriate for students pursuing a new language or beginning a language.

5222 SPANISH II 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	SPANISH I with a required minimum grade of C- or 70% accuracy on a proficiency exam and teacher approved.

SPANISH II is appropriate for those students who completed a SPANISH I course. Students will continue to develop the four basic language skills of listening comprehension, speaking, reading and writing in units with themes on aspects of life in Spanish speaking countries.

5232 SPANISH III 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	SPANISH II with a required minimum grade of C-.

SPANISH III is an extension of the development of listening comprehension, speaking, reading and writing skills. Grammar and vocabulary activities are aimed at building comprehension and communication skills. Classes are conducted primarily in Spanish. Increased emphasis will be given to reading and writing.

5242 SPANISH IV 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	SPANISH III with a required minimum grade of C-.

SPANISH IV, students will continue to apply the basic skills developed in previous levels. Classes are conducted primarily in Spanish. Course content includes grammar, oral communicative activities and writing assignments around thematic units. Additional emphasis is placed on reading and culture of Mexico and Spain through mini-novels.

5252 SPANISH V	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	SPANISH IV with a required minimum grade of B- or teacher recommendation.

SPANISH V, students will continue to apply the skills developed in previous levels. Course content includes a grammar review, oral and written communication activities, readings of contemporary drama and short stories with an emphasis on Spanish and Latin American culture. Classes will be taught in Spanish, with emphasis on content and accuracy in oral and written communication. This course is the alternative to AP SPANISH.

5262 SPANISH CULTURE AND COMMUNICATION	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	Spanish immersion students and native speakers

This course presents an overview of the fundamentals of Spanish grammar and the reading of Hispanic literature. Students have the opportunity to practice and improve their language skills by reading and writing compositions and essays in Spanish. This course is recommended for immersion students, near-native speakers, and native speakers of Spanish.

5263 *HONORS SPANISH COMMUNICATION AND LITERATURE	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	SPANISH CULTURE & COMMUNICATION with a minimum grade of C-.

This course is designed with the rigor and relevance for students wishing to take the Advanced Spanish Placement course the following year or as a prerequisite for SPANISH V. It presents a comprehensive overview of advanced Spanish grammar where the focus is on accuracy of written and oral communication. Students are expected to speak entirely in Spanish. Writing assignments vary from short letters to persuasive essays. Students will also read literature and current event articles from a variety of Hispanic authors and are expected to discuss and critique all the material in the Spanish language. This course is recommended for Immersion students, near-native speakers, and native speakers of Spanish. The purpose of the class is to prepare students for the AP SPANISH course. Due to the demanding nature of this course, students who are highly motivated and ready for the rigorous academic challenge should take the course. **Summer work is required for this course.**

5274 *AP SPANISH LANGUAGE & CULTURE	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	SPANISH V with a recommended minimum grade of C or HONORS SPANISH COMMUNICATION & LITERATURE with a minimum grade of C or SPANISH IV students with a minimum grade of A and teacher recommendation.

AP SPANISH LANGUAGE & CULTURE is intended for students who wish to develop proficiency and integrate their language skills using authentic materials and sources. Students who enroll should already have an advanced knowledge of the language and cultures of Spanish-speaking peoples and should have attained a reasonable proficiency in using the language. Although these qualifications may be attained in a variety of ways, it is assumed that most students will be in the final stages of their secondary school training and will have had appropriate course work in the language. The four skills – listening, speaking, reading and writing – are carefully integrated throughout the course. Grammar is presented as a tool for accurate communication. The AP SPANISH LANGUAGE & CULTURE course is designed to be comparable to advanced level (fifth- and sixth – semester) college/university Spanish language courses. Students will have the option of taking the AP exam for college credit at the end of the course and at their own expense. **Summer work is required for this course.**

5284 *AP SPANISH LITERATURE & CULTURE 	
3 days per cycle	Full Year
1.00 credit	Elective
Prerequisite	AP SPANISH LANGUAGE & CULTURE with a minimum grade of B- or a teacher recommendation

The AP SPANISH LITERATURE & CULTURE course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American and Hispanic literature of the United States. Students continue to develop proficiencies across the full range of the modes of communication (interpersonal, presentational, and interpretive), honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, and literary criticism). This class will be conducted entirely in Spanish appropriate to this level and covers the entire official AP Spanish Literature and Culture reading list. Students will have the option of taking the AP exam for college credit at the end of the course and at their own expense. **Summer work is required for this course.**

HEALTH, PHYSICAL EDUCATION, DRIVER EDUCATION

6010 DRIVER EDUCATION-THEORY-CLASSROOM 	
3 days per cycle	One-Half Year
.50 credit	Required

The mission of the DRIVER EDUCATION program is to provide our students with the opportunity to develop the knowledge, attitudes, and skills (visual, mental and physical) necessary to become a safe and responsible driver. Hopefully by doing this, the possibility of students becoming involved in a motor vehicle crash will be reduced.
NOTE: Students who will be sixteen prior to the beginning of their sophomore year are permitted to take the classroom (theory) part of Driver Education as a freshman. The purpose of this is to encourage students to take "On The Road" while they have a permit.

DRIVER EDUCATION - "ON THE ROAD" Available Option

"On The Road" consists of a minimum of six hours of actual driving and is available to those students who successfully complete at least one half of the classroom phase of DRIVER EDUCATION. It is offered before/during/after school, on Saturdays, and during the summer. The first priority is given to permit drivers. The concepts, theories, and knowledge taught in the classroom are put into practice during "On The Road." In addition to the basic physical skills required to drive, "On The Road" will focus on the development of visual skills, decision making/problem solving skills, night driving, and parent involvement.
For this program to be a success it is essential for parents to take an active role in the learning process. To a large extent, the education students receive at school and at home will determine the success they experience as a driver.
Upon completion of the classroom and "On The Road", students will have the opportunity to take the Pennsylvania driver's license exam at Southern Lehigh.

The Southern Lehigh High School On the Road Driving Program is offered to all interested students following the successful completion of the Driver Education classroom theory course. The Pennsylvania State Standard requires that the On the Road Driving Program consist of a minimum of six hours of behind the wheel instruction. The Southern Lehigh On the Road Driving Program is completely elective and registration for the program is the responsibility of interested students. All lessons are offered during the class periods that the students identify on their On The Road Registration form. Students will complete five hours of driving during the school day and one hour after school when it is dark. Outlined below is a summary of the process that an individual would follow during the On the Road Driving program.

1. Complete the Southern Lehigh High School Driver Education Theory course.
2. Pass the Pennsylvania State Permit Exam at the PA Department of Motor Vehicles.
3. Complete the SLHS On the Road Driving Registration Form (Found in the Main Office).
4. Return the completed On the Road Driving Registration Form to either a Driver Education Teacher (Mr. Schrader, Mr. Ditchcreek, or Mr Green) or the Main Office.
5. Each participant will then regularly check the On the Road Driving lesson dates scheduled by the instructors.
6. Each student will have a document shared with them titled "Student Lesson Evaluation" that will provide updates specific to individual driving performance and future scheduled lesson dates.
7. Each student must schedule a night lesson to finalize the requirements of the program.
8. Schedule and pass the Pennsylvania Drivers License Exam.

LICENSE TEST REMINDER
Each student must have the **FOLLOWING** with them in order to complete the Pennsylvania Drivers License Exam.
1. The students Pennsylvania State Drivers Permit.
2. Signed DL-180C Parent/guardian Certification Form (parent can either sign in front of instructor or have it notarized ahead of time). Parent/Guardian must have their ID.
3. Pennsylvania State Driving Log totaling AT LEAST 65 hours of driving experience.

6150 HEALTH 9 	
3 days per cycle	One-Half Year
.50 credit	Required

The ninth grade HEALTH curriculum has been developed to assist students with their emerging health and identity as a young adult. To accomplish this, the class will address such topics as: healthy relationships, abstinence, consequences associated with risky behaviors, personal responsibility, mental and emotional health, physical health, drug awareness and refusal skills, environmental health and advocacy, basic first aid and life saving techniques, nutrition, and body systems.

6200 HEALTH 11-12 – SPORTS MEDICINE 	
3 days per cycle	One-Half Year
.50 credit	Elective

This course is offered to any junior or senior that is interested in pursuing a health career. This course is designed to focus on the core areas associated with sports nutrition, supplements, sports conditioning, injury prevention, health careers and health/fitness assessments. The course will include Kinesiology (Human Movement) and theories of Exercise Physiology (how the body creates and uses chemical components and energy). The course will constantly change to adapt to current trends, technological advancements and the ever-changing field of medicine.

6250 HEALTH 11-12 – WELLNESS 	
3 days per cycle	One-Half Year
.50 credit	Required

This is a required general health course offered to any junior or senior. The course is designed to enhance student knowledge and skills to live a healthy lifestyle while developing an individualized action plan and habits that promotes lifelong wellness. Content focuses on consumer health, stress management, nutrition fads, addiction, sex education, personality development, mental health awareness, and structures and functions of the brain.

6250C HEALTH 11-12 – WELLNESS – ONLINE 	
3 days per cycle	One-Half Year
.50 credit	Required

This is a required general health online course offered to any junior or senior. Students taking this course will not be assigned to a block within their schedule. However, students can sign up for a Spartan period to meet with the instructor and get help where needed. The course uses Canvas learning management system and is developed to enhance student knowledge and skills to live a healthy lifestyle while developing an individualized action plan and habits that promotes lifelong wellness. Content focuses on consumer health, stress management, nutrition fads, addiction, sex education, personality development, mental health awareness, and structures and functions of the brain.

6300 INDIVIDUAL & TEAM SPORTS – GRADES 9-10 	
3 days per cycle	One-Half Year
.50 credit	Required

This course is offered to any student interested in an intense, competitive physical education class. The curriculum is designed as a high intensity, competitive class that focuses on team and individual sports with an emphasis on skill development and playing strategies.

6310 INDIVIDUAL & TEAM SPORTS – GRADES 11-12 	
3 days per cycle	One-Half Year
.50 credit	Required

This course is offered to any student interested in an intense, competitive physical education class. The curriculum is designed as a high intensity, competitive class that focuses on team and individual sports with an emphasis on skill development and playing strategies.

6400 PERSONAL FITNESS – GRADES 9-12 	
3 days per cycle	One-Half Year
.50 credit	Required

This course is offered to any student interested in improving/maintaining their physical fitness. The curriculum focuses on personal fitness and strength training through student centered fitness activities. The goal of the class is to improve cardiovascular endurance and muscular strength through lifetime fitness activities.

BUSINESS COMPUTER INFORMATION TECHNOLOGY DEPARTMENT

Business concepts are interwoven in every aspect of life. No matter your field of expertise, your family makeup or your goals in life, you are affected by business concepts. Everything including marketing and promotion, accounting and finance, business law and computer skills affects our everyday lives, both personal and professional. A solid foundation of business skills prepares students for life and careers in the Business, Finance, and Law pathways. Learn more about the exciting and interactive courses offered by the Business Computer Information Technology Department.

7000E ACCOUNTING I	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

ACCOUNTING I is strongly recommended for students who intend to pursue a career in business, but is also applicable for all students. Students learn basic accounting procedures for a service business organized as a sole proprietorship. They will apply automated (computer) accounting methods while maintaining financial records for real-world businesses through simulation projects.

7010E ACCOUNTING II (OFFERED IN THE SPRING OF AN ODD GRADUATION YEAR.)	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective
Prerequisite	ACCOUNTING I

This course is an elective course for any student who has successfully completed ACCOUNTING I. Concepts of inventory, journalizing entries, notes receivable, accounting for uncollectible amounts, and preparing financial statements for a merchandising business organized as a partnership will be covered. Automated accounting procedures will be explored in this course through real-world business simulation projects.

7040E BUSINESS CONCEPTS (OFFERED IN THE SPRING OF AN EVEN GRADUATION YEAR.)	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective
Prerequisite	INTRODUCTION TO BUSINESS

This course is an elective course for any student who has successfully completed INTRO TO BUSINESS. Students will explore and learn about the role of entrepreneurs in the U.S. economy through current events projects, classroom activities and research. In addition, students will design a basic business plan incorporating marketing, financing, inventory or personnel management and accounting systems. Students will be involved in special projects that may include Spartan apparel or other items for sale. Guest speakers from the business community will be invited to make presentations to supplement the classroom text. This course is appropriate for all students who are planning to pursue a career in business or business administration.

7080E BUSINESS LAW	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

BUSINESS LAW is a half year course designed to make students fully aware of their rights and responsibilities in contract law and to provide them with a basic working knowledge and understanding of the legal principles and terminology that affect their lives as students, consumers, employees and citizens.

7100 CAREERS AND TECHNOLOGY APPLICATIONS	
3 days per cycle	One-Half Year Grade 10
.50 credit	Required Sophomore Year

This course is a graduation requirement for all tenth grade students not attending LCTI. Students learn software applications while creating and producing various business and career-related documents and products. Participation in cyber safety activities and digital citizenship lessons will develop skills and awareness of responsible behavior for participants in the world's global network. Communication skills are practiced through group and individual project demonstrations and presentations. PA Career and Work Education standards and technology concepts are incorporated throughout the course. Students create an electronic portfolio and will complete the graduation project throughout this course.

7140E FINANCIAL LITERACY	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

College bound or career oriented students will find this course helpful in controlling their own finances both now and in the future. Topics like debit cards, credit cards, credit reporting agencies, calculating costs for college, personal budgeting, banking, buying a car, taxes, insurance and investments will be discussed. Business ethics, leadership skills, financial policy, stock market and current economic and financial events will be incorporated throughout the course.

7180E INTRODUCTION TO BUSINESS	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

Students who would benefit from this course are those who intend to pursue a career in the field of business. Topics to be covered include the job market, budgeting, banking, credit, and insurance. In addition, emphasis is placed on discussing the business world from the perspective of the consumer. Guest speakers from the business community will be invited to make presentations to supplement the class text.

7220E MARKETING	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

Students learn the basic components and functions of a marketing plan and how they apply to the cyber world and traditional business settings. **Emphasis is placed on the marketing of sports and entertainment** industries, which rank among the top of the list of largest exports from the United States to the rest of the world. Topics including marketing strategies, development of a marketing plan, impacts on society, promotion and advertising, pricing, product/service management, distribution, selling, and careers in marketing will be explored through traditional text, simulations, videos and Internet exploration.

7260E MICROSOFT SKILLS FOR COLLEGE & CAREER	
3 days per cycle	Grades 9-12
.50 credit	Elective

Microsoft Office is the basic toolkit used in a wide variety of professional settings in most career pathways. Students will benefit from a more thorough and focused approach to this workplace suite of tools. Through this course, students will be able to master the nationally standardized skills needed to earn official Microsoft Office Certifications. Beginning with basics of Word, Excel, PowerPoint, Access, and Outlook, students will practice building the skills needed to sit for certification at a local testing center. An advanced program, Microsoft's office specialist Expert (MOS Expert), requiring the passing of 5 exams, one from

each content program, is also available. Although encouraged, students in this course are not required to sit for certification in order to complete the course.

7270E WEB PAGE DESIGN I 	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

This course is designed for those students who are interested in learning skills to develop web pages using HTML. Students will learn about the origins of the Internet and the World Wide Web, as well as planning, designing, producing, and maintaining a professional looking website using a series of tutorials. Students will search for various types of web sites and analyze their structure and content. Design elements will include photos, clip art, and navigation practiced through mini-projects throughout the course.

7280E WEB PAGE DESIGN II 	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective
Prerequisite	WEB PAGE DESIGN I

This course is designed for those students who are interested in extending their web page design skills beyond those successfully completed in WEB PAGE DESIGN I. Dreamweaver will be the focus of the format used to create web pages. Students will create a professional caliber web site using Dreamweaver tutorials adding elements such as sound, graphics, navigation, hyperlinks and more. Students will also explore various free online websites dedicated to assisting users in creating their own web sites without having to understand HTML or Dreamweaver. Skills will be practiced through mini-projects throughout the course.

FAMILY AND CONSUMER SCIENCES

Family and Consumer Sciences prepare students for life and careers after high school. These classes focus on providing students with simulated experiences and real world skills necessary for adulthood.

7300E CONCEPTS IN CLOTHING 	
3 days per cycle	One-Half Year Grades 10-12
.50 credit	Elective

CLOTHING CONCEPTS will help you explore your own personal style by creating projects that reflect your individual creativity. This course explores the elements of design and how they relate to creating beautiful clothing items. We will research waste in the fashion industry and make a dress entirely of recycled materials. We will also work through the process of creating two sewing projects. All materials for the two sewing projects must be provided by the student.

7330E FAMILY AND CONSUMER SCIENCES 	
3 days per cycle	Full Year Grades 9-12
1.00 credit	Elective

FAMILY AND CONSUMER SCIENCES provides a sample of each course we offer in the Family and Consumer Sciences Department at SLHS. This introductory course focuses on the safe handling and preparation of foods, while exploring cake decorating, cheese making, and bread making, among other labs. We also explore concepts of budgeting, interpersonal relationships, and basic sewing skills. This course will help you decide which FCS courses you would like to continue with during your time in high school and help you identify potential future careers in this exciting and ever-changing field.

7350E FAMILY LIVING 	
3 days per cycle	One-Half Year Grades 10-12
.50 credit	Elective

FAMILY LIVING explores all aspects of life: personality development, lifestyle choices, dating, family dynamics, marriage, handling major crisis. Individuals have more choices than they might consider in relationships and this course will present a fresh look at life in today's changing society. Topics will relate to the modern day and how family relationships have changed from those of the past. A mock wedding will allow students to experience a wedding ceremony and in class, students will plan a wedding of their own. Hands on activities, class discussions, and game based learning makes the class engaging and different each day.

7370E HOUSING AND INTERIOR ENVIRONMENTS 	
3 days per cycle	One-Half Year Grades 10-12
.50 credit	Elective

HOUSING AND INTERIOR ENVIRONMENTS is a basic overview of today's housing and what is available in our world. Students will be able to study exterior and interior housing elements and design basic floor plans. Once in the interior section, furniture arrangement, color theory, design elements and principles, as well as room layout will all be studied. Students will have the opportunity to design their own rooms, as well as examine exterior features they may want in a home. Lastly, the importance of green architecture and housing around the world will be investigated to get a better sense of how others are living globally in today's society. HOUSING AND INTERIOR ENVIRONMENT is perfect for anyone interested in fields such as architecture, interior design, construction, or many others in the industry.

7390E INDEPENDENT LIVING	
3 days per cycle	One-Half Year Grades 10-12
.50 credit	Elective

The focus of INDEPENDENT LIVING is to pinpoint the needs of students as they prepare for adult responsibilities and lifestyles after high school. Effective independent living and survival skills, along with skills such as leadership, communication, job skills, mindfulness, meditation, individuality, and stress management are taught, among others. This comprehensive course teaches all aspects of practical living from finding and furnishing a place to live, planning a trip, personal development, food shopping, to money management. INDEPENDENT LIVING will prepare students for an independent lifestyle, as well as, preparing them for wherever life may take them in their future endeavors.

7400E MULTICULTURAL FOODS	
3 days per cycle	One-Half Year Grades 10-12
.50 credit	Elective

In MULTICULTURAL FOODS, you will cook meals from all around the world. This course is project based and very self-directed. Most of the recipes you will cook in this class will be chosen by YOU. The highlight of this course is the "Restaurant Project" where you will create meals from various countries and sell them from your very own online restaurant! Do not be afraid to take this course if you are new to cooking. We will develop your skills throughout the semester and make you into a confident home chef.

7430E NUTRITION	
3 days per cycle	One-Half Year Grades 10-12
.50 credit	Elective

We are in an era of national awareness about the importance of food and nutrition in relationship to our health. NUTRITION plays a vital role in the health and well-being of our society. This course will teach the importance of sound nutrition and its correlation to energy level, weight gain, poor mental health, and chronic diseases. Students will investigate local food options, sugar consumption in America, modern trends in Nutrition, food diets, and nutritional principals throughout this course work intensive class. Labs will enable you to prepare nutritious snacks, local foods, low sugar recipes, and healthy meals. Instruction in kitchen safety and sanitation is included, as well as basic food preparation skills. NUTRITION will stimulate you to choose a lifestyle of making healthy choices each and every day.

7440E CHILD DEVELOPMENT	
3 days per cycle	One-Half Year Grades 10-12
.50 credit	Elective

Are you interested in pursuing a career working with children? Are you hoping to earn extra money babysitting in your free time? This course covers the development of children from conception to preschool age, and will show you what is involved in their care. Emphasis is also placed on effective behavior management techniques. Students will have the opportunity to observe and participate with children during this course.

7445E CAREERS IN FOOD SERVICE	
3 days per cycle	One-Half Year Grades 11-12
.50 credit	Elective
Prerequisite	MULTICULTURAL FOODS

This course will build upon the concepts learned in MULTICULTURAL FOODS. You will continue to explore and develop your culinary skills while experimenting with various careers in the food industry. Each unit in this course will be a simulation of a potential career related to food. Some units will include; Careers in Catering, Lifestyle/Food Careers on the Internet, Becoming a Pastry Chef/Careers in Baking, Food Trucks. Etc. If you liked all of the cooking that occurred in MULTICULTURAL FOODS, you will LOVE this class.

GIFTED SEMINAR

Gifted Seminar is a half-year elective open to students identified as gifted learners through the GIEP procedure. Gifted students may take one Gifted Seminar course for each of their 4 years in high school. The courses: IA & IB, IIA & IIB, IIA & IIIB, and IVA & IVB, do not need to be taken in order. These course focus on reflection, analysis, and action. Students will work on 21st century skills such as perspective taking and interpersonal development. Course work will be influenced by student interest and driven by inquiry, discussion, and problem solving.

7500E GIFTED SEMINAR IA – Global Studies 	
3 days per cycle	One-Half Year
.50 credit	Elective
Prerequisite	Gifted Students Only

The emphasis of this course is developing a global perspective on current issues. Students will view contemporary issues from the diverse perspective of people from around the world.

7510E GIFTED SEMINAR IB - Local Activism 	
3 days per cycle	One-Half Year
.50 credit	Elective
Prerequisite	Gifted Students Only

The emphasis of this course is for students to develop an idea, plan, and act to make a local impact. Students will develop 21st century skills as they work to address a problem they identify as consequential. They will develop a sense of efficacy as they see their idea to completion.

7520E GIFTED SEMINAR IIA – Contemporary Social Issues 	
3 days per cycle	One-Half Year
.50 credit	Elective
Prerequisite	Gifted Students Only

The emphasis of this course is to explore contemporary issues that challenge students' understandings of the world around them. Students will evaluate current issues, consider various points of view, and cultivate an appreciation for fairly addressing social complexities.

7530E GIFTED SEMINAR IIB – Media in Society 	
3 days per cycle	One-Half Year
.50 credit	Elective
Prerequisite	Gifted Students Only

The emphasis of this course is to examine the role of media on our world today. Students will analyze various media in order to evaluate the impact of media on one's personal identity and on our collective identity as a society.

7540E GIFTED SEMINAR IIIA – Philosophy 	
3 days per cycle	One-Half Year
.50 credit	Elective
Prerequisite	Gifted Students Only

The emphasis of this course is to appreciate the philosophical foundations of many of our current beliefs and institutions. Students will read various philosophical perspectives, reflect on their own philosophical beliefs, and discuss the merits and implications of philosophical thinking.

7550E GIFTED SEMINAR IIIB – Cultural Experiments 	
3 days per cycle	One-Half Year
.50 credit	Elective
Prerequisite	Gifted Students Only

The emphasis of this course is to develop an understanding of how a specific culture is established and maintained over a given period of time. Students will analyze how history, values, physical environment, and institutional norms affect the development of a culture.

7560E GIFTED SEMINAR IVA – Leadership 	
3 days per cycle	One-Half Year
.50 credit	Elective
Prerequisite	Gifted Students Only

The emphasis of this course is to develop leadership characteristics through creative problem solving of real world dilemmas. Students will examine their own leadership traits and build their personal capacity for leadership through various experiences throughout the semester.

7570E GIFTED SEMINAR IVB –Fiction vs. Nonfiction 	
3 days per cycle	One-Half Year
.50 credit	Elective
Prerequisite	Gifted Students Only

The emphasis of this course is to compare and contrast the impact of fiction and nonfiction on a person's beliefs and understanding. Students will evaluate the efficacy of facts and the arts and analyze how both impact how people think and feel about similar issues.

MUSIC

The music electives are designed to offer a wide variety of experiences to students. The electives are structured with the assumption that a cross-section of students whose instrumental and/or vocal abilities range from beginner to extremely talented will comprise the enrollment in these courses. Read course descriptions carefully. Students desiring further assistance in making course selections in music should talk with the music faculty.

7604E *AP MUSIC THEORY  	
3 days per cycle	Full Year Grades 10-12
1.00 credit	Elective
Prerequisite	B+ or better in MUSIC THEORY or permission of instructor.

This is a course for the college-bound music major, designed to prepare the student in music theory on an advanced level. It will prepare the student for the AP MUSIC THEORY examination. Successful achievement in this examination can give the student advanced placement in required music theory courses upon entering college. Students will have the option of taking the AP exam for college credit at the end of the course and at their own expense.

*****The music theory courses are offered in alternating years. If the graduation year is an odd numbered year, then AP MUSIC THEORY is taught. If the graduation year is an even numbered year then MUSIC THEORY is taught.*****

7610E BAND 	
3 days per cycle	Full Year Grades 9-12
1.00 credit	Elective
Prerequisite	BAND is an elective, open to students in grades 9-12 who have had private or class instruction on a woodwind, brass, or percussion instrument. Interested students are requested to contact the director before the course selection process is completed.
Requirement	BAND rehearsals commence prior to the start of the school year. All students are expected to participate in all performances; this is a course requirement.

High school BAND is a course designed to strengthen existing playing/reading/aural skills and to develop greater technique and musicality. Band is both a concert and marching band class. Marching band runs until the conclusion of the football season; at which time concert band will begin. Students in band are required to complete bi-monthly playing exams that are submitted electronically to the director. Literature that the band performs is in addition to method books and materials and is comprised of a wide spectrum of musical styles and technical difficulty. **Band rehearsals commence prior to the start of the school year. Students will have grades accumulated before the first day of school.** Students enrolled in this course will also have the option to audition for Jazz Band, Pit Orchestra and Full Orchestra.

7630E CHORUS 	
3 days per cycle	Full Year Grades 9-12
1.00 credit	Elective
Prerequisite	The ability to match pitch is essential to this course. Students who have a concern about this requirement should seek the instructor before course selection is completed.
Requirement	All students enrolled are expected to participate in all performances; this is a course requirement.

This is an elective open to all students in grades 9 through 12. The objective is to teach music reading skills, aural skills, vocal techniques and performance skills necessary to develop a well-balanced choral ensemble. The student will acquire performance practice skills appropriate to the style period of the literature being performed.

7660E COLOR GUARD	
3 days per cycle	One-Half Year (Fall Semester Only) Grades 9-12
.50 credit	Elective

COLOR GUARD is a half-year course available in the fall semester only. Students will work with flags and other equipment. Students who elect COLOR GUARD are expected to attend practices in the summer, prior to the start of the school year (as scheduled, in conjunction with BAND). **There are also rehearsals outside of the school day after the start of the school year**. COLOR GUARD students take part in all scheduled BAND events during the fall marching band season. No experience is necessary, although students interested in this course should contact the BAND director or the COLOR GUARD director for additional information.

7690E MEISTERSINGERS	
3 days per cycle	Full Year Grades 9-12
1.00 credit	Elective
Prerequisite	Successful completion of audition in the Spring.

MEISTERSINGERS is the advanced choir offered at the high school level. Students who successfully audition for this group will be challenged in their musicianship by more difficult literature and expectations. Music literacy, ear training, history, and vocal technique are heavily emphasized in this class and students are making a commitment in this course to achieve very high standards of music performance. **A significant part of this course is the performance schedule outside of school time. Students who successfully audition for this course will be expected to make all performances in the calendar year.**
*****All students at time of course selection will register for CHORUS. Audition letters/materials will be available to all students who registered for CHORUS by May 1st and the blind audition will be done before Memorial Day.**

7700E MUSIC THEORY	
3 days per cycle	Full Year Grades 9-12
1.00 credit	Elective
Prerequisite	No special training required, only a sincere interest in music.

This course is designed to give the student musician a basic understanding of the components and structures of music. Emphasis is placed on those elements with which the student will have the most contact. The course progresses from the very basic fundamentals to most diatonic harmonic and melodic devices found in major and minor keys, plus basic rhythmic structures. Basic notational skills using Finale software will be explored. Development of skills in sight-reading, melodic/harmonic and rhythmic dictation is carried out through computer guided exercise plus live performance and is tied to content material. Students will create rudimentary compositions based on the concepts taught in this course.
*****The music theory courses are offered in alternating years. If the graduation year is an odd numbered year, then AP MUSIC THEORY is taught. If the graduation year is an even numbered year then MUSIC THEORY is taught.*****

7730E ORCHESTRA	
3 days per cycle	Full Year Grades 9-12
1.00 credit	Elective
Prerequisite	ORCHESTRA is an elective, open to students who have had private or class instruction on a string instrument, specifically violin, viola, cello and string bass. Interested students are requested to contact the director before the course selection process is complete.
Requirement	All students enrolled are expected to participate in all performances; this is a course requirement.

High School ORCHESTRA is a course designed to strengthen existing playing/reading/aural skills and to develop greater technique and musicality with respect to the challenges presented by orchestra literature. In addition to quarterly playing requirements performed on their instrument, students in ORCHESTRA are required to complete bi-weekly playing exams that are submitted electronically to the director. Literature that the ORCHESTRA performs is comprised of a wide spectrum of musical styles and technical difficulty. All performance literature, method books and materials are oriented to the string section. Woodwind, brass and/or percussion students may be added on an “as needed” basis for selected literature. Extra rehearsals outside of the school day are scheduled as needed for program preparation.

7760E PIANO I 	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

This course is designed for the beginning student who wishes to learn the fundamentals of playing the piano. The student will demonstrate adequate motor skill development through the performance of a variety of sequential repertoire. Learning to read basic pitch and rhythmic patterns will be taught. A history of the instrument as well as its most famous composers and performers will be examined. The department of music's computer lab will be used for both individual and group instruction. **Students who have played before should consider Piano II instead of starting in Piano I. You must have permission of the instructor first.**

7770E PIANO II 	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective
Prerequisite	Grade of B or higher in PIANO I or permission of the instructor

The primary focus of this course is to allow students study into the great composers and styles of piano literature. Fundamentally, this course is a continuation of PIANO I. Students will refine technical skill and fluency through standard piano methodology. Students will work on creative repertoire derived literature ranging from Mozart to popular contemporary music. Students will also be able to develop accompanying skills for a soloist or choir.

7790E THEATRE 	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

This is an introductory course to the dramatic and theatrical arts. Students will explore the theatre as actors and directors. The focus of THEATRE is on the skills of acting and directing. Students will experience the aspects of improvisational acting as well as rehearsed acting. Acting techniques and scene exploration will be explored. Students will be performing memorized, scripted monologues and scenes as well as monologues and scenes that they create themselves. Concentration, observations, and believability will be the skills targeted. Students will be able to use the terms and phrases that are used in professional theatre productions. Students will be exposed to the origins of theatre as well as the elements of acting by reading dramatic literature. This is an active class that includes theatre games, memorization, and public speaking as well as tests and projects.

TECHNOLOGY EDUCATION/STEM

The Technology Education Department at Southern Lehigh High School believes that the study of technology must place emphasis on developing the students' abilities to discover, experience, share, and use knowledge, rather than simply retain it. Learning in the technology education classes encourages students to be partially responsible for creating, monitoring, and evaluating their learning process. We incorporate learning strategies that extend past structured time periods and free students to inquire and create. Our courses emphasize social interaction and teamwork, which foster higher order thinking skills. Students who study technology learn about the technological world that inventors, engineers, and other innovators have created. Because technology is so fluid, teachers of technology tend to spend less time on specific details and more on concepts and principles. The goal is to produce students with a more conceptual understanding of technology and its place in society, who can thus grasp and evaluate new bits of technology that they might never have seen before. One of the great benefits of learning technology is also learning to do technology, that is, to carry out in the laboratory-classroom many of the processes that underlie the development of technology in the real world. Students in the technology education laboratory are taught practical problem-solving skills and are asked to put them to work on different types of real-world problems.

7870 FOUNDATIONS OF TECHNOLOGY	
3 days per cycle	One-Half Year
.50 credit	Required Freshman Year

FOUNDATIONS OF TECHNOLOGY is a semester (.5 credit) course required for graduation. It provides an overview of technology and STEM activities. Students will explore hands-on application of the various technical components that are being integrated into the present and future workplace. Specific activities include programming robotic functions, computer-assisted manufacturing, 2D and 3D computer-aided design/animation, product development, 2D architectural CAD with virtual walk through, structural testing activities (bridges/towers), and logic of sequential computer programming.

7881E ARCHITECTURAL DESIGN	
3 days per cycle	Full Year Grades 10-12
1.00 credit	Elective
Prerequisite	Successful completion of Computer Aided Drafting and Design (Formally 7940E Principles of Engineering Design/CAD)

ARCHITECTURAL DESIGN will focus on basic residential design. The fundamental sequences in designing and drawing are stressed as students complete the architectural drawings necessary for the construction of a residence. Elements of the course include architectural styles, area planning, structural detailing, pictorial rendering, building specifications, and cost analysis. Students will build a scaled model residence and use professional architectural 2D CAD software, utilizing virtual reality to design computer-generated floor plans (walk through). Students will design tower structures and perform a destructive test, which will assist them in calculating the efficiency of the structure.

7891E COMPUTER AIDED DRAFTING AND DESIGN	
3 days per cycle	Full Year Grades 9-12
1.00 credit	Elective

In COMPUTER AIDED DRAFTING AND DESIGN (formally Principles of Engineering Design), students will learn what engineers do. They will also learn about the different types of engineering and the specific tools used by engineers during their work. Computer Aided Design (CAD) is a critical tool engineers use to transfer their napkin sketch ideas into actual three- dimensional models. Rhinoceros and AutoCad are powerful software packages that allow engineers to design parts, create assemblies, animate assemblies and create real life renderings of their models. Students will use these programs to design their own Formula One Dragster and use online aerodynamic software to check their dragsters air resistance and aerodynamics. Before students design their 3D dragster they will be required to sign on to our standards-based curriculum and state-of-the-art engineering tools (WhiteBox Learning) which will guide them through an engaging, realistic product development process capped by a very cool virtual race. Students will also construct 3D rapid prototyping models utilizing our 3D printer. Students will be required to design and use sequential logic to program their own Video Game using our state of the art Multimedia Fusion 2 software. Students will design Architectural floor plans and then use the software's animation to complete a walk-through of their homes.

Project Lead the Way (PLTW): Engineering

Southern Lehigh High School offers honors level Project Lead the Way (PLTW) courses that provide students with rigorous and innovative learning experiences focused on Science, Technology, Engineering, and Mathematics (STEM). This program promotes high levels of critical thinking, creativity, innovation, and real-world problem solving skills. The curriculum, when combined with mathematics and science courses, introduces students to specific STEM related fields.

Students will develop in-demand, transferable skills that they will use both in school and after graduation. PLTW provides real-world, applied learning experiences that empower students to gain the skills they need to thrive in college, career, and beyond. It enables students to explore career paths, engage in problem solving and process thinking, develop technical knowledge and skills, and build communication skills. For students interested in completing the PLTW Capstone Course, Engineering Design and Development, the suggested sequence is:

Honors Introduction Engineering Design 9th Grade	**Honors Computer Integrated Manufacturing** 10th or 11th Grade	**Honors Principles of Engineering** 10th or 11th Grade	**Honors Engineering Design and Development** 12th Grade-*Capstone Course* (anticipated to begin in 2021-2022)

7913 *HONORS INTRODUCTION TO ENGINEERING DESIGN	
3 days per cycle	Full Year Grades 9-12
1.00 credit	Required as alternate to Foundations of Technology 1
Prerequisite	Successful completion of an ALGEBRA I course.

HONORS INTRODUCTION TO ENGINEERING DESIGN will introduce students to the engineering profession and an engineering design process. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software. Students dig deep into the engineering design process, applying math, science, and engineering to hands-on projects. This course will satisfy the FOUNDATIONS OF TECHNOLOGY graduation requirement.

7923E *HONORS COMPUTER INTEGRATED MANUFACTURING	
3 days per cycle	Full Year Grades 10-12
1.00 credit	Elective
Prerequisites	Successful completion of Honors Introduction to Engineering Design; AND Successful completion or concurrent enrollment in a Geometry course

HONORS COMPUTER INTEGRATED MANUFACTURING provides an opportunity for students to recognize many of the career opportunities in the manufacturing industry. Manufactured items are part of everyday life. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. Students will deepen their skills and knowledge of engineering within the context of efficiently creating products.

7933E *HONORS PRINCIPLES OF ENGINEERING	
3 days per cycle	Full Year Grades 10-12
1.00 credit	Elective
Prerequisites	Successful completion of Honors Introduction to Engineering Design or recommendation by the teacher (for the 20-21 SY) AND Successful completion or concurrent enrollment in a Geometry course

HONORS PRINCIPLES OF ENGINEERING will engage and challenge students to explore a broad range of engineering topics, including; mechanisms, the strength of materials and structures, automation, and kinematics. This course will expose students to major concepts they will encounter in a post-secondary engineering course of study. Students will further develop engineering skills in problem solving, research, and design through collaborative and real-world problems. It is recommended that students have completed or are currently enrolled in a Physics course to be most successful in Honors Principles of Engineering.

VISUAL ARTS

The arts encourage the development of right-brain intuitive thinkers. The course offerings in the VISUAL ARTS provide all Southern Lehigh students opportunities to grow aesthetically, to develop a critical awareness, and acquire the sensitivity needed to distinguish fine quality from the mundane. Courses help students increase their perceptive awareness through observation, encourage creative problem solving, and develop self-discipline with confidence while giving personal meaning, narration, humor, and empathy to art as relative to students' lives. These are all skills taught by the arts that are required of 21st century learning as identified by Daniel Pink in his book, "*A Whole New Mind: Why Right-Brainers Will Rule The Future."* The arts intensify motivation to learn, improve academic performance and standardized test scores (PSSA, PSAT, SAT) as defined in the various studies by Harvard University's Project Zero Educational Research Department. So compelling is the research the arts produce more highly engaged students, that the arts were included as one of the nine core subjects identified in "GOALS 2000: Education America Act."

8104E *AP ART HISTORY	
3 days per cycle	Full Year Grades 11-12
1.00 credit	Elective
Prerequisite	A reasonably "serious" interest in the arts and/or history

This course curriculum is equivalent to those in a college level introductory art history course. Students will study the beginning of art (ancient art) through the postmodern art era with emphasis on art of 1500-1998 in the third and fourth marking periods. Information on the artist, artist movements, and the social and political background of the artworks will be supported by other art forms such as literature, music, architecture, dance, and drama. Students will be actively encouraged to think for themselves and form their own personal responses to visual artworks. Students will have the option of taking the AP exam for college credit at the end of the course and at their own expense.
This is a weighted class.

8150E CERAMICS	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective

Students will gain an understanding of the fundamentals of working with clay using various techniques in designing and creating three-dimensional forms. Various clay methods and techniques may be explored such as pinching, coiling, adding and subtracting and slab construction. Experimentation with form, texture, surface decoration and glazing will also be encouraged. Students may create whistles, containers, sculptural puns, artist cups, etc. No previous experience with clay work and three dimensional designs is required. This course satisfies the PA Arts and Humanities standards.

8200E CERAMICS II	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective
Prerequisite	CERAMICS I

CERAMICS II is developed to provide interested students the opportunity to continue to work in clay beyond the level I class. In this course, students will develop their artistic ceramic skills at a higher level of craftsmanship as well as experiment with wheel throwing. Students will have the opportunity to explore expressing their creativity and ideas with their newly developed skills. The team of both teacher and student will develop projects that will reflect the individual's interest. The expectation of this class is that the students take an ambitious, self-disciplined approach to growth and self-expression. This is a student driven course.

8260E GRAPHIC DESIGN 	
3 days per cycle	Full year Grades 9-12
1.00 credit	Elective

Creating successful designs requires certain technical as well as creative skills. GRAPHIC DESIGN introduces computer design skills with print layout, product design, digital imagery, and animation graphics through demanding creative solutions to assignments. Student assignments will include product design and advertising, typography, information graphics and print layout. Students will work on Macintosh computers utilizing the Adobe Creative Suite software; which include Adobe Illustrator, Adobe Photoshop, and Adobe InDesign. This course satisfies the PA Arts and Humanities Standards.

8310E DRAWING 	
3 days per cycle	One-Half Year Grades 9-12
.50 Credit	Elective
Prerequisite	FOUNDATIONS OF ART

DRAWING is the foundation to learning, mastering and exploring all works of art. This means drawing is a necessity. It is understood that drawing is done in tones of gray. Students will draw various projects not only from memory, but also realistically, from observation, and expressively. This class allows the students time to develop and refine their acquired drawing skills and knowledge previously learned in FOUNDATIONS OF ART. Active art research is used to engage the students using a variety of technologies. Various art styles, periods and artists will be introduced with the corresponding assignments. Assignments may include drawing with graphite, color pencils, charcoal, and chalk pastels. This course satisfies the PA Arts and Humanities Standards. This is a half-year class. This course is a prerequisite for Portfolio.

8350E FOUNDATIONS OF ART 	
3 days per cycle	One-Half Year Grades 9-12
.50 Credit	Elective

This course is an introduction to the art design elements and principles through a series of assignments in two-dimensional design. Each assignment includes intense observation of line, shape, form, space, texture, and color in each composition. Students can expect to work in a variety of materials to develop skills in the visual arts. Students will evaluate their creative efforts through an art critique process and learn to objectively discuss art through analysis of basic principles of design. The objective is to build your artistic skills as well as your verbal skills through the art process. Learn what visual literacy means! This course satisfies the PA Arts and Humanities standards.

8400E METHODS AND MATERIALS 	
3 days per cycle	One-Half Year Grades 9-12
.50 Credit	Elective

This course is designed for the student who does not wish to concentrate on a specific medium but is willing to experiment with a variety of traditional and non-traditional fine craft methods. Students will be asked to think outside the box, utilize problem-solving skills, and bring their creative minds in order to create a well-rounded work of art. Students will be working with various mediums such as fibers, paper, clay, metals, plastic, glass, as well as found objects. Some examples of projects would be creating vessels, mosaics, lanterns, birdhouses, jewelry, non-traditional clothing, stained glass, weaving, felting, etc. No previous experience with art is necessary.This course satisfies the PA Arts and Humanities standards.

8420E PAINTING	
3 days per cycle	One-Half Year Grades 9-12
.50 credit	Elective
Prerequisite	FOUNDATIONS OF ART and DRAWING

It is understood that drawing is done in tones of gray. When color is introduced, the result is called painting. Students will paint various projects not only from memory, but also realistically, from observation, and expressively. This class allows the students time to develop and refine the acquired painting skills and knowledge previously learned in DRAWING and FOUNDATIONS OF ART. Active art research is used to engage the students using a variety of technologies. Various art styles, periods and artists will be introduced with the corresponding assignments. Assignments may include painting with ink, watercolors, oil paints, and acrylic paints. This course satisfies the PA Arts and Humanities Standards. This is a half-year class. This course is a prerequisite for Portfolio.

8450E PHOTOGRAPHY	
3 days per cycle	One-Half Year Grades 9-12
.50 Credit	Elective
Required	35mm manual camera & DSLR camera

This course will introduce the basic skills and concepts of black and white photography, using traditional film cameras, film processing and darkroom methods as well as using digital tools and methods within a Fine Arts context. With an emphasis on creativity and inventiveness, students will explore the image-making potential and craft of the photographic print, within a fine arts context. Grading will be based on technical expertise as well as artistic composition. Students are to have their own 35mm camera with an instruction manual for learning their cameras; absolutely NO fully automatic cameras. Students must be able to take light meter readings. With digital work, students will be exposed to the hardware and software necessary for each step of the digital image making process, from input (digital cameras, scanners, web) through manipulation (Photoshop and other current software) to output. Homework outside of the classroom is required. A lab fee for photographic supplies may be charged. Students will have to purchase some of their own photographic supplies. *Please note* Students will be working in the darkroom under low light and sometimes "NO LIGHT" conditions, therefore, this class should not be taken by a student with light sensitivity or sight problems or with a phobia to the dark or small spaces. This course satisfies the PA Arts and Humanities standards.

8500E PORTFOLIO PREPARATION	
3 days per cycle	Full Year Grades 11-12
1.00 credit	Elective
Prerequisite	FOUNDATIONS OF ART, DRAWING, PAINTING or teacher approval.

This course is for the serious art student to develop their college entrance portfolio. The student should be prepared for intense study and expect to do homework on their class assignments on a weekly basis. The course work has been selected based on the entrance portfolio requirements listed by various art colleges and universities' art department. Along with creating highly advanced artworks, students are expected to discuss their work intelligently in class supporting their reasons for design solutions, using correct art terms and language. Student portfolios should exhibit breadth as well as depth in studio art exemplary. Students must purchase and prepare an actual portfolio of their artwork for the college art admissions process. Students are also expected to participate in a gallery art show. This course satisfies the PA Arts and Humanities standards.

8550E THREE-DIMENSIONAL DESIGN 	
3 days per cycle	One-Half Year Grades 9-12
.50 Credit	Elective

This is a three-dimensional design class, which focuses on introducing and extending student understanding to various skills, processes, tools, and materials of sculpture and three-dimensional design elements. In this class students will be working in the round to create several visually interesting pieces. The class will also explore technique, form, content, art criticism, aesthetics, art history, analysis and interpretation of art! Students will learn how to work in depth in expressing and generating their ideas through their artwork. They will learn how to deconstruct/reconstruct materials, think outside the box and utilize various problem-solving skills. Various mediums used during the class are paper, environmental materials, plaster, paper maché, clay, and recyclable materials. No previous experience with three-dimensional design is required.

8555E PORTFOLIO II 	
3 days per cycle	Full Year Grades 11-12
1.00 Credit	Elective
Prerequisite	Completion of FOUNDATIONS OF ART, DRAWING, PAINTING AND PORTFOLIO PREPARATION

This course is for the serious art student that has taken PORTFOLIO PREPARATION, developed their college entrance portfolio, and is currently applying to collegiate art programs. The student should be prepared for intense independent study and expect to do work outside of class. The course is designed to individually refine the artistic skills of each student. Along with creating highly advanced artworks, students are expected to discuss their work intelligently in class supporting their reasons for design solutions, using correct art terminology and language. Students will be expected to create an online digital portfolio of their work for the application process of the desired art programs. Students will be expected to participate in a gallery exhibit as well as community art events. This course satisfies the PA Arts and Humanities Standards.

Career and technical education, or CTE, helps students get more out of high school. Specifically, more opportunities to master practical skills, secure industry credentials, earn college credit, win scholarships, explore careers, develop leadership ability and gain real-world experience. That's why Lehigh Career & Technical Institute is the smart choice for students who want to be college and career ready when they graduate.

Operating with the support of all nine Lehigh County school districts, LCTI offers dozens of CTE programs taught by industry experts in five areas of study: Arts & Humanities, Business & Communication Technology, Engineering & Advanced Manufacturing, Health & Human Services and Industrial Technology.

We are the largest career and technical school in Pennsylvania and, thanks to the support of our education and industry partners, among the best equipped nationwide. LCTI's campus is adjacent to Lehigh Carbon Community College in the Schnecksville section of North Whitehall Township and boasts a 450,000-square-foot facility outfitted with the latest software, tools and equipment

ENROLLMENT OPTIONS

Academic Center: The Academic Center provides students in **grades 10-12** with the option of taking both their academic and career & technical course work at LCTI as full-day students. These rigorous academic courses will satisfy graduation requirements as well as complement the career & technical major of each student. Students will still graduate from their resident school districts and are encouraged to participate in extra-curricular activities back at their sending school. Students will be able to register for the full-day program during their school district's regular course registration time.

Half-day enrollment: Students in **grades 9-12 may** choose the half-day enrollment option. The half-day option provides students with career & technical education at LCTI and the required academics at their respective school districts. Students are encouraged to take high-level course work at the sending district which will provide the academic background necessary to be successful in today's highly technical careers.

Flex time enrollment: Another option that may suit students' individual needs is the flex-day program. The flex program is designed to provide students with technical coursework on a limited schedule. Students may choose to come to LCTI for one or more periods per day depending upon their needs. Students may attend one or both semesters and may attend for multiple years. Many students use this technical educational training as a jump start to a technical degree in a four-year institution. Both the half-day and flex-day options may be chosen during the regular course registration process.

ACADEMIC CENTER COURSE OFFERINGS

All courses in the LCTI Academic Center are college-preparatory and meet graduation requirements. Courses are assigned based on classes completed at the sending district prior to attending LCTI. All science courses are lab-based and a graduation project is required for all Academic Center students. The courses offered in the Academic Center are listed below.

English	Mathematics	Science	Social Studies	Other
ELA II	Geometry	Biology	American Studies II	Wellness/ Fitness 11
ELA III Accelerated ELA III	Algebra II	Chemistry	World Cultures	Wellness & Fitness 12
ELA IV Accelerated ELA IV	Pre-Calculus	Physics I Physics II	American Government/Civics/Economics Accelerated American Government/Civics/Economics	
LCCC English Course	Calculus	Environmental Science		
	LCCC Academic Courses			

Lehigh Career & Technical Institute Academic Center Course Schedule 2019-2020

Grades	Semester I	Semester II
10	Math	Math
	Science	Science
	ELA II	ELA II
	American Studies II	American Studies II
11	Math	Math
	Science	Science
	ELA III	ELA III
	*Wellness/Fitness or World Cultures	*World Cultures or Wellness/Fitness
12	ELA IV	ELA IV
	American Government/Civics/Economics	American Government/Civics/Economics
	Wellness & Fitness	Wellness &Fitness
	Math or Science	Math or Science

*Semester Course

LCTI ACADEMIC OPTIONS FOR HALF-DAY STUDENTS

Lehigh Career & Technical Institute (LCTI) provides academic courses to some half-day students who attend the school. It is very important for students to be successful in both their academic and technical course work. The courses taken at LCTI are necessary to meet the student's graduation requirements. If a student does not complete an academic course with a passing grade, the course must be re-taken. LCTI does not offer a summer school; however, this option may be available through the sending high school. It may also be possible for courses to be made up during the students' senior year; however, make up courses scheduled in the senior year can cause the student to lose the opportunity for a Cooperative Education job placement. If the coursework is not made up, graduation from high school may be jeopardized.

The following academic courses for half-day students may be required while attending LCTI.

American Studies II
The American Studies II course addresses the development of the United States throughout the twentieth century. This course is aligned to the Pennsylvania Core Standards for Social Studies as well as Reading, Writing, and Listening and Speaking. Through various activities and lessons, these standards will be met to understand the development of the United States as a world power; focusing on economic and industrial development, political trends, society and cultural problems and achievements. The students will develop an understanding of the progress of technology and social groups. They will be expected to evaluate the changes of culture in society and analyze the political contributions of individuals and events of the periods studied. American Studies assignments also include the integrated concepts between this history course and various Career & Technical Labs. Students will be assessed formally and informally to determine mastery of the content for the duration of the academic year.

Wellness & Fitness
Course Overview: The Wellness Program provides students with life-changing information on nutrition and various techniques on stress management that they can use throughout life. The most common mental disorders will be researched and students will receive training on suicide prevention. During nutrition, students will investigate the harmful ingredients found in the foods they eat on a daily basis, analyze products served by several fast food chains and research healthy alternatives.

The Fitness Program is designed to acquaint students with the benefits of physical activity in their lives and to promote life-long wellness and fitness. The course, which is held in the state-of-the-art LCTI Fitness Center, will feature various strength and conditioning principles, such as specificity, progression and overload, along with multiple training techniques, such as CrossFit, Tabata, Yoga, and an assortment of technology-based exercises.

LCTI CAREER & TECHNICAL EDUCATION OPTIONS

At Lehigh Career & Technical Institute, students learn by doing. Teachers guide students from instruction to action, helping them tackle projects that mirror on-the-job challenges as they develop the knowledge and skill necessary to secure industry credentials, earn college credit or both. For example, marketing students manage a store on their way to earning National Retail Federation certification. Programs are identified as either Program of Study (POS) or TECH PREP which designates the type of postsecondary credit options available. Students who participate in the POS programs have the ability to earn advanced college credits through SOAR (Students Occupationally and Academically Ready) or through articulation credit with a specific post-secondary school. Tech Prep programs only offer articulation credit where available.

LCTI's programs fall into five areas of study:

ARTS AND HUMANITIES

Advertising Design/Commercial Art: Students will learn the latest Adobe graphic design software currently used in the professional workplace. The emphasis of the program is based on Adobe Photoshop, Illustrator and InDesign Creative Cloud and creating a printed and electronic portfolio of work produced through these programs. Students are able to receive certification for Adobe Photoshop, Illustrator and InDesign through Adobe endorsed Train Simple. In addition to the Adobe Creative Cloud, students will learn traditional illustration skills such as pencil drawing and shading, water color, color pencil, scratch board and various other mediums. Photography for advertising is used in class and students will learn the use of a Digital Single Lens Reflex camera and the setup of strobe lights. Students are able to concentrate in three different career objectives which are Graphic Design, Sign-Making or Illustration. **(POS)**

***Commercial Photography/Electronic Imaging*:** Students who select this specialty will receive training in photography both in the studio and on location using the latest digital camera techniques and digital computer technology for processing and printing images. The course includes professional lighting techniques and design elements for a wide variety of subjects including wedding and portraiture, products for advertising, as well as photojournalism and editorial markets. **(TECH PREP)**

BUSINESS AND COMMUNICATION TECHNOLOGY

Computer Information Technology: Students will be at the forefront of cyber-security related issues as a means to safeguard sensitive data and preserve confidentiality. Computer Information Technology will challenge students to develop meaningful business solutions through computer programming in Visual Basic, C+, C#, and Java. Students will learn to work with data in order to produce relevant information that will help to drive the direction of organizations and solve real problems.*This program participates in the IT Academy* **(POS)**

Computer & Networking Technology: Students are prepared for advanced network training and the industry standard CompTIA ***A+*** and ***Network+*** Service Technician certifications. The program takes students from basic PC hardware through operating systems and networking. Students will also learn the MS Office Suite, customer service and support, and advanced network support. Students have the opportunity to participate in dual enrollment coursework for college credit; additionally, satisfactory completion of the program may grant college course credit through articulation agreements with LCCC. . *This program participates in the IT Academy* **(POS)**

Emerging Digital Media & Social Communications: Social media is big business and video content is king. In our Emerging Digital Media program, students learn about the creative and technical processes that drive video production for multimedia platforms ranging from Snapchat and TikTok to YouTube and Netflix. They also explore deejaying and electronic dance music production as they master a variety of concepts, software and skills.

Marketing and Business Education: Students learn about finance, retail marketing, banking, entrepreneurship, promotions and other important aspects of marketing through virtual business software and retail experience in the school's store. They examine what is necessary to run a business, promote a product or manage a department. Practical experience is available through the student-managed school store and by participating in community internship opportunities. **(POS)**

Print Technology/Graphic Imaging: Students creatively design printed materials such as full-color books, posters, packaging, displays, stationary, as well as specialty items like mugs and shirts. Using the most current versions of Adobe Creative Cloud software on Apple Macintosh computers, students then reproduce their attractive projects on state-of-the-art copiers, printing presses, and bindery machines in a real production environment. **(POS)**

Web Design/Web Programming: Students learn the fundamentals related to web page design and website development, graphics, multi-media and HTML coding. Students are taught the tools for rapid web page production and basic server-side programming techniques to handle everything from forms transmittal to building dynamic interactive web pages, intranet, extranet and e-commerce applications. . *This program participates in the IT Academy* **(POS)**

ENGINEERING & ADVANCED MANUFACTURING

Computer-Aided Drafting & Design: Students combine their industrial and mechanical interests with creativity and work toward successfully moving into mechanical, architectural or civil engineering careers. Drawing techniques, architectural plans, advanced AutoCAD, and engineering, open the world of CAD to students. This solid foundation assists Drafting/CAD students who wish to pursue further education and professional careers. **(POS)**

Electromechanical/Mechatronics Technology: Students learn an innovative curriculum which combines hands-on training with real world industrial equipment and software. Students get a solid background in industrial, electrical and electronic systems, A.C. and D.C. motors, motor controls, power distribution systems, programmable controllers, hydraulics, pneumatics, mechanical drives, transformers, process control systems and troubleshooting. **(POS)**

Electronics Technology/Nanofabrication: Students are taught the principles of electronics. From DC Circuits to Solid State Devices they learn to design, build, and test electronic circuits. LCTI has a fully functioning Class 1000 fabrication room (cleanroom) where students create the silicon chips that are the foundation of the information age and the heart and soul of modern electronics. **(POS)**

Precision Machine Tool Technology: LCTI's Precision Machine lab is recognized as a Haas Technical Education Center and incorporates lessons and demonstrations, as well as extensive applications training in reading blueprints, operating a digital lathe, milling machine, drill press and other machine shop operations in the curriculum. Students train on state-of-the-art CNC machine tools placed in the lab by Haas Automation. **(POS)**

Pre-Engineering & Engineering Technology: This pre-engineering program is a sequence of courses which, when combined with traditional mathematics and science courses, introduces students to the world of engineering. Students study the principles of engineering, engineering design, digital electronics and computer integrated manufacturing. **(POS)**

***Supply Chain Management & Logistics Technology*:** Students learn inventory control, purchasing, receiving, shipping, equipment operation and maintenance in a state-of-the-art 17,000 square foot distribution center. Students train with current industry technology including handle-held track pads and computers, vertical and horizontal carousels, a computer-controlled conveyor and a computer-integrated warehouse management system. Students explore the supply chain of products from their global origin to the consumer including modes of transportation. **(POS)**

Welding Technology: This course teaches students shielded metal arc welding, gas metal arc welding, flux cord arc welding, welding inspection, testing, and safety/emergency procedures. The program operates under entry level certification authorization by the American Welding Society and a special arrangement with Lehigh Carbon Community College permits students to earn a national skills certificate and an Associate Degree. **(POS)**

INDUSTRIAL TECHNOLOGY

Auto Body/Collision Repair Technology: Students learn about the tools and equipment associated with the collision repair industry, while learning welding, non-structural and structural damage analysis, estimating, and repair techniques, along with paint preparation and refinishing systems used on todays' technologically advanced automobiles. This comprehensive course of study and the volume of exposure students receive allows them to step into the workforce immediately following graduation or continue studies at the post-secondary level. **(POS)**

Auto Technology: Students in this program are prepared to diagnose and repair automobile systems including electrical systems, ignition and emission systems, engine cooling and lubrication, front ends, air conditioning, brakes, transmissions, engines and drive trains. Students participate in the nationally recognized Automotive Youth Education Systems (AYES) industry partnership. The program teachers are Master Certified ASE Technicians who utilize state-of-the-art equipment to prepare students to become automotive technicians. **(POS)**

Cabinetmaking & Millwork: Cabinetry, wood products design and layout and construction open the world of cabinetmaking & millwork to students. Students are taught to read blueprints, make shop drawings, and produce components with trade-related hand and power tools and machinery. The newly expanded lab and curriculum provides knowledge of lumber products adhesives, fastener, finishing, 32mm cabinets and counter top fabrication. Technology has entered this rewarding construction trade with the addition of CNC router technology. **(POS)**

Carpentry: Blueprints, site work, construction footings, framing floors/walls/ceilings/roofs, radon control, insulation and power tools are some of the areas taught in Carpentry. Students participate in the LCTI Student House Project where a home is built and sold at auction upon its completion. Students learn how the building industry works, its standards, and what is required to complete a project on time and at cost. **(POS)**

Diesel/Medium and Heavy Truck Technology: Students gain experience with drive trains, clutch assemblies, transmissions, diagnostics, steering and other aspects of this industry. Students also study suspension, diesel engines, gasoline engines, bearings and seals. The trucking industry needs professionals to service the truck fleet that keeps industry and commerce moving in the United States. LCTI can provide students with the necessary expertise they need to succeed in this industry. **(POS)**

Electrical Technology: Students learn residential, commercial, and industrial electrical wiring, as well as fluid power technology planning and wiring. Students are taught to install duplex and split wired duplex receptacles, single pole switches, 3-way and 4-way switches and Ground Fault Circuit Interrupters. **(POS)**

Heating/Air Conditioning & Refrigeration: Students learn to install, troubleshoot and repair air conditioning, heat pumps, commercial refrigeration units and gas and oil heating equipment. Skilled technicians are proficient in reading electrical diagrams, diagnosis of electrical problems, air distribution designs, copper and steel pipe cutting, soldering and fabricating fiberglass and sheet metal duct systems. **(POS)**

Heavy Equipment Operations & Preventive Maintenance: As a student in this fast-paced and diverse program, you will learn the safety, maintenance and operating techniques for a wide variety of earthmoving equipment. Students will also receive instruction in soils, erosion and sediment control, site preparation, aggregate production, concrete and asphalt paving, surveys and grades, and utility installation. In addition, students will have the opportunity to learn machine systems, parts identification and ordering, and preventative maintenance techniques in a state-of-the-art facility. **This program is not available to ninth grade students. (TECH PREP)**

Masonry: Students will learn various layouts and pattern designs using brick, concrete masonry units, stone and ceramic tile. This comprehensive program teaches students how to correctly use the necessary tools and equipment to build simple wall structures, fireplaces and brick sculptures. Ceramic tile installation and thin stone veneer applications are also included in the curriculum. Students also participate in the student-built house project. (POS)

Painting and Decorating: Students learn to refresh and highlight interior and exterior spaces (residential and commercial) as well as improve and restore historical buildings. Painting, wallpaper hanging, furniture refinishing, line striping, staining and spraying are among some of the topics emphasized in this program.**(TECH PREP)**

Plumbing and Heating: In this high priority occupation program, Students will learn the basic to the advanced skills of Plumbing & Pipe Fitting. Repairing and installation of items such as, but not limited to; Faucets, Bathtubs, Toilets, Sump Pumps, Sewage Pumps, Water Heaters, Boilers, Water Softeners, Well Pumps, Solar Heating Systems, Chilled Water, Air Conditioning and Radiant Heating Systems. This lab will teach skills such as but not limited to; brazing, soldering, threading, pressed, rolled/grooved, flared, pipe fitting and measurement and fused joints. Students will work with PEX, Copper, Steel, Cast Iron, PP-R, PVC and CVPC Pipe and Tubing. This program incorporates a multi-level and fast paced, technology enriched learning environment. **(POS)**

Small Engines/Recreational Vehicle Repair: Students will learn to diagnose and repair lawn mowers, chain saws, jet skies, motorcycles and go-karts. Students will learn about the small engine and the vital components to effectively make the engine perform to maximum efficiency. Students will also learn about brake systems, transmissions, hydraulics, hydrostatics and drive systems. Students will learn skills that involve welding, cutting with a torch, cylinder honing and boring. **(POS)**

HEALTH AND HUMAN SERVICES

Applied Horticulture: This program, a combination of general horticulture (plant science) and hands-on applications, prepares students to produce, process and market plants and flowers used for ornamental and aesthetic purposes as well as establishing, maintaining and managing various horticultural businesses. Instruction emphasizes knowledge, understanding and applications important to the success of businesses such as floriculture (floral design), greenhouse and nursery operations and management, and landscape technology. **(POS)**

Commercial Baking: Cake decorating, breads, rolls, sweet goods, pastries, pies, doughnuts and nutrition are all part of this course. Students learn the fundamental principles and procedures of operating a fully functioning bakery and retail bake shop, including preparation, display and management. With attention to both theory and practice, this course is designed to prepare students for entry-level positions in the commercial baking industry. LCTI's program is certified by the American Culinary Federation and is nationally recognized as exemplary in all areas of the curriculum. **(POS)**

Cosmetology: Students learn hair styling, hair cutting, hair coloring, chemical texturizing, nail/skin care and salon business operations. Students learn these skills through clinical practices offered at the school salon. Preparation for the Pennsylvania State Board Examination will enable students to become licensed as a cosmetologist and will allow them to work in a challenging and creative profession. **(TECH PREP)**

Criminal Justice: Students learn Pennsylvania criminal and traffic laws, the legal use of force, search/seizure/evidence procedures, arrests and other aspects of law enforcement. Students also train in a fire arms simulator and conduct mock disaster drills to gain practical emergency skills. The program includes opportunities to earn Emergency Medical Responder (EMR) and Emergency Medical Technician (EMT) certifications. ***(POS)***

Culinary Arts: Stocks, soups, sauces, appetizers, desserts, main dishes, menu planning and nutrition are just some of the aspects of this program. Students learn front of the house and back of the house skills working in the school restaurant. LCTI's program is certified by the American Culinary Federation and is nationally recognized as exemplary in all areas of the curriculum. **(POS)**

Dental Technology: Students who enroll in this program learn a variety of skills that will enable them to become a dental assistant, dental laboratory technician, and/or pursue a career as a dental hygienist. The major areas of study in the course include: dental radiology, oral pathology, chair-side dental assisting, anatomy and physiology, dental materials, sterilization, and dental office business procedures. **(POS)**

Early Care & Education of Young Children: Students studying childcare will learn child and staff health, child development, early childhood education, elementary education, special education, discipline and guidance of children, childcare program development and professional development. **(POS)**

Emerging Health Professionals: The Emerging Health Professionals Program provides high school seniors with an opportunity to experience a variety of health care careers in a hospital setting and take Penn State/Lehigh Carbon Community College science courses for college credit. Students spend one day a week rotating among various departments of a hospital. Students will experience these departments throughout the three Lehigh Valley Hospital & Health Network facilities, St Luke's University Health Network Allentown Campus, Country Meadows, and Good Shepherd Rehabilitation Network. The hospital portion of the program provides students with observational experience that enables students to observe various health care professionals as they work with patients. Also, students have the opportunity to meet various health career professionals during presentations within the LVHN community. In addition to these experiences, students are given an overview of the health care industry and all that it entails throughout their coursework at LCTI. **This program is only available to senior students. (POS)**

Exercise Science & Rehabilitation Services: Health care is among the nation's fastest growing industries and offers a broad range of professional opportunities. In our Exercise Science & Rehabilitation Services program, students learn about the practical applications of medical science as they explore careers in physical therapy, athletic training and comparable fields. Students can earn CPR, AED and other certifications through the American Heart Association and may pursue internship and co-op positions at local health care facilities. ***(POS)***

OTHER PROGRAM OPTIONS

Service Occupations Cluster: Five curricular areas are offered in this program: Auto Specialization Technology, Building Trades Maintenance, Food Service, Hospitality Services, Indoor/Outdoor Maintenance, and Supply Chain Management & Logistics Technology. Each area is designed to help the student transition from basic entry-level skill development to more advanced technical training or directly into the workforce. A skills screening will be done to determine the readiness and interest of the student. Results of the screening will be provided to the student's IEP team.

Career Academy Program: Provides the nine participating school districts of Lehigh County an alternative for at-risk students to receive a high school diploma and work toward a career goal in their program of choice. Selected technical programs at LCTI are available to Career Academy Program (CAP) students. They receive academic instruction in English, mathematics, social studies, science, health/wellness, physical education, job readiness, and enrichment coursework. The program operates on a three-day rotation schedule with two out of three days focused on Career & Technical Education Programs. Programs include: Applied Horticulture, Building Trades Maintenance, Electrical Technology, Graphic Communications, Health Occupations/Health Related Technology, and Office Systems Technology.

School-To-Career

- ***Job Shadow*** Students accompany employees through part of a typical day and learn about the varied aspects of their job and skills required to work in the field.
- ***Internship*** Students may participate in a business match program that allows them to spend a period of time working in their field of study.
- ***Cooperative Education*** Students in 11th and 12th grade may participate in a business match program that allows them to spend a portion of the school year working in their field of study. Students pursue their academic coursework on a half-day schedule and report to their place of employment for the remainder of the day.

DUAL ENROLLMENT PROGRAM

Did you know you can take college classes while attending LCTI?

Opportunities to earn college credit while still in high school

You won't have to break the bank to attend college. Each credit course at Lehigh Carbon Community College (LCCC) costs about half the regular tuition rate and less than a fourth of the cost for a comparable credit course at any one of Pennsylvania's State universities.

What is a placement test? A placement test is given to students who are interested in taking college courses at LCCC. Students must obtain a minimum score to be eligible for college classes. More information regarding placement testing can be found on lccc.edu.

Dual Enrollment requirements? Students must be Level II or higher in their lab programs and maintain a minimum of a "B" average to participate in Dual Enrollment. Students must also have good attendance and no discipline referrals. The tuition and associated costs for dual enrollment courses must be paid by the student/parent.

Want to see if Dual Enrollment is right for you? Our free, one credit course **"The College Experience"** is an opportunity to explore dual enrollment. In **"The College Experience"** you'll learn what to expect if you go to college, as well as what will be expected of you. Upon completion of the course, students have the option of taking a placement test to determine eligibility for future classes at a reduced rate paid by the student/parent.

GRADE 9 COURSE SELECTION 2020-21

CORE COURSES

ENGLISH

1091 _____ Applied English 9 – 1.0 Credit
1092 _____ English 9 – 1.0 Credit
1093 _____ *Honors English 9 – 1.0 Credit

MATHEMATICS

2091 _____ Applied Algebra I – 1.0 Credit
2092 _____ Algebra I – 1.0 Credit
2101 _____ Applied Geometry – 1.0 Credit
2102 _____ Geometry – 1.0 Credit
2103 _____ *Honors Geometry – 1.0 Credit
2111 _____ Applied Algebra II – 1.0 Credit
2112 _____ Algebra II – 1.0 Credit
2113 _____ *Honors Algebra II – 1.0 Credit

SCIENCE

3091 _____ Applied Biology – 1.0 Credit
3092 _____ Biology – 1.0 Credit
3093 _____ *Honors Biology – 1.0 Credit

SOCIAL STUDIES

4091 _____ Applied Civics & Government – 1.0 Credit
4092 _____ Civics & Government – 1.0 Credit
4093 _____ *Honors Civics & Government – 1.0 Credit

OTHER REQUIRED COURSES

6150 _____ Health 9 - .50 Credit
7870 _____ Foundations of Technology - .50 Credit

PHYSICAL EDUCATION – CHOOSE ONE

6300 _____ Individual & Team Sports – (Gr 9-10) .50 Credit
6400 _____ Personal Fitness – Gr 9-12 - .50 Credit

WORLD LANGUAGE

5012 _____ Chinese I – 1.0 Credit
5022 _____ Chinese II – 1.0 Credit
5112 _____ French I – 1.0 Credit
5122 _____ French II – 1.0 Credit

WORLD LANGUAGE (Continued)

5212 _____ Spanish I – 1.0 Credit
5222 _____ Spanish II – 1.0 Credit
5262 _____ Spanish Culture & Communication (Immersion) – 1.0 Credit

Example of Typical Schedule

DAY 1	DAY 2
1. English	1. Civics & Gov
2. Algebra I	2. Biology I
3. Phys Ed or Health	3. Found Tech
4. Spanish 2	4. Elective

LCTI: 7.0 CREDITS

Half Day Morning at SLHS

English – 1.0 Credit
Social Studies – 1.0 Credit
Mathematics – 1.0 Credit
Science – 1.0 Credit
Course 659 - LCTI (PM ½ DAY) – 3.0 Credits

Maximum Number of Credits = 8
Minimum Number of Credits = 7

8 Class Periods Total

GRADE 10 COURSE SELECTION 2020-21

CORE COURSES

ENGLISH

1101 _____Applied English 10 – 1.0 Credit
1102 _____ English 10 – 1.0 Credit
1103 _____ *Honors English 10 – 1.0 Credit

MATHEMATICS

2101 _____ Applied Geometry – 1.0 Credit
2102 _____ Geometry – 1.0 Credit
2103 _____ *Honors Geometry – 1.0 Credit
2111 _____ Applied Algebra II – 1.0 Credit
2112 _____ Algebra II – 1.0 Credit
2252 _____ Pre-Calculus – 1.0 Credit
2253 _____ * Honors Pre-Calculus - 1.0 Credit
2262 _____ Survey of Statistics - .50 Credit
2272 _____ Algebra III - .50 Credit
2282 _____ Trigonometry - .50 Credit

SCIENCE

3101 _____ Applied Chemistry – 1.0 Credit
3102 _____ Chemistry – 1.0 Credit
3103 _____ *Honors Chemistry – 1.0 Credit
3111 _____ Applied Physics – 1.0 Credit
3112 _____ Physics – 1.0 Credit

SOCIAL STUDIES

4101 _____ Applied United States History – 1.0 Credit
4102 _____ United States History – 1.0 Credit
4104 _____*AP United States History – 1.0 Credit

OTHER REQUIRED COURSES

6010 _____ Driver Education - .50 Credit
7100 _____ Careers & Technology Applications - .50 Credit

PHYSICAL EDUCATION – CHOOSE ONE

6400 _____ Personal Fitness – (Gr 9-12) - .50 Credit
6300 _____ Individual & Team Sports – (Gr 9-10) - .50 Credit

WORLD LANGUAGE

5022 _____ Chinese II – 1.0 Credit
5032 _____ Chinese III – 1.0 Credit
5122 _____ French II – 1.0 Credit
5132 _____ French III – 1.0 Credit
5222 _____ Spanish II – 1.0 Credit
5232 _____ Spanish III – 1.0 Credit

WORLD LANGUAGE (Continued)

5263 _____ *Honors Spanish Comm & Lit – 1.0 Credit

LCTI: 7.0 CREDITS

Half DayAfternoon at SLHS

English – 1.0 Credit
Mathematics – 1.0 Credit
Science – 1.0 Credit
Phys Ed – .50 Credit

Driver Ed - .50 Credit
Course 660A – LCTI (AM ½ DAY) – 3.0 Credits

Maximum Number of Credits = 8
Minimum Number of Credits = 7

8 Class Periods Total

GRADE 11 COURSE SELECTION 2020-21

CORE COURSES

ENGLISH

1111 _____ Applied English 11 – 1.0 Credit
1112 _____ English 11 – 1.0 Credit
1113 _____ *Honors English 11 – 1.0 Credit
1114 _____ *AP English Language & Composition – 1.0 Credit

MATHEMATICS

2111 _____ Applied Algebra II – 1.0 Credit
2112 _____ Algebra II – 1.0 Credit
2113 _____ *Honors Algebra II – 1.0 Credit

2232 _____ Statistics & Probability – 1.0 Credit
2242 _____ College Algebra (DE) – 1.0 Credit
2252 _____ Pre-Calculus – 1.0 Credit
2253 _____ *Honors Pre-Calculus – 1.0 Credit
2262 _____ Survey of Statistics - .50 Credit
2272 _____ Algebra III - .50 Credit
2282 _____ Trigonometry - .50 Credit
2291E ____ Economics Applications of Math .50 Credit
2300 _____ Calculus - 1.0 Credit
2313 _____ *Honors Calculus – 1.0 Credit
2314 _____ *AP Calculus AB – 1.0 Credit
2334 _____ *AP Statistics – 1.0 Credit

SCIENCE

3102 _____ Chemistry – 1.0 Credit
3103 _____ *Honors Chemistry – 1.0 Credit
3111 _____ Applied Physics – 1.0 Credit
3112 _____ Physics – 1.0 Credit
3210 _____ *Honors Physics - 1.0 Credit
3304E _____ *AP Biology – 1.0 Credit
3354E _____ *AP Chemistry – 1.0 Credit
3404E _____ *AP Env Science – 1.0 Credit
3460E _____ Physics: Electricity and Magnetism - 1.0 Credit
3503E _____ *Honors Anatomy & Physiology – 1.0 Credit
3510E _____ Environmental Science - 1.0 Credit
3602E _____ Forensic Science – 1.0 Credit
3652E _____ Genetics & Biotech – 1.0 Credit
3752E _____ Kinesiology – 1.0 Credit
3902E _____ Zoology – 1.0 Credit

SOCIAL STUDIES

4111 _____ Applied World Cultures – 1.0 Credit
4112 _____ World Cultures – 1.0 Credit
4114 _____ *AP World History – 1.0 Credit

HEALTH/PHYSICAL EDUCATION

HEALTH – CHOOSE ONE

6200 _____ Health 11-12 Sports Medicine - .50 Credit
6250 _____ Health 11-12 Wellness - .50 Credit
6250C _____ Health 11-12 Wellness Online - .50 Credit

PHYSICAL EDUCATION – CHOOSE ONE

6310 _____ Individual & Team Sports –(Gr 11-12) - .50 Credit
6400 _____ Personal Fitness – (Gr 9-12) - .50 Credit

WORLD LANGUAGE

5032 _____ Chinese III – 1.0 Credit
5042 _____ Chinese IV – 1.0 Credit
5132 _____ French III – 1.0 Credit
5142 _____ French IV – 1.0 Credit

5232 _____ Spanish III – 1.0 Credit
5242 _____ Spanish IV – 1.0 Credit
5274 _____ *AP Spanish Language & Culture – 1.0 Credit

LCTI: 7.0 CREDITS

Half Day Afternoon at SLHS

English - 1.0 Credit
Math - 1.0 Credit
Science – 1.0 Credit
Social Studies – 1.0 Credit
Course 661 – LCTI (AM ½ DAY) – 3.0 Credits

Maximum Number of Credits = 8
Minimum Number of Credits = 7

8 Class Periods Total

GRADE 12 COURSE SELECTION 2020-21

CORE COURSES

ENGLISH

1121 _____ Applied English 12 – 1.0 Credit
1122 _____ English 12 – 1.0 Credit
1123 _____ *Honors English 12 – 1.0 Credit

1124 _____ *AP English Literature - 1.0 Credit

MATHEMATICS

2111 _____ Applied Algebra II – 1.0 Credit
2112 _____ Algebra II – 1.0 Credit
2113 _____ *Honors Algebra II - 1.0 Credit
2232 _____ Statistics & Probability – 1.0 Credit
2242 _____ College Algebra (DE) – 1.0 Credit
2252 _____ Pre-Calculus – 1.0 Credit
2253 _____ *Honors Pre-Calculus – 1.0 Credit
2262 _____ Survey of Statistics - .50 Credit
2272 _____ Algebra III - .50 Credit
2282 _____ Trigonometry - .50 Credit
2300 _____ Calculus - 1.0 Credit
2313 _____ *Honors Calculus – 1.0 Credit
2314 _____ *AP Calculus AB – 1.0 Credit
2324 _____ *AP Calculus BC – 1.0 Credit
2334 _____ *AP Statistics – 1.0 Credit

SCIENCE

3102 _____ Chemistry – 1.0 Credit
3103 _____ *Honors Chemistry – 1.0 Credit
3111 _____ Applied Physics – 1.0 Credit
3112 _____ Physics – 1.0 Credit
3214 _____ *AP Physics II – 1.0 Credit
3210 _____ *Honors Physics - 1.0 Credit
3354E _____ *AP Chemistry – 1.0 Credit
3404E _____ *AP Env Science – 1.0 Credit
3460E _____ Physics: Electricity & Magnetism - 1.0 Credit
3503E _____ *Honors Anatomy & Physiology – 1.0 Credit
3510E _____ Environmental Science - 1.0 Credit
3602E _____ Forensic Science – 1.0 Credit
3752E _____ Kinesiology – 1.0 Credit

SOCIAL STUDIES

4204E _____ *AP Gov & Politics - 1.0 Credit
4412E _____ Contemporary American Issues – .50 Credit
4502E _____ Economics - .50 Credit
4512E _____ Global Issues - .50 Credit
4702E _____ Sociology - .50 Credit

HEALTH/PHYSICAL EDUCATION

HEALTH – CHOOSE ONE

6200 _____ Health 11-12 Sports Medicine - .50 Credit
6250 _____ Health 11-12 Wellness - .50 Credit
6250C _____ Health 11-12 Wellness Online - .50 Credit

PHYSICAL EDUCATION – CHOOSE ONE

6310 _____ Individual & Team Sports – (Gr 11-12) - .50 Credit
6400 _____ Personal Fitness – (Gr 9-12) - .50 Credit

WORLD LANGUAGE

5042 _____ Chinese IV – 1.0 Credit
5052 _____ Chinese V – 1.0 Credit

5142 _____ French IV – 1.0 Credit
5152 _____ French V - 1.0 Credit
5242 _____ Spanish IV – 1.0 Credit
5252 _____ Spanish V – 1.0 Credit

5274 _____ *AP Spanish Language & Culture – 1.0 Credit
5284 _____ *AP Spanish Literature & Culture – 1.0 Credit

LCTI – 7 Credits

English – 1.0 Credit

Phys Ed - .50 Credit
Science OR Math – 1.0 Credit

Elective - 1.0 Credit
Course 662 – LCTI – (PM ½ Day) – 3.0 Credits

Maximum Number of Credits = 8
Minimum Number of Credits = 7

8 Class Periods Total

Southern Lehigh High School Course Elective Worksheet 2020-21

BUSINESS

7000E _____ Accounting I - .5 Credit
7010E _____ Accounting II - .5 Credit (odd grad. year)
7040E _____ Business Concepts - .5 Credit (even grad. year)
7080E _____ Business Law - .5 Credit
7140E _____ Financial Literacy - .5 Credit
7180E _____ Introduction to Business - .5 Credit
7220E _____ Marketing - .5 Credit
7260E _____ Microsoft Skills for College & Career - .5 Credit
7270E _____ Web Page Design I - .5 Credit
7280E _____ Web Page Design II - .5 Credit

ENGLISH

1200E _____ Creative Writing - .5 Credit (Gr 11-12)
1600E _____ Newspaper Journalism - 1.0 Credit
1700E _____ Public Speaking - .5 Credit (Gr 11-12)
1750E _____ Intro to Video, TV & Film Prod - .5 Credit (Gr 10-12)
1751E _____ Adv Video, TV & Film Prod - .5 Credit 9 (Gr 10-12)
1800E _____ Yearbook – 1.0 Credit

MATHEMATICS

2232E _____ Statistics and Probability - 1.0 Credit
2262E _____ Survey of Statistics - .5 Credit
2272E _____ Algebra III - .5 Credit
2282E _____ Trigonometry - .5 Credit
2291E _____ Economic Applications of Math - .5 Credit
2334E _____ *AP Statistics - 1.0 Credit
2404E _____ *AP Computer Science – 1.0 Credit (Gr 10-12)
2414E _____ *AP Computer Science Principles –1.0 Credit
2600E _____ Intro Comp Science I - .5 Credit
2610E _____ Intro Comp Science II (DE) - .5 Credit

MUSIC

7604E _____ *AP Music Theory - 1.0 Credit (even grad. year)
7610E _____ Band – 1.0 Credit
7630E _____ Chorus – 1.0 Credit
7660E _____ Color Guard - .5 Credit
7690E _____ Meistersingers – 1.0 Credit
7700E _____ Music Theory - 1.0 Credit (odd grad. year)
7730E _____ Orchestra – 1.0 Credit
7760E _____ Piano I - .5 Credit
7770E _____ Piano II - .5 Credit
7790E _____ Theatre - .5 Credit

FAMILY & CONSUMER SCIENCES

7300E _____ Concepts In Clothing - .5 Credit (Gr 10-12)
7330E _____ Family & Consumer Sciences – 1.0 Credit
7350E _____ Family Living - .5 Credit (Gr 10-12)
7370E _____ Housing & Interior Environments - .5 Credit (Grade 10-12)
7390E _____ Independent Living - .5 Credit (Gr 10-12)
7400E _____ Multicultural Foods - .5 Credit (Gr 10-12)
7430E _____ Nutrition - .5 Credit – (Gr 10-12)
7440E _____ Child Development - .5 Credit (Gr 10-12)
7445E _____ Careers In Food Service - .5 Credit (Gr 11-12)

VISUAL ARTS

8104E _____ *AP Art History – 1.0 Credit – (Gr 11-12)
8150E _____ Ceramics - .5 Credit
8200E _____ Ceramics II - .5 Credit
8260E _____ Graphic Design – 1.0 Credit
8310E _____ Drawing - .5 Credit
8350E _____ Foundations of Art - .5 Credit
8400E _____ Methods & Materials - .5 Credit
8420E _____ Painting - .5 Credit (Gr. 10-12)
8450E _____ Photography - .5 Credit
8500E _____ Portfolio Preparation - 1.0 Credit (Gr. 11-12)
8550E _____ Three-Dimensional Design - .5 Credit
8555E _____ Portfolio II - 1.0 Credit (Gr 12)

TECHNOLOGY EDUCATION

7881E _____ Arch Design – 1.0 Credit – (Gr 10-12)
7891E _____ Computer Aided Drafting & Design – 1.0 Credit
7913E _____ *Honors Intro to Engineering Design - 1.0 Credit
7923E _____ *Honors Computer Integrated Manufacturing - 1.0 Credit (Gr 10-12)
7933E _____ *Honors Principles of Engineering - 1. Credit (Gr 10-12)

SCIENCE

3304E _____ *AP Biology – 1.0 Credit (Gr 11-12)
3354E _____ *AP Chemistry – 1.0 Credit (Gr 11-12)
3404E _____ *AP Env Science – 1.0 Credit (Gr 11-12)
3204E _____ *AP Physics I – 1.0 Credit (Gr 10-12)
3214E _____ *AP Physics II – 1.0 Credit (Gr 11-12)
3454E _____ *AP Physics C – 1.0 Credit (Gr 11-12)
3510E _____ Environmental Science - 1.0 Credit (Gr 11-12)
3602E _____ Forensic Science – 1.0 Credit (Gr 11-12)
3503E _____ *Honors Anatomy & Physiology – 1.0 Credit (Gr 11-12)
3652E _____ Genetics & Biotech - 1.0 Credit (Gr 11-12)
3752E _____ Kinesiology – 1.0 Credit (Gr 11-12)
3460E _____ Physics:Elec.& Magnetism-1.0 Credit (Gr 11-12)
3902E _____ Zoology – 1.0 Credit – (Gr 10-12)

SOCIAL STUDIES

4204E _____ *AP Gov & Politics – 1.0 Credit (Gr 12)
4304E _____ *AP Psychology – 1.0 Credit (Gr 11-12)
4412E _____ Contemporary American Issues-.5 Credit (Gr 11-12)
4512E _____ Global Issues - .5 Credit (Gr 11-12)
4602E _____ Psychology - .5 Credit (Gr 11-12)
4702E _____ Sociology - .5 Credit (Gr 11-12)
4502E _____ Economics - .5 Cr (Gr 11-12)

OTHER

7560E _____ Gifted Sem IVA - Leadership - .5 Credit
7570E _____ Gifted Sem IVB – Fiction vs. Nonfiction -.5 Credit

.50 Credit – ½ Year Course
1.0 Credit – Full Year Course
* - AP/Honor Course

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