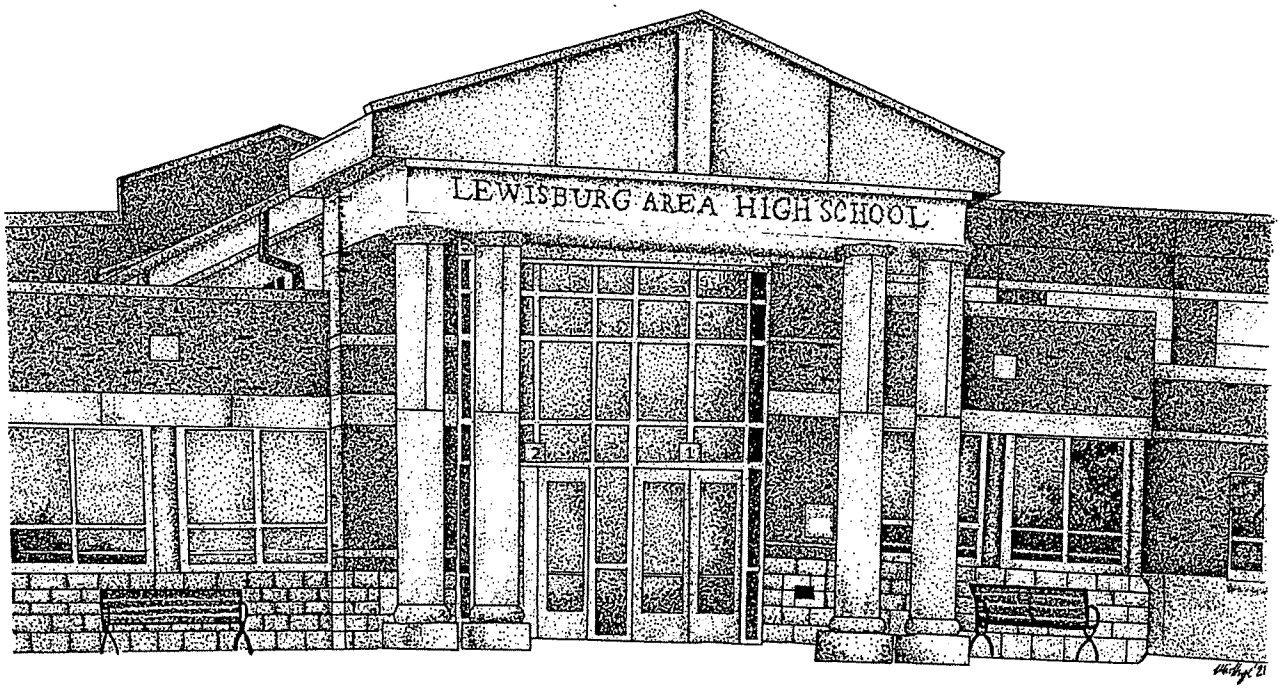
LAHS Course Selection Guide



2021-2022

LEWISBURG AREA HIGH SCHOOL

Course Selection Guide

2021-2022

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Dr. Brenda Zack (K-12 Career Counselor)

ANNUAL ANNOUNCEMENT REGARDING NON-DISCRIMINATION PRACTICES AND POLICIES

- The Lewisburg Area School District's programs are open and available to all students. The district does not discriminate or prohibit students from participation because of race, color, national origin, religion, sex, handicap, or political affiliations.
- The school district's hiring practices are also non-discriminatory. The school district is an equal opportunity employer. In the activities related to employee recruitment and screening, hiring, promotion, demotion, transfer and furlough, the non-discrimination policy stated above extends to include age and veteran status.
- Inquiries or complaints concerning possible discrimination are to be directed to Mrs. Cathy Moser, who serves as the Title IX and Section 504 officer for the school district. She will also provide information regarding services, activities and facilities which are accessible and usable by handicapped persons. Please call 523-3220, Ext. 3255 for additional information.
- Publication of this announcement is in accordance with state and federal laws including Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 and Title VI of the Civil Rights Act.

TABLE OF CONTENTS

DISCLAIMER: Neither this guide, nor any part of it, should be construed as a contract itself. This guide is not intended to be comprehensive and is advisory to only help students, parents, and faculty of Lewisburg Area High School. The school district reserves the right to make changes or exceptions to statements in the Course Selection Guide.

PROGRAM OF STUDIES

This booklet has been prepared for the use of students and their parents in deciding which courses are best suited to the student's' goals, interests, aptitudes, and abilities.

VISION STATEMENT

In the pursuit of excellence and equity. the Lewisburg Area School District is an inclusive learning community that supports students as they realize lives of purpose and fulfillment in our diverse global society.

MISSION STATEMENT

The Lewisburg Arca School District is committed to developing successful. active. informed citizens by providing each student with a personally relevant. intellectually stimulating. innovative educational program supported by caring relationships in a physically and emotionally safe learning environment.

ACADEMIC PROGRAM

The LAHS curriculum is designed to prepare students for an appropriate post-secondary experience, with an emphasis on career and college readiness. Different school situations demand different aptitudes and interests. To assure the greatest possible school success, students should assess their own aptitudes and future plans before selecting the specific courses they wish to pursue. The course descriptions contained in this booklet will be of immediate value and should prove beneficial in the long-range planning that students must do to achieve their desired goals.

Students' choices in high school may often affect their chances for success in future years of education and/or employment. For this reason, students are encouraged to select their courses with the greatest of care. This important educational matter should be discussed with parents. In the event that more information is needed concerning course selection, college admissions and requirements, or employment demands, students and parents should arrange to consult with a counselor. The high school principal reserves the right to place students in courses to enhance their overall program of studies.

SUN AREA TECHNICAL INSTITUTE PROGRAM

SUN Area Technical Institute Courses are designed to prepare students for work in a specific technical field immediately after graduation or for further training in post-graduate education. Students electing this program may attend the Technical School full time in the twelfth grade or, students with an individualized education plan in eleventh grade. A cooperative education program in which students gain "on-the-job" experience is an integral component of the SUN Area Technical Institute program.

COOPERATIVE AGRICULTURAL EDUCATION PROGRAM

Students who have been approved for enrollment in The Cooperative Agricultural Education Program will attend Mifflinburg Area High School. Students in the program will follow the Vocational-Agriculture curriculum, must complete the Graduation Requirements for Mifflinburg High School and will receive a diploma from Mifflinburg upon graduation. Students generally begin this program in grade nine or ten and must be approved for enrollment by the Board of Directors of each school district. Students interested in this program must contact a high school counselor to begin the application process.

MASTER SCHEDULE CONSTRUCTION

Students are presented with course information as well as selection of course requests in the spring of each year. The administration and counseling staff use this information to build the master schedule. This schedule reflects the interests of the students and incorporates the best educational practices for college and career paths. Because course sections are determined by the initial requests and teacher availability, it is essential that adequate time and preparation be put into choosing courses. Every effort is made to reduce scheduling conflicts and to fulfill as many student requests, as possible. The listing of a course does not guarantee that the course will be taught. **NOTE: The administration reserves the right to make any changes or updates to course offerings to the Course Selection Guide. Changes in policy, programming, staffing, or low student enrollment to a given course may result in a course no longer being offered.**

COURSE SELECTION & REGISTRATION PROCEDURE

The steps outlined below should be of assistance to students in proceeding through the course selection and registration process:

Students will receive the Course Selection Guide link to download on their computer and will receive hard copies of the planning form. All information will also be posted online. Paper copies of the Course Selection Guide are available upon request in the guidance office.

Students will complete the following:

1. Work with advisors, teachers, counselors, and parents to select courses for the next school year
2. Make an appointment with his/her current school counselor to discuss course selections, if there are questions.
3. **Select "Alternate" courses for your electives. Please choose carefully as you may be scheduled into these courses if the other courses are full. If alternate courses are not listed and the course requested is not available, school counselors will assign any needed credits.**
4. Complete the Course Registration Form to use as a guide to select courses. Have your parent/guardian sign the form. Once you have submitted your courses, please return the planning guide sheet to your advisor or counselor with signatures.
5. During the scheduling window, select courses in the PowerSchool portal. * Student log-in must be used. This may be completed at home or at school, if assistance is needed. **Initial requests should be submitted by May 21st**.
6. **Changes to the original requests may be made within the PowerSchool Student Portal until May 28th.**

Juniors will meet individually to review schedule requests with Mrs. Fennell and Mrs. O'Connor.
Schedules will be available in early August on PowerSchool.

STUDENT SCHEDULE CHANGE PROCEDURE

The schedule change form will be available on the HS website (www.lasd.us) in August. Just because a change in class is requested, it does not guarantee adjustment will be made. In most cases, schedule changes will be for those seniors who need a change for a particular college major or workforce preparedness.

** The school may make adjustments to what section you are enrolled in for a particular class based on balancing sections.

Schedule changes will not be made for convenience purposes, or for a teacher change.

Only in extenuating circumstances will courses be changed after the start of the school year. Any changes in the student schedule during the school year requires a parent conference and will result in a W/P (Withdraw Passing) or a W/F (Withdraw Failing) grade being recorded on their permanent record. W/F will affect Honor Roll for the marking period

in which the change was made, a W/*P* or W/*F* will not affect grade point average.

Any course change after the midpoint of the first marking period and the 45th day (end of first marking period) will require the student's marking period current grade to transfer to the new course. After completing 45 days of a course (the first marking period), NO schedule changes will be made for the course. No student will be permitted to add or drop a yearlong course after the first 45 days of a semester.

NCAA

Students who do not complete all course work at Lewisburg High School may be in jeopardy of not having enough core courses to meet NCAA Clearinghouse requirements. This includes students who may choose to attend SUN ATI or those students who have transferred into the Lewisburg District during their high school years. Students who have a desire to participate in intercollegiate sports should indicate their interest and work with their school counselor through the course scheduling process to assure that proper course work can be planned.

COUNSELING SERVICES

For purposes of scheduling, college/career counseling, and record keeping, students are assigned a counselor as follows:

Students whose last name begins with A-K- Mrs. O'Connor
Students whose last name begins with L-Z - Mrs. Fennell

Parents/guardians should also feel free to schedule appointments with the school counselors. Below is a general outline of the counselors' work with the students.

Orientation - 9th grade and upperclassmen transfer students

Individual Counseling

Personal/social
Collaboration with stakeholder in the community, including necessary referrals
Course selection and registration
Schedule adjustments
Academic problems as identified by unsatisfactory progress notices, report cards and teacher referrals
Progress toward meeting graduation requirements
Post-secondary plans
Test results and implications
Counselors will meet individually with all Juniors during the second semester and all Seniors during the first semester to help finalize their future plans.

College and Post-Secondary School Counseling

Group and individual meetings concerning college selection, application process, required testing, financial aid, etc.
Sessions with visiting college admission counselors
Writing recommendations and submitting transcripts
Announcements about scholarship opportunities
Informational meetings for families about post-secondary options and financial aid

Technical and Career Counseling

- ✓ Access to local business employment and internship opportunities
- ✓ Career and occupational information
- ✓ Group and individual meetings with students interested in attending the SUN Area Technical Institute
- ✓ Presentations by counselors from SUN Area Technical Institute
- ✓ Visitations at SUN Area Technical Institute
- ✓ Meetings with seniors attending the SUN Area Technical Institute
- ✓ Assistance with work-study program at the SUN Area Technical Institute

Testing

- ✓ Ninth Grade: Possible Keystone Exam in Algebra
- ✓ Tenth Grade: Preliminary Scholastic Aptitude Test; Keystone Exams English Literature, Biology and Algebra, as needed.
- ✓ Eleventh Grade: Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test; Registration for SAT's; ACT's; Keystone Exams
- ✓ Twelfth Grade: Registration for SAT's and ACT's

NAVIANCE

At LAHS, one of the primary objectives is to prepare all students for college, career, and life. Through the use of Naviance, students in grades 10-12 can begin exploring their post-secondary plans. With the help of school counselors, students learn how to access online resources, match their interests to careers, explore colleges and technical schools, search for scholarships, archive important documents such as test scores, letters of recommendation, and more. Students each have a unique log-in and throughout the year, participate in activities specifically geared toward their grade levels. Informational sessions for parents are provided at various points during the school year.

Career Counseling Services

Career Counseling services focus on providing career awareness and career development services K-12 in the District. Using national standards (ASCA) as well as our State standards (22 Pa. Code Chapter 4 Career Education and Work), counselors assist all students in learning about work and exploring employment and career pathways. Students will examine their own interests and aptitudes while developing, creating, and refining a personalized post-secondary education and career development plan. Our Career Counselor, Dr. Zack, works with students and families as well as faculty and community resources to facilitate a comprehensive program guided by the school counselor framework of three domains: academic, career, and social/emotional development.

Career Counseling at the High School (Dr. Brenda Zack)

- Provides grade-level, classroom, small group, and individual opportunities to consider student study, work, and career interests
- Administers interest surveys, learning inventories, and aptitude testing to guide students towards career pathways
- Assists students in the creation of an individualized career plan. Collaborates with staff and students in the development of individualized career portfolios
- Provides information regarding trends in occupations and careers
- Assists students in the development of post-secondary education plans. Coordinates workshops, special presentations, and programs to provide students with resources helpful to planning for careers and work
- Assists students with job shadowing experiences
- Works with local businesses and community resources as well as alumni to assist students in their efforts to network and develop connections
- Communicates with parents and shares resources in consideration of career, education, and work

Appointments can be made with Dr. Zack through the counselor's office or by emailing zack b@lasd.us.

GRADUATION REQUIREMENTS

Graduation Requirements: In addition to course requirements, students are also required to take the state-mandated Keystone Exams. These are intended to be end-of-course testing and will take place after students take Algebra I, 10th Grade English and 10th Grade Biology. **Beginning with the class of 2023, the state has expanded** the options for students to demonstrate postsecondary readiness using four additional pathways, in addition to passing each Keystone exam, that more fully illustrate college, career, and community readiness. See more information at https://www.education.pa.gov/K-12/Assessment°/4,20and%20Accountability/GraduationReguirements/Pages/default.aspx

Graduation Project: The purpose of the culminating project is to assure that students are able to apply, analyze, synthesize and evaluate information and communicate significant knowledge and understanding. All students in the Lewisburg Area School District are required to complete a Graduation Project that will be composed of a written document summarizing their experience *I* research and an oral presentation that includes a visual component.
Graduation Projects may include Career Exploration, Community Service or an Extension of Academic Learning. A minimum of twenty hours must be invested into the project. The project is worth .25 credit and graded P/F with an F recorded as 50%. Students choosing to complete a Career Exploration or Community Service Project must complete the requirement by the Thursday in November set aside for Parent/Teacher Conferences or a 50% will appear on their official records. Records for seniors are updated at the end of each semester.

Lewisburg Area High School requires a total of 27.25 credits for graduation as outlined below:

AREA	CREDITS
English	4.0
Social Studies	4.0
Science	4.0
Math	4.0
Physical Education	2.0 (.5 credit each in Grade 9-12)
Arts and/or Humanities Health	1.5 (See definition below)
Personal Finance and Career Exploration	0.5
Performing Arts Credit	0.5 (9^{th} grade-*excused if student is ensemble)
Electives	6.5
Completion of Graduation Project	0.25 (See Description Above)
Total Credits	**27.25**

Arts and Humanities - Courses in art, music, English, foreign languages, family and consumer science, business, and social studies. **Students must complete at least one course in the Visual Arts.** For students not in band, choir, or orchestra they must take Performing Arts Appreciation, Band Techniques, or Music Technology in ninth grade to fulfill the performing arts requirement. For the 21-22 school year, sophomores who didn't complete the performing arts requirement will need to make sure one of the above classes or ensemble is scheduled.

SUN Area Technical Institute students shall be permitted to graduate with the following adjustments to the requirements: 3.0 credits of Science, 3.0 credits of Social Studies, 3.0 credits of English, 4.0 credits of Math.

GRADE LEVEL SCHEDULING REQUIREMENTS

Students must complete a minimum of 7.0 credits and can take a maximum of 8.0 credits each year.
Most AP courses begin in 11th grade, with the exception of AP Computer Science Principles and AP European History. It is recommended, but not required, for students to complete at least three years of a foreign language. The Driver Education elective is strongly recommended for 9th grade students unless they are choosing another, outside provider.

Course Weighting:
AP course grades are multiplied by a factor of 1.12 providing the student earns the equivalent grade of C or higher. Honors classes are weighted by a factor of 1.06 providing the student earns the equivalent grade of C or higher.

SPECIAL COURSE OPPORTUNITIES

BUCKNELL UNIVERSITY COURSE **#HS 295**

Students who have demonstrated superior academic aptitude and achievement may have the opportunity to enroll in courses at Bucknell University. This program is open to eligible juniors and seniors who are in the top 20% of their graduating class. Lewisburg Area High School's cooperative agreement with Bucknell University allows students to enroll in courses tuition-free each semester; students may matriculate in day or evening classes during regular semesters. Students are limited to one course per semester or summer term. Typically, students may not take a course at Bucknell that is offered at Lewisburg Area High School if they have not taken it first at LAHS. Students must have completed one semester at Lewisburg Area High School before enrolling in a course at Bucknell. All effort will be made to accommodate students who may have a conflict between a Bucknell Class and a core Lewisburg Area High School Class.

Any student interested in this special program should seek further details from his/her school counselor. Final course approval will be granted by the principal. All registration must be initiated through the High School Guidance Office.

Grade Guidelines: Students who enroll in Bucknell or other college courses should understand these guidelines relative to the grade earned in each course: (l) The grade earned in the course will not appear on the high school report card, nor will it be counted in the GPA. (2) The course and grade earned will be listed on the student's official transcript.

SUSQUEHANNA UNIVERSITY COURSE **#HS295**

Students who have demonstrated strong academic aptitude and achievement may have the opportunity to enroll in courses at Susquehanna University. The program is open to eligible juniors and seniors. Lewisburg High School students can enroll in SU Courses each semester, and there is no tuition cost for the courses. All enrollment information is handled by high school counselors, and student enrollment is limited to 8 credits in one academic year.

Grade Guidelines: Students who enroll in Susquehanna courses should be aware of these guidelines for grades earned in each course: (1) The grade earned in the course will not appear on the high school report card and will not be counted in the GPA. (2) The course and the grade earned will be listed on the student's official LASD transcript.

SENIOR SERVICE /INTERNSHIP

#HS298

This program is for seniors who wish to practice and refine skills or to learn new skills through work or study. Each participant will choose a sponsor (a teacher or a community leader) who will act as a consultant, and to whom the student will be responsible. All participants will meet once per marking period with the staff. Eligible students must have satisfactory attendance to be considered for enrollment. A reflection paper will be written at the completion of required credit hours. Senior service must be scheduled into open blocks; schedules will not be adjusted. In addition, the student's academic and attendance records will be reviewed prior to approval in the program. Senior Service is usually limited to one semester.

COURSE ACCELERATION

A student may request to accelerate in select courses within the curriculum appropriate to his or her level of competency. Courses that are LASD requirements may not be taken online or accelerated. All requests for course acceleration must be made via submission of the Course Acceleration Request Form obtained from the Guidance Office. Requests must be submitted prior to May 1st for summer and fall acceleration, with final approval granted by the principal. Depending upon the type of acceleration, credit might be given for the course on a Pass/Fail basis. Interested students should see School Board Policy #215 or Mrs. Fennell or Mrs. O'Connor for more information.

DISTANCE LEARNING OPPORTUNITIES

Students who reside in the Lewisburg Area School District interested in cyber education are able to participate in distance learning opportunities through a program offered by the District. Students and parents wishing to pursue such a program should develop their proposed schedule in consultation with their school guidance counselor. Final approval for participation in these opportunities will be granted by the Building Principal or the Assistant Superintendent. Students who participate in the Lewisburg Area School District e-LASD school program may receive credit toward a Lewisburg Area High School Diploma, providing they meet all LAHS graduation requirements. All requests to participate in the LASD e-School program must be submitted within 10 days of the semester. Second semester seniors are not eligible to switch to the LASD e-School program.

DUAL ENROLLMENT-ACE/ACE STEM

The Lewisburg Area High School participates in a program with Bloomsburg University that allows to take college courses at reduced tuition rates. The Advanced College Experience (ACE) Program at Bloomsburg University allows qualified high school seniors to take one or more college courses. Courses taken through the program would satisfy high school graduation credits and allow students to begin to earn college credits at a reduced cost. Students may be able to save up to 75% on tuition in the ACE Programs.

Students also have the opportunity to attend the STEM Magnet program through Bloomsburg University, which would allow juniors or seniors to take courses in Health Sciences or Early Childhood Education. Students would take LAHS courses in the morning and Bloomsburg University courses in the afternoon for select subject areas. More information about ACE and ACE STEM Magnet programs can be found at www .Bloomu.edu/ace or https://www.bloomu.edu/stem.

Students interested in pursuing this dual enrollment option should meet with his/her counselor for more information. There are program enrollment requirements and deadlines. All requests for dual enrollment are subject to the final approval of the principal.

Students attending SUN ATI may be eligible to earn college credits while attending SUN through the Penn College NOW program. Students should work with guidance counselors to learn more about this opportunity.

LEARNING SUPPORT PROGRAM

STUDY HALL SUPPORT

This course is designed for students enrolled in the Learning Support Program. The course is designed to identify and remediate academic and emotional needs while providing instruction in organizational, study, and test-taking skills. Students are instructed in various study and organizational skills while identifying their academic and behavioral strengths and needs. Special attention is given to individualized goals and coping skills necessary to succeed in the regular classroom environment. Students will also explore various career and college options. To receive credit, students must attend with the assigned teacher.

RESOURCE COURSES

These courses are designed for students enrolled in the Learning Support, Supplemental Support, or Emotional Support Programs who, despite adaptations and support, have experienced difficulties in regular education classrooms. Students who have been identified for these courses are provided specialized instruction in Mathematics, Science, English, Social Studies and/or other subjects, depending on individual needs and abilities. Instruction in these classes is provided by a regular and/or highly qualified resource teacher in small group or individualized settings.

GIFTED PROGRAM

The Gifted Program offers several opportunities for students who are identified as gifted with a Gifted Individualized Educational Plan (GIEP). These opportunities provide a means for students to reach their academic potential, and to broaden their experience in subject areas beyond what is offered through differentiated instruction within the high school curriculum.

ENROLLMENT - Students in the Gifted Program are encouraged to take academically challenging courses through the Honors and AP courses offered within the curriculum. These students may also wish to investigate other opportunities that are available through the acceleration policy described on page 8 of this guide.

ENRICHMENT - A student may choose to complete an independent research project with a member of the high school faculty as his/her mentor. A planned course of study must be completed by the student and teacher and submitted to the high school gifted coordinator, which will become part of the GIEP. Credit will be awarded on a pass/fail basis. Students may not earn more than one credit per year for independent enrichment studies.

THE ADVANCED PLACEMENT PROGRAM FOR COLLEGE CREDIT

The Advanced Placement Program is a cooperative educational venture between the College Board and Lewisburg Area High School. It is based on the fact that many young people can complete college-level studies while in high school. Like other programs of the College Board, this program is national in scope. Advanced Placement courses are designed to be the equivalent of freshman level college courses, and as such require more individual work than many other courses. Students who take Advanced Placement courses generally do so with the idea that they will take an Advanced Placement examination offered by the Educational Testing Service.

Advanced placement examinations are offered throughout the world each May. No examination in any subject area is longer than three hours. They cost about $95.00 each and are administered in participating schools. All the examinations contain either an essay or problem-solving section; most of them also contain a section consisting of objective questions. The tests are scored by readers and are assigned grades: 5 - Extremely Well Qualified; 4 - Well Qualified; 3 - Qualified; 2 - Possibly Qualified; 1 - No Recommendation.

Many colleges grant credit and advanced standing automatically for qualifying work on the examinations; some grant advanced standing or credit only; others are still establishing their policies. It is the candidate's responsibility to apply for proper placement and credit at college registration. Courses that are available at Lewisburg Area High School that could help prepare the student to take these exams are:

AP Eng. Literature and Composition
AP Eng. Language and Composition
AP United States History
AP Government and Politics
AP Art History (offered in even graduation years)
AP Economics
AP Biology
AP Chemistry
AP Environmental Science
AP Physics 1
AP Physics 2
AP Calculus AB
AP Calculus BC
AP Statistics
AP Art and Design Year 1
AP Art and Design Year 2
AP European History (10)
AP Music Theory
AP Spanish
AP Computer Science Principles (10)* (New in 2021-2022)

Interested students should refer to the appropriate departmental section in this booklet for course numbers and descriptions. For students to be admitted to Advanced Placement courses they must be juniors or seniors, except for AP European History and AP Computer Science Principles (10). AP Courses are weighted by a 1.12 multiplier.

By junior and senior year, students have had many opportunities to explore electives in various career pathways. While LAHS offers one of the highest selections of AP courses in the region, the goal should not be to have students choose as many AP courses as possible. Students and parents should carefully consider the time and commitment outside of class that come with taking AP courses. The decision on how many AP courses to select should be balanced with other aspects of their lives, such as extracurricular activities, family time, and jobs.

What's Different in 2021-2022

Added:

AP Computer Science Principles- 10th graders may take if they meet the prerequisites

Course Title Changes:
AP Art and Design Year 1 (Previously AP Art Breadth)
AP Art and Design Year 2 (Previously AP Art Depth)

Not Offered:

Theatre Arts

This year the scheduling portal on PowerSchool will be available to all students/families currently in Grades 9-11 through May 28th. During this time, students will make their requests for the 2021-2022 school year. Students and parents who wish to complete the scheduling process at school should make an appointment with their counselor by calling the Guidance Office. Requests may be changed viewed and changed through June 10th

Signed course selection sheets (parent signature) required by May 14t.

ARTS (Visual) and HUMANITIES

ELEMENTS OF ART

#712
Grades 9, 10, 11, and 12 (1 Semester, .5 Credit)

Emphasis is on the art elements and principles of design using various materials. Course activities include studies in drawing emphasizing line, shape, texture, composition, proportion, perspective, color mixing and terminology; painting emphasizing color, space, and form; typography; art from other cultures; art history; aesthetics; and art criticism.

PRINCIPLES OF DESIGN

#704
(1 Semester, .5 Credit)

Grades 9, 10, II, and 12

Emphasis is on the principles of design, further exploration and development of drawing emphasizing composition and proportion, art criticism, creative thinking, problem solving, art history, and aesthetics. Assignments will include exploration in drawing, painting, sculpture, graphic design, and ceramics. All students will develop an art vocabulary and improve technical skills and craftsmanship.

CERAMICS I
Grades 9, 10, 11, and 12

#705
(1 Semester. .5 credit)

This is a course that teaches the history or clay through modern hands-on projects. Students will develop their skills in the varying ceramic styles from pinch pots to coil and slab building. The course finishes with a culmination project of all three building styles. Students may get to experiment with throwing on the wheel, but the focus is on hand-building. Students will learn how to make both functional and sculptural ceramic-ware in tandem with a greater understanding for this age-old art form.

CERAMICS 2
Grades I 0-12

#707
(1 semester. .5 credit)

Prerequisites: #705 Ceramics I

This is an extension of the content learned in Ceramics I. Students will fine tune their abilities when using a combination of building techniques and apply them to choose-based projects both sculptural and functional. They will learn subtractive sculpture and they will have routine wheel throwing scheduled into the class as an ongoing opportunity to create more functional work.

DRAWING
Grades 9-12

#701
(1 Semester, .5 credit)

Emphasis in this class is on the ability to develop observational skills as students create drawings in a variety of themes and mediums. Topics to be covered include perspective, mark making, line quality, value, and texture through still life, landscape, and portraiture.

PAINTING
Grades 9-12

#706
(1 Semester. .5 Credit)

Emphasis will be on color theory. techniques and expression in painting. Art history. art appreciation. creativity and craftsmanship will be an integral part of the class. All students will explore various materials. tools and techniques to increase their art vocabulary and develop their painting style.

DESIGN IN 3D
Grades 9-12

#729
(1 Semester, .5 Credit)

Students will explore three-dimensional construction, that is both additive and subtractive. Materials may include wood, plaster, clay, papier maché, cardboard, found objects and paper. This is a sculptural class that is primarily hands on work and student-interest based. All students will explore the principles of design, art history, and aesthetics.

AP Art and Design Year 1
Grades I 1-12

#735
(1Year, 1 Credit)

Prerequisites: Successful completion of two previous semesters of Art.

The College Board AP Art and Design Program includes three different courses: AP 2-D Art and Design, AP 3-D Art and Design, and AP Drawing. Lewisburg offers two years of AP Art and Design so that students are prepared at the end of "Year 2" to submit a portfolio in the course of their choosing. "Year 1" is a year of exploration in all mediums, it is an advanced elective art course designed to build a firm foundation in the visual arts, through intensive study, following the AP guidelines. Emphasis is on mastery of those skills to complete an explorative art portfolio that shows growth while establishing your personal art style. Students will mostly work with hands-on choice-based projects, and will complete one research project. Students must demonstrate the ability to work independently and be self-directed; students will also explore the design principles in-depth, creative expression, originality, craftsmanship, aesthetic perception, art heritage, criticism, assessment, and aesthetics.

AP Art and Design Year 2
Grade 12

#731
(1 Year, 1 Credit)

Prerequisites: #735 AP Design Year 1

AP Art and Design Year 2 is the most advanced elective art course at LAHS with individualized intensive study, following the AP guidelines. Emphasis is on mastery of skills to complete an art portfolio within **one** of the following categories: 2-D Art and Design, 3-D Art and Design, or Drawing. Following "Year 1" students should have a clear understanding of the portfolio type they should spend a full year working in. Students must demonstrate the ability to work independently and be self-directed; students will also explore the design principles in-depth, creative expression, originality, craftsmanship, aesthetic perception, art heritage, criticism, assessment and aesthetic values focusing on their own artistic production. Work includes hands-on projects, a sketchbook, homework assignments, worksheets, critiques, a research project, establishment of a digital portfolio, and digital requirements established by AP guidelines.

Humanities:

PHOTOJOURNALISM
Grades 9, 10, 11, and 12

#850
(1 Year, 1 Credit)

Students are introduced to the historical importance of journalism in America. They study the basic principles of print and online journalism as they examine the role of printed news media in our society. They learn investigative skills, responsible reporting, and journalistic writing techniques as they read, respond to, and write their own news and feature articles. Throughout the course, students will explore a variety of projects from taking selfies. to taking photos using fashion models, to the art of staging food for photos. Students conduct interviews, research, write, and design their own publications, including the student yearbook.

BUSINESS & TECHNOLOGY

HIGH SCHOOL SEMINAR **#803**
Grade 9 Only (1 Semester, .25 Credit)

High School Seminar is a course to help prepare freshmen students for success during their four years of high school. This semester-long, required class will focus on investigating career pathways, study skills, digital literacy, digital citizenship and social and emotional learning. During the 11th grade year, they will take a course on financial literacy to prepare them for real- world skills such as budgeting, credit, interest rates, and more.

PERSONAL FINANCE/ CAREER **#801**
Grade 11-12 (Only if not completed in Grade 9) (1 Semester.5 credit)

Career Exploration:
The Career Preparation course is an exploratory class in which students will identify interests, aptitudes, and career awareness/job-related options via assessment, in-class instruction, and guest speakers/presentations. In addition, students will understand the job acquisition process by completing a resume, cover letter, job application, and mock interviews in preparation for attaining a job. This course is designed to equip students with the ability to identify their ideal career, how to obtain and retain a job, and contribute meaningfully to society.

Personal Finance
This course is designed to prepare students for the financial responsibilities they will face upon graduation and most importantly as a consumer through the teaching of financial concepts. They will gain practical life skills and knowledge necessary to maintain the finances of a household with topics such as paychecks, budgeting, income taxes, checking accounts, saving, investing, credit, and taxes.

ENTREPRENEURSHIP/SMALL BUSINESS **#802**
Grades 9-12 (1 Semester, .5 Credit)

This introductory to business course focuses on mastery of the National Standards for Business Education and Pennsylvania's Standards for Entrepreneurship and Management. Students will analyze and develop a business plan and learn the key skills, attitudes and guidelines that it takes to get an entrepreneurial venture off to a good start, including identifying entrepreneurial characteristics, evaluating opportunities, engaging in customer discovery, design thinking, feasibility, financing and planning for success. The course is based on The University of Iowa's Bizinnovator Curriculum, and upon completion, students are eligible to receive 3 University of Iowa College Credits, after sitting for final and achieving a score of 70% or higher. This course is recommended for students who have a passion for creating new things, problem solving, and who are interested in business or plan to own and operate their own business.

APPLIED LAW **#828**
Grades 9 - 12 (1 Semester, .5 Credit)

This course is designed to acquaint the student with the basic principles of law that apply to everyday life. Students are introduced to different types of laws and how they are created and discuss the differences between criminal, civil, procedural, and substantive law. Students learn how to recognize and create legally enforceable contracts by the introduction of the six elements of a contract: offer and acceptance, genuine agreement, consideration, capacity, legality of contracts, and written contracts under the Statute of Frauds. Students will also analyze and discuss current legal issues through current events highlighting legal issues in the news. This course is to all students planning on a business or legal career, or who plan to own and operate their own business.

ACCOUNTING I **#841**
Grades 9-12 (1 Semester, .5 Credit)

This introductory course is a valuable first step for students planning on working in business, starting their own business, majoring in business in college or who simply wants a good understanding of basic finances. The Accounting I curriculum is

designed to provide students with the knowledge and skills necessary for a solid understanding of accounting principles and bookkeeping fundamentals.

Accounting I students learn the "language of business" by understanding the basic principles of the accounting cycle for a sole proprietorship, which includes analyzing transactions, journalizing, preparing closing entries, generating a trial balance, and preparing financial statements. The basic financial statements are presented-balance sheet and income statement. Students are exposed to the recording, summarization, and presentation of financial information and methods of analyzing these statements.

ACCOUNTING II **#843**
Grades 10-12 (1 Semester, .5 Cred

Prerequisites: Passing grade in Accounting I. (Recommended grade of 83%)

This course is designed for the student who wants to enhance accounting concepts acquired in Accounting I and is an excellent head start for those planning to major in Business/Accounting in college. Students will complete the accounting cycle for a corporate merchandising business while gaining experience with plant assets, depreciation, inventory valuation, notes, and accruals. They will apply these skills to the day-to-day financial reporting and decision making of a corporation. Accounting II expands the students' understanding of accounting subsystems and internal control procedures.

GRAPHIC DESIGN **#910**
Grades 9-12 (1 Semester, .5 Credit)

This course will emphasize visual communication principles and visual presentation aspects of Web pages and visual media, including page layout, typography, color theory, navigation, and image creation and editing. Prior to creating webpages students will understand how the Internet works, and how information is transferred from one server back to their web browser. Students will then apply principles of design in the creation of various visual media projects. Including but not limited to web pages using various markup languages, as well as the creation of various vector and bitmap related projects using CNC technology.

COMPUTER PROGRAMMING **#485**
Grades 9-12 (1 Semester, .5 Credit)

This course introduces students to computer science more specifically computer programming at the beginning level, but students will be encouraged to explore beyond the basic level. A structured approach to programming will be employed using Python.
Topics include computer hardware and operating systems, problem-solving techniques, object-oriented program design, program coding, testing, and implementation, and documentation issues and techniques. Students will create computer programs to perform a specific function. Students will also use and apply knowledge learned from Python to program Vex robots in Python as well as Robot C languages.

INDEPENDENT STUDY IN COMPUTER SCIENCE **#482**
Grades 10-12 (1 Semester, .5 Credit)

Prior instructor approval is required to take this course. Students who exhibit a strong desire to pursue a particular study on an independent basis are encouraged to enroll. However, students must discuss their plans with the instructor and receive approval of the project prior to registering for the course. Note: only a small number of independent projects will be scheduled each semester.

ADVANCED PROTOTYPING AND DESIGN
Grades 9-12

#924
(1 Semester, .5 Credit)

Students in this course will develop an in-depth understanding of the science and technology in converting wood into useful products. Students will study the material science and engineering of using wood and wood fiber as a manufacturing material. The course will enhance the students' knowledge as they learn a broad range of specialized skills. The Advanced Prototyping and Design course allows students to convert concept sketches and renderings into real life design, teaching students the science, mathematics, and critical thinking skills needed in the creation of various prototypes and products.

INTRO TO ENGINEERING DESIGN
Grades 9-12

#920
(1 semester, .5 credit)

Foundations of Engineering Design are a high school level introduction course. Students are introduced to the engineering profession and a common approach to the solution of engineering problems, and engineering design process. Utilizing the activity-project-problem-based teaching and learning pedagogy, students will progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills.

INDEPENDENT STUDY IN TECHNOLOGY EDUCATION
Grades 10-12

#907
(1 Semester, .5 Credit)

Prior instructor approval is required to take this course. Tenth through twelfth grade students having completed a minimum of two semester courses of Technology Education may choose an independent study. A specific technology area of concentration may be elected which emphasizes the application of technology to solve problems encountered in real life situations. The technology education instructor and the student will determine the scope of the project, instructional time spent, and evaluation procedures.

COMPUTER AIDED DRAFTING AND DESIGN (CADD)
Grades 9-12

#911
(1 Semester, .5 Credit)

Students learn to use AutoDesk Inventor, a 3-D solid modeling software package. After a computer hardware/software orientation, students learn to read and create several types of engineering technical drawings. Students will design 3-D objects using CADD software and then may create that object using a Computer Numerical Control (CNC) machine. Students will design both individual components and larger assembly drawings consisting of numerous individual parts. Students will explore Architectural Drawing concepts. Students will design building structures using AutoDesk Architectural software.

COMMUNICATION SYSTEMS/ VIDEO PRODUCTION
Grades 9-12

#919
(1 Semester, .5 Credit)

This course covers the history and development of cinema, documentaries, live production, and other new media and film technologies. Students will explore the Audio and Video production industry and its post-secondary educational and career opportunities. Students will gain job-specific training for entry-level employment in audio, video, television, and motion picture careers. Professional grade equipment and software will be used in the creation of student lead productions. Students learn skills and practices in various aspects of cinema and video production by applying the elements of art, principles of design, integration of technology for the effective visual communication of their ideas, feelings, and values. Students develop skills, including camera/recording operation, framing and composition, manipulations of space and time, idea development and communication, the mechanics and psychology of editing, script writing or text creation, light and sound, and impact.

ENGLISH LANGUAGE ARTS

ENGLISH LANGUAGE ARTS 9 **#101**
Grade 9 (1 Year, l Credit)

Students will develop reading, writing, listening, and speaking skills. Students will learn to read independently as well as analyze and interpret texts. Literature, both fiction and non-fiction, will be used to develop skills. Various types of writing may include poems, short stories, plays, complex informational pieces, and persuasive pieces. Students will focus on clear research and conduct inquiry on self-selected and/or assigned topics. Students will improve the quality of their writing, understanding style and using grade appropriate conventions of language. Students will listen critically and respond to others while demonstrating an awareness of audience. Classes will understand the characteristics and functions of the English language. Students will use media and technology resources and understand how techniques used in media influence society.

HONORS ENGLISH LANGUAGE ARTS 9 **#102**
Grade 9 (1 Year, 1 Credit)

Utilizing a variety of writing genres, this course will focus on close reading of text for understanding and analysis purposes. Students will build their skill in analyzing, interpreting and evaluating the authors' use of techniques in fiction and nonfiction classical and contemporary works. They will study the impact of cultures and writers on literature and will build their skill in identifying and using literary devices through textual analysis. The course will focus on skills that aid students in interpreting the literal and figurative meanings of words as well as their origins. Students will continue vocabulary acquisition through the use of the English department's vocabulary program, which focuses on words that appear on the SAT test. Students will write beyond the five-paragraph. Students will build communication skills during class discussions of material by learning how to respond in a scholarly manner and will be able to support their position with textual responses in both large and small group situations. Students will also make associations between history, the arts, and literature. Through the use of various mediums of art, students will connect to the texts on both an intellectual and mimetic level.

ENGLISH LANGUAGE ARTS 10 **#107**
Grade 10 (1 year. 1 credit)

In this course, students will analyze various forms and genres of literature on a variety of levels, including thematic development, authorial assumptions and worldview, and point of view. Students will use textual evidence to answer specific questions and prompts, as well as to engage in collaborative discussions on grade-level topics. Students will write to different types of prompts of varying lengths, using academic vocabulary, sufficient facts, concrete details, and quotations. Students will read most of the texts in class and will also have an opportunity to better understand the texts through visual media and other supplemental materials pertaining to each module. Students will access some texts digitally and will be able to use the class' online site to obtain documents and handouts pertaining to each unit, notes, study guides, and assessments. English 10 will follow the five modules created by the PA Core Standards. Students taking this class should plan to take Keystone English Language Arts test at the end of the course.

HONORS ENGLISH LANGUAGE ARTS 10 **#108**
Grade 10 (1 Year, l Credit)

The course will focus on using textual examples to defend opinions and analytical responses. The course will focus intensely on writing to various prompts; the length of the writing will vary from short writing assignments to several pages.
Students will increase their understanding of the texts through supplemental activities, including music, art, technology, and non-fictional texts. Students will have nightly reading assignments. Many texts can be accessed digitally; students will use the district Moodie to obtain documents, handouts, and notes pertaining to each unit. Honors Ten English follows the five modules created by the PA Core Standards. Students will sit for the Keystone Literature Exam in the spring.

ENGLISH 11 LANGUAGE ARTS **#111**
Grade **11** (1 Year, 1 Credit)

In this course students will develop reading, writing, listening, and speaking skills. Students will develop these skills through a systematic study of American Literature including poetry, fiction, nonfiction, drama, and film. They will apply critical thinking skills to texts, analyzing and interpreting literature, evaluating relationships, drawing inferences, and analyzing the effective use of literary elements. Students will expand and enrich their vocabulary through direct vocabulary study and through the examination of the relationship of new words to other words in context. Students will develop writing skills through grammar

study and various writing exercises. Students will develop speaking and listening skills through presentations, class discussions, and small group discussions. Students will engage in collaborative learning experiences and group and individual projects. Assessments will include daily reading assignments and homework, quizzes, vocabulary tests, unit exams, essays, presentations, projects, and participation in classroom discussions.

ENGLISH LANGUAGE ARTS 12 **#118**
Grade 12 (1 Year, 1 Credit)

In English 12, students will continue to build their reading and writing skills as they relate to their postsecondary plans. Students will read a variety of modem literature and delve into different schools of literary criticism in order to analyze literature from multiple perspectives. Students will develop the skills to evaluate textual evidence in order to make inferences and draw conclusions about the author's implicit and explicit beliefs about a subject. Students will read a variety of texts and evaluate the authors' effective use of literary devices. Students will hone their writing skills by completing writing in multiple genres and will apply critical thinking skills as they respond to complex informational and persuasive pieces. Topics for writing could include but are not limited to: literary analysis, argumentative response, and cover letter/resume. Students will continue to develop speaking and listening skills through presentations and class discussions.

FILM STUDY AND PRACTICE **#195**
Grades 9-12 (1 Semester, .5 Credit)

In this course students will start out by analyzing films for the various ways to develop plot, manipulate the viewer through sound, and create a visual work of art through angles. After looking at the bigger picture, each student will be able to write a screenplay. Throughout the writing process there will be tutorials on how to use a screenwriting app on your personal device along with a look at other scripts and how they are developed. At the completion of the semester students will choose a scene to record with classmates and present as a final for the course.

CREATIVE WRITING **#145**
(Grades 9-12) (.5 Semester, .5 Credit)

In Creative Writing, students will have an opportunity to write and workshop as they prepare to share their own creative work with an audience. They will participate in rigorous, teacher-led workshops with the goal of identifying existing strengths and areas of improvement in their own and other's writing, developing their skills as both writers and editors. The number one goal in a workshop is to provide the writer with the tools and encouragement to attempt an improved second draft of their piece. If the workshop does not accomplish this, it has not been successful! Units will also include readings on craft as well as texts to be used as examples in discussions. Writing exercises will also be periodically assigned. All genres are welcome: fiction, creative non- fiction, poetry, drama, screenwriting, and more.

THEATRE ARTS **#138**
Grades 9-12 (1 Semester, .5 Credit)

Not offered in 2021-2022

Theatre Arts is an elective for students interested in the visual art of acting. Students will read several plays during the semester through the strategy of reader's theatre. Within each unit specific theatrical devices will be addressed such as: characterization, blocking and physical use of the actor's body, set design, costume design, accents, language and line delivery, and performance of specific scenes in classroom performances. Students will have reading guides for each unit in order to help them better understand the play and the playwright's message to the audience. Students will have unit exams and will work on a variety of projects specific to each unit.

MYTHOLOGY AND LEGENDS
Grades 9-12

#144
(1 Semester, .5 Credit)

Instruction in the course of Myths and Legends is based on the PA Core English Language Arts standards. Students focus on reading, writing, speaking, and listening activities framed around the big idea of exploring and analyzing mythology from around the world. Students read fictional mythology and non-fictional informative texts to provide context. Students write to analyze, connect, and evaluate these texts. Students engage in class discussions involving informational text and literature to interpret diverse perspectives from across the world and history. Students address how literature is a reflection of the society that produced it. Students address how heroes of a culture reflect the values of a society. Key outcomes include citing strong and thorough textual evidence to support analysis of what the text says explicitly and implicitly; analyzing different perceptions of the purpose of life, the duties of humanity, and the function of death based on texts; identifying how audience and purpose influence a writer's choice of organizational pattern; and constructing original creation and hero myths.

SPEECH
Grades 9-12

#157
(1 Semester, .5 Credit)

Instruction in the course of Speech is based on the PA Core English Language Arts standards. Reading, writing, speaking, and listening are framed around the big idea that communication is a process that requires preparation. Students read informative and persuasive texts and watch examples of speeches to provide models. Students write and present to inform and persuade their audience. Students engage in class discussions involving informational and persuasive presentations to interpret diverse perspectives within the audience and society. Key outcomes include identifying how audience and purpose influence a speaker's choice of organizational pattern; analyzing different perceptions of selected topics; evaluating presentations; and constructing a complete script and delivering speeches using information from their research.

AP ENGLISH LANGUAGE & COMPOSITION
Grade 11

#185
(1 Year, 1 Credit)

The AP English Language and Composition course is designed to parallel an introductory college course in composition. This course is a rigorous class in which students will develop skills in reading and writing over the course of four thematic units. The course is aligned with the PA Core Standards for English Language Arts as well as the curricular requirements set forth by the College Board. Students will be challenged to engage in higher-order thinking based upon in-depth reading and thoughtful writing. Students will become better readers as they practice close reading and examine the rhetorical strategies of a wide variety of nonfiction prose and visual texts. Students will improve their writing through informal and formal writing exercises. Student writing will display skillful focus, development, organization, and style. Students will complete a researched argumentative paper that shows understanding, analysis, and synthesis of ideas from a number of different texts and follows MLA conventions of citation. Students will improve their vocabulary by using direct vocabulary study as well as by practicing precise word choice during the writing and revising processes. Students enrolled in this course will be prepared to take the AP English Language and Composition exam, which may count as college credit at some colleges and universities.

AP ENGLISH LITERATURE AND COMPOSITION
Grade 12

#187
(1 Year, I Credit)

AP English Literature and Composition focuses on reading literature from a variety of time periods and genres. Students will read widely in this course and reflect on their reading through extensive discussion, writing, and rewriting. Students will write a variety of papers including analytical papers focusing on a particular literary prompt, expository essays using textual examples and personal experience to respond to or defend a particular opinion, and argumentative essays. There will also be essays incorporating the visual arts as a means of better understanding the texts, and timed in-class essays taken from previously used national exam prompts. Students will use MLA (Modern Language Association) Format for their outside writings. Prompts used in class will be those created and used by the College Board for the timed in-class essays. In all cases the writing and reading in this course will allow students to interact and better understand the writer's purpose, genre conventions, and how language itself contributes to the effectiveness in writing.

FAMILY AND CONSUMER SCIENCES

BAKING AND PASTRY (Level 1) **#870**
Grades 9-12 (1 Semester, .5 Credit)

Baking and Pastry is an introductory baking class. Culinary skills will be taught in Quick breads, Yeast breads, Cookies, and Pie/ Pastry Units. In each unit students will learn how to modify recipes to meet individual dietary needs while lowering fats, sugar, sodium, and calories. Measurement, conversions, equipment, teamwork, and sanitation will also be taught. Labs are designed to apply information learned in class.

CULINARY ARTS (Level 2) **#892**
Grades 10-12 (1 Semester, .5 Credit)

Prerequisite: Baking and Pastries

In Culinary Arts, students will study and prepare food from cultural cuisines such as Italian, Mexican, and Chinese. Cultural food prep techniques using knives, woks, pasta machines, food processors, pizelle irons, and other equipment will also be studied. Students will learn sanitation, food purchasing information, and recipe adaptations (changing recipes to serve various dietary needs such as vegetarianism, lower cholesterol, and sodium reduction. Culinary will engage in an exciting Iron Chef competition at the end of the semester to put the skills learned to the test!

FIBER ARTS (Clothing and Crafts) **#871**
Grades: 9-12 (1 Semester, .5 Credit)

Fiber Arts is a hands on, project based course, intended to teach students how to construct textile materials in a creative and useful way. This course is filled with opportunities to problem solve, think critically and creatively, and collaborate. The course will begin with a unit on *Machine and Hand-stitching Basics and Textile Science.* In this unit, students will learn the features of the machine along with basic sewing skills. In addition, students will learn the types of textiles, their characteristics, benefits, and drawbacks. This will allow students to select the optimal fabric for different kinds of projects. The first unit ends with the first project: Elastic Waste Project, which applies the basic skills, taught. Students will become pattern literate to be able to construct their choice of shorts, pants, or a skirt. Students will also be able to tailor their project to fit them perfectly. *Upcycling* is the focus of the second unit. Conservation, reducing, reusing, and recycling will be explored along with upcycling; increasing the value of an otherwise worn out item. Students will then research, design, and create their own upcycling project using the best sewing practices. The third and final unit is a *Project Choice* unit where students can pick a project of their choice after mastering secondary levels skills like zippers, French seams, and applique. For example, students might make a tote bag, stuffed animal, clothing item, or quilt. This unit is meant to apply the skills learned throughout the course to construct a more challenging textile based project.

FOOD AND NUTRITION **#872**
Grades 9-12 (1 semester, .5 Credit)

This course is an exploration of food. Students will progress through several units that include protein, grains, dairy, vegetables, and fruits. In each unit, students will learn about nutritional properties, quality comparison, alternatives and substitutes related to dietary restrictions, along with safe and delicious preparation techniques. The course is infused with cooking labs; therefore, students will be able to understand proper cooking techniques for a large variety of foods. In addition, an analytical look at the media and nutrition will be explored.

CHILD DEVELOPMENT/PARENTING **#884**
Grades: 9-12 (1 Semester, .5 Credit)

Calling all future teachers, psychologists, pediatricians and parents! Child Development is designed to help students understand the normal growth and development patterns of children from the prenatal stage to kindergarten (age 6). Students will learn to develop effective child-rearing skills through a positive approach. The attitudes and knowledge developed help students become better professionals who will work with kids and parents. Students will focus on the cognitive, physical, social and emotional development of children. This course includes projects where students develop and carry out a variety of activities to help children grow using information learned.

SURVIVING THE REAL WORLD **#875**
Grades: 9-12 (1 Semester, .5 Credit)

Surviving the Real World is a course intended to prepare students for post-graduation life with a focus on financial management, independent living, and personal improvement. The course contains four units. The first, *Food and Nutrition,* will focus on healthy and sanitary food preparation. In addition, food choice and its effects on one's health will be explored. The second unit is *Financial Management* and will explore budgeting, saving, and prioritizing money. *Consumerism* is the topic of the third unit.
This unit will focus on comparative shopping, which includes understanding marketing and advertising techniques. Students will work towards the ability to evaluate items and determine the best option. Also, analyzing nutrition labels, conservation, consumer rights and basic mending will be explored and practiced. The last unit is *Career and Professional Development.* Students will learn skills such as resume critique, interview skills, and professional, educational or scholarship application completion.

MATHEMATICS

ALGEBRA I
Grades 9- 11

#410
(1 Year, 2 Credits)

Algebra I is designed to build strong problem solving skills through linear and quadratic functions. Multiple methods of representing these functions such as verbal descriptions, equations, tables, and graphs will be taught. Modeling real-world situations using functions in order to solve problems arising from those situations is also covered. Skills are learned individually as well as collaboratively. Topics covered include expressions; equations; functions; properties of real numbers; solving, graphing and writing linear equations and functions; graphing linear inequalities; exponent; operations with polynomials; and probability with data analysis. This course meets every day for one full block.

INTERMEDIATE ALGEBRA
Grades 9- 11

#430
(1 Year, 1 credit)

Prerequisite: Algebra I

Intermediate Algebra class is a yearlong course. In addition to a review of topics covered in Algebra I, students will also learn all other topics included as eligible content on the Keystone Algebra Exam. New mathematical topics include Quadratic Functions and Factoring, Polynomials and Polynomial Functions, Rational Exponents, Rational Functions, and Radical Functions. The Pennsylvania Keystone Algebra Exam will serve as an end of course exam to determine student mastery of content.

ALGEBRA II
Grades 9-12

#435
(1 Year, 1 Credit)

Prerequisites: Algebra I, Intermediate Algebra, (Geometry II may be taken concurrently)

Algebra II is a year-long course. It includes a continual application of all topics covered in Algebra I and Intermediate Algebra, plus additional topics. Additional topics include Systems of Equations in Three Variables, Matrices, Function Operations, Graphing Square Root and Cube Root Functions, Exponential and Logarithmic Functions.

GEOMETRY
Grades 10-12

#427
(1 Year, 1 Credit)

Prerequisites: Intermediate Algebra. (Algebra II may be taken concurrently.)

Geometry topics include, but are not limited to, points, lines, and planes; segments and angles; parallel and perpendicular lines; triangle relationships; congruent triangles; special quadrilaterals; similarity of plane figures; areas of plane figures; surface area and volume of solids; right triangle trigonometry; and circles.

GEOMETRY (9)
Grade 9-10

#428
(1 Year, 1 Credit)

Prerequisites: Intermediate Algebra
8th grade students who had Intermediate Algebra or Algebra II should schedule this course.

Geometry topics include, but are not limited to, points, lines, and planes; segments and angles; parallel and perpendicular lines; triangle relationships; congruent triangles; special quadrilaterals; similarity of plane figures; areas of plane figures; surface area and volume of solids; right triangle trigonometry; and circles.

ADVANCED ALGEBRA WITH TRIGONOMETRY
Grades 10, 11, 12

#450
(1 Year, 1 Credit)

Prerequisites: Successful completion of Algebra II and Geometry. (Recommended final grade of 83%)

Description: Topics covered in this course include exponential and logarithmic functions; rational functions; counting methods and probability involving permutations and combinations; data analysis and statistics; arithmetic and geometric sequence and series; trigonometric ratios; functions; graphs; identities; and equations.

PRE-CALCULUS
Grades **11,** 12

#464
(1 Year, 1 Credit)

Prerequisites: Advanced Algebra with Trigonometry.
(Recommended final grade of 83%)

Pre-calculus is an advanced form of secondary algebra and trigonometry. Topics covered include equations and inequalities, polynomial, rational, exponential, and logarithmic functions and their graphs. The conics and trigonometry as well as sequences, series, and probability will be discussed.

ANALYSIS OF MATHEMATICS
Grades 11,12

#404
(1 Year, 1 Credit)

Prerequisites: Completion of Alg II and Geometry

The Analysis of Mathematics course is a year-long course geared to those students who want to explore economics, science, and technology and how these areas connect to mathematics. Students will develop their problem-solving skills and improve their understanding of number theory, statistics, probability, interpretation of graphs and equations, and finance through real-world applications.

STATISTICS
Grade 11, 12

#444
(1 Year, 1 Credit)

Grade 10 students wishing to take statistics must submit a letter to the principal stating the reason for requesting to take the course.

Prerequisites: Algebra II

The course content of Basic Statistics includes, but is not limited to probability, data collection, data display methods, data interpretation, descriptive and inferential statistics, statistical measures of centrality and spread, binomial and normal distributions, hypothesis testing, sample size, and confidence intervals.

AP STATISTICS **#445**
Grade 11-12 (1 Year, 1 Credit)

Prerequisite: Algebra II
Recommended: Trigonometry/Advanced Math. Recommended final grade of 85%

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data . Students are exposed to four broad conceptual themes:

1 . Exploring Data: Describing patterns and departures from patterns

2 . Sampling and Experimentation: Planning and conducting a study
3 . Anticipating Patterns: Exploring random phenomena using probability and simulation 4 .
Statistical Inference: Estimating population parameters and testing hypotheses

AP COMPUTER SCIENCE PRINCIPLES **#473**
Grades 10-12 (1Year,1 Credit)

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems, including the internet work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical.''

Prerequisites: Algebra II; 5 Credit from Technology (CAD, Computer Programming, Advanced Prototype and Design, Graphic Design, Foundations of Engineering, Video and Communication)

AP CALCULUS AB **#470**
Grades 11, 12 (1 Year, 1 Credit)

Prerequisites: Advanced Algebra with Trigonometry with teacher recommendation or Pre-Calculus. Recommended final grade of 85%

Description: The course content of Advanced Placement Calculus incorporates guidelines recommended by the College Board for Calculus AB including: functions, limits and continuity, derivatives and applications, the definite integral and applications, methods and application of integration, and transcendental functions. Students are encouraged to take advantage of the opportunity to receive college credit or advanced standing by sitting for the Advanced Placement Calculus AB Exam. Students are also encouraged to use graphing calculators.

AP CALCULUS BC **#471**
Grade 12 (1 Year, 1 Credit)

Prerequisite: AP Calculus AB. Recommended final grade of 83%

Calculus BC is a full-year course in the calculus of functions of a single variable. It includes all topics covered in Calculus AB plus additional topics. Additional topics include convergence tests for series, Taylor and Maclaurin series, the use of parametric equations, polar functions, arc length in polar coordinates, calculating curve length in both parametric and function equations, L'Hopital 's rule, integration by parts, improper integrals, Euler's method, differential equations for logistic growth, and the use of partial fractions to integrate rational functions.

MUSIC AND PERFORMING ARTS

PERFORMING ARTS APPRECIATION **#703**
Grade 9 (1 Semester, .5Credit)

This course is designed as a way to fulfill the State requirements for music, dance and theatre for students who are not in Band, Orchestra or Choir. Students will explore elementary music theory, different genres of music, dance and theatre.

BAND TECHNIQUES **#741**
Grade 9-12 (1Year, .*5* Credit)

Prerequisites: None

Band Techniques is a year-long course designed to give students the opportunity to learn a Band instrument from a beginner level at an accelerated pace. This course is geared toward students who have never played an instrument or who played an instrument in earlier grades before quitting. This course is also available to current Band or Orchestra students who desire to learn another instrument in addition to their primary instrument. In this course, students will play exercises and solos at an easy level, while learning musical skills in a group setting. Upon enrollment, students will meet with the course instructor to obtain an instrument on loan from school or through a rental program. Upon completion of the course, students will be encouraged to enroll in Concert Band/Marching Band. Students will not be permitted to enroll in this course as a replacement to Concert Band if they have participated in Band during the previous year at DHEMS or LAHS or have completed a year of Band Techniques. Students enrolled in Band Techniques will be invited to participate as a member of the Marching Dragons, though it would not be a requirement. Successful completion of this course satisfies the Performing Arts credit required for all LAHS students.

MUSIC TECHNOLOGY **#705**
Grades 9-12 (1 Semester, .*5* credit)

This course will focus on experiencing music through the use of technology. Students taking this course will explore a wide overview of musical concepts as they are seen through technology, in a hands-on way. Students will utilize computers, software, keyboards, and audio equipment to experiment in various musical environments. Concepts explored will be music notation, loops, composition, and improvisation. Units will be organized around a series of projects, each focusing on a different aspect of music or music technology. Students will also receive helpful skills for navigating life in an increasingly technology-oriented world. This course, if taken in Grade 9 will fulfill the state requirements for music, dance and theatre for students who are not in Band, Orchestra or Choir.

CONCERT BAND/MARCHING BAND **#740**
Grades 9-12 (1 Year, .*5* Credit)

Prerequisites: Participation in 8th Grade at DHEMS or Concert Band at LAHS or successful completion of Band Techniques course.

Band at LAHS encompasses both Concert Band and Marching Band as a single course. During the late summer and fall, the ensemble functions as the Marching Band. Attendance at Band Camp in early August is required. During the fall season, the Marching Band performs at all football games, pep rallies, school assemblies, community events, and parades in Lewisburg and neighboring communities. During the remainder of the year, the group functions as the Concert Band, presenting several concerts during the school year, as well as occasional community performances. The focus of Band class is to prepare repertoire, in a wide variety of styles, for public performance while simultaneously developing necessary skills to progress as an instrumental musician. Opportunities to participate in Susquehanna Valley Band, PMEA Festivals, and local Honors Bands provide additional outlets for band students to pursue their musical goals. Jazz Ensemble is an extra-curricular opportunity available to LAHS Band students, though a screening audition may be required for participation. Additional small ensembles may be established in a given year and are determined by availability of students and instrumentation.

HIGH SCHOOL ORCHESTRA **#750**
Grades 9-12 (1 Year, .*5* Credit)

Prerequisites: Prior instruction on at least one stringed instrument, ability to demonstrate certain aptitudes on that instrument, a knowledge of musical rudiments, and audition by the director.

Orchestra is a performing group open to all students in grades 9-12 who play an orchestral stringed instrument. *Wind and percussion students belonging to the band may be requested to join the class for credit by invitation of the director only.* String bass players may be asked to join the symphonic band for credit as well, but must be in good standing as a bassist in the chamber orchestra and be invited

by the director. The group will present several concerts during the school year, one during the winter holiday season, and two during the spring term. Community performances may also be scheduled. Students will be responsible for learning their music. PMEA District, Regional, and State Music Festivals provide an opportunity to showcase our highly talented students in their pursuit of excellence.

Any student who desires to play in the Orchestra as a Wind and Percussion student must be enrolled in the Symphonic Band during the same school year. Wind/Percussion players desiring to be in Orchestra must first be approached by either Orchestra or Band teacher for enrollment into Orchestra.

CONCERT CHOIR **#760**
Grades 10- I 2 (I Year, .5 Credit)

The Concert Choir is a performing organization which may be made up of two choirs. Many of the students who sing in the choir each year have had no previous musical experience. An ability to read music is not a required skill. Through membership in the group, that skill will be taught to each student. All styles of choral literature will be explored in reading situations and in preparation for performances. The Choir performs major concerts each year. Prominent conductors also work with the concert choir in clinic situations. Occasionally, a Men's Choir or Women's Choir will be an adjunct of this choir. All students who are enrolled in Concert Choir are responsible for the preparation and the adjudication of musical materials. Subject areas will include posture, breath control, attack tone, resonance, diction, range, intonation and vocal interpretation as involved in correct singing processes. PMEA District, Regional, and State Choir Festivals provide an opportunity to showcase our highly talented students (beginning in 10th grade) in their pursuit of excellence.

CHAMBER CHOIR **#762**
Grades I 0- I 2 (I Year, .5 Credit)

Prerequisites: A high degree of vocal proficiency, knowledge of the rudiments of music. *Admission to the group* is *by audition or invitation of the director.* Also, students must be a be a member of Concert Choir in order to be considered for admission to the Chamber Choir.

The Chamber Choir is a small, select group of students with an arrangement of vocal balance designed to obtain a high degree of independence and performance. This course is designed to teach students the technical music skills of their respective instrument/voice and musicianship/sight-reading skills involved in the large and small group performance of the art. An investigation of all styles of music will be realized. PMEA District, Regional and State Choir Festivals provide an opportunity to showcase our highly talented students in their pursuit of excellence. Chamber Choir is open to students in grades I 0-12.

GRADE NINE CONCERT CHOIR **#765**
Grade 9 (I Year, .5 credit)

Grade Nine Concert Choir focuses on mastery of the PA Academic Standards for Arts and Humanities and the National Standards for Music Education. As students progress through the course they focus on all aspects of good vocal production including breathing, diction, rhythm, pitch, articulation, phrasing and tonal production. All styles of choral literature will be explored in reading situations and in preparation for performances. The Choir performs major concerts each year. Prominent conductors also work with the concert choir in clinical situations. Occasionally a Men's Choir or Women's choir will be an adjunct of this choir. All students who are enrolled in Grade Nine Concert Choir are responsible for the preparation and adjudication of musical materials. Subject areas will include posture, breath control, attack tone, resonance, diction, range, intonation, and vocal interpretations as involved in correct singing processes.

MUSIC THEORY I
Grades 10- I 2 **#770**
(1 Semester, .5 Credit)

Prerequisites: Active enrollment in an LAHS performing ensemble

Music Theory I is a beginning course in the fundamentals of music. Students interested in enrolling in the course should have some musical background playing an instrument or singing. The course will deal with key signatures, musical notation, triads and two or four-part writing. An important aspect of the course is the improvement of musicianship through the recognition by sound of tonal and rhythmic patterns. Theory I is the first level of a three level sequence of courses.

MUSIC THEORY II
Grades 10- I 2

#775
(1 Semester, .5 Credit)

Prerequisite: Music Theory

Music Theory II is a sequential, elective course for students who have completed Music Theory I. Sight reading will be continued from the previous semester in addition to more advanced harmonic and rhythmic dictation. Written theory will also explore chord inversions and chromatic harmony. Students completing this course and Music Theory I are eligible to take the College Board Advanced Placement Exam for college credit.

AP MUSIC THEORY
Grades 11-12

#776
(1 Year, 1 Credit)

Prerequisite: Music Theory II

AP Music Theory is a sequential elective for students who have completed Music Theory II. The course will explore all harmonic tools of the twentieth century through compositions done by students and presented in a classroom lab situation. Students will also be introduced to listening techniques and basic style analysis. Because of the emphasis placed on compositions and their live performance for the class, a significant amount of time will have to be spent outside the class on composition. Students completing this course and Music Theory I and Music Theory II, are eligible to take the College Board Advanced Placement

SCIENCE

ECOLOGY and ENVIRONMENTAL SCIENCE **#556/#557**
Grade 9 (1 Year, 1 Credit)

Ninth grade students will take two half-year courses; Environmental Science and Ecology. Ecology will include the study of the: distribution and abundance or organisms, the: interaction among organism, and the interactions between organisms and their abiotic environment. This course will also investigate the flow of matter and energy among organisms and between organisms and their environment in an ecosystem. Ecology includes lab investigations to help students better understand the connections between living organisms and their environment. Environmental Science is a laboratory course which investigates the Earth and the environment around us. Physical science and mathematical applications are used to help students explore the answers to questions about their surroundings. Students will explore the economic impact of environmental decisions. Both courses, allow students to gain deeper understanding of the ecological and environmental standards tested on the Biology Keystone Exam, taken in 10th grade.

BIOLOGY **#510**
Grade 10 (1 Year, 1 Credit)

This tenth-grade course offers an investigation of living things at the molecular, cellular and organism levels. An emphasis will be placed on the structures and processes necessary for all organisms to maintain life. Class activities and discussions will demonstrate the relevance of biology to our personal well-being and that of the planet. This course is designed for students who intend to continue their education at a four-year college but do not intend to major in science. The course is appropriate for those planning careers in nursing and medical technology. Students taking this course will be taking the Keystone Biology Test at the completion of the course.

HONORS BIOLOGY **#525**
Grade 10 (1 Year, 1 Credit)

This course offers an investigation of living things at the cellular and molecular (chemical) levels. The topics will be covered in more detail and at a faster pace than in the tenth-grade Biology course. Highly motivated students with a strong interest in science and science related careers, such as medicine and engineering, should enroll. Students taking this course will be taking the Keystone Biology Test at the completion of the course. In order to select the course, students must complete and submit a letter of intent with the course selection form.

AP BIOLOGY **#545**
Grades 11-12 (1 Year, 1 Credit)

Prerequisites: Biology or Honors Biology

This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Some AP students, as college freshmen, are permitted to undertake upper-level courses in biology or to register for courses for which biology is a prerequisite. Other students may have fulfilled a basic requirement for a laboratory science course and will be able to undertake other courses to pursue their majors.

The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and one in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology.

This is a very intensive course. It will expand on certain topics introduced in previous biology courses and introduce new topics as well. Students must expect summer and holiday assignments and they must recognize that there is a need to devote significant time to the course above and beyond scheduled class time. A high level of interest in science, self-discipline and self-motivation are required for success.

AP ENVIRONMENTAL SCIENCE #507
Grade 11-12 (1 Year, I Credit)

Prerequisite: Successful completion of Algebra I and Biology; Completion of Chemistry strongly recommended.

AP environmental science is designed to be the equivalent of an introductory college course in environmental science. This course is a rigorous, in depth, study of advanced topics in environmental science. Students will be challenged to engage in higher order thinking with a foundation based upon significant amounts of reading, writing, and laboratory research.

CHEMISTRY #580
Grades 11, 12 (1 Year, 1 Credit)

Students will study key concepts regarding the composition, structure, and properties of matter and how substances interact and transform. Through classroom demonstrations, laboratory activities, and discussions, students will learn about the chemical make-up of the world and applications of chemistry. This course will serve as preparation for college chemistry for non- science majors.

HONORS CHEMISTRY #575
Grade 11; 10 (Limited; Must be taken concurrently w/ Honors Bio concurrently) (1 Year, 1 Credit)

Prerequisites: Enrollment in or completion of Algebra II; **Due to the availability of chemistry instructors, course enrollment for sophomores will be dependent on the number of spots open after junior enrollment.** If **the number of spots exceeds the number of openings, sophomore students will be selected by science teachers, counselors and administration. Interested sophomores should select it under the full-year elective options.**

Students will investigate the composition, structure, and properties of matter and how substances interact, transform, and change. To prepare for college-level chemistry courses, a high concentration of content **will** be covered. Students will be required to complete some sections of the course independently with teacher guidance. To be successful in this course, a student must have a superior ability for independent learning, a desire to achieve to high levels, and intellectual curiosity not motivated by grades alone.

Grade 10 students will be admitted as space allows on a case-by-case basis as determined by past grades and teacher recommendation

AP CHEMISTRY #555
Grade 11/12 (1 Year, 1 Credit)

Prerequisites: Completion of Algebra II and Honors Chemistry. Students taking this course must sign a contract provided by the Chemistry teacher, and complete an extensive summer assignment in order to complete all course material within the allotted time.

The advanced work in chemistry should not displace any other part of the student's science curriculum. It **is highly desirable for a student to have a course in secondary school physics and a four-year college preparatory program in mathematics.**

This course is designed to be the equivalent of the general chemistry course usually taken during the first college year and should be taken after the successful completion of an initial course in high school chemistry. The college course in general chemistry differs qualitatively from the usual first secondary school course in chemistry with respect to the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by students. Students will probably need to spend at least five to ten hours a week studying outside of class.

HUMAN ANATOMY/PHYSIOLOGY #565
Grade 11-12 (1 Year, 1 Credit)

Prerequisites: Successful completion of Honors Biology or Biology. Successfully completion of or taken concurrently with Chemistry or Honors Chemistry.

Anatomy and Physiology I is a rigorous first part of a two-course sequence. This course is specifically designed for students intending

to pursue a medical, science, or health-related career in college. This course will provide the student with an in-depth look at the human body and the way it works. It is a study of structure and function of the human body including cells, tissues

and organs on the integumentary, skeletal, muscular and nervous systems. Extensive medical terminology will be studied and laboratory exercises, including dissections, are required.

ANATOMY II **#568**
Grade 12 (1 Year, 1 Credit)

Prerequisites: Successful completion of Human Anatomy and Physiology I.

Anatomy and Physiology II is the second part of a two course sequence. This course is specifically designed for students intending to pursue a medical, science, or health-related career in college. This course continues to explore the human body by studying the following organ systems: cardiovascular, respiratory, digestive, urinary and immune. Extensive medical terminology will be studied and laboratory exercises, including dissections, are required.

PHYSICS **#590**
Grades 11/12 (1 Year, I Credit)

Students will find physics an interesting and useful part of their education and life. Topics include measurement of time and space, motion, forces, momentum, energy, and an introduction to sound, light, and nuclear physics.

AP PHYSICS 1 **#584**
Grade 11/12 (1 Year, I Credit)

Prerequisites: Chemistry, Pre-Calculus, or concurrent Pre-Calculus

AP Physics I is the equivalent to a first semester college course in algebra/trigonometry-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. The content of this course focuses on eligible content found on the AP Physics I exam.

AP PHYSICS 2 **#586**
Grade 12 (1 Year, I Credit)

Prerequisites: AP Physics **I,** Pre-Calculus

AP Physics 2 is equivalent to most college-level introductory physics courses with a focus on the following topics: fluid statics and dynamics, thermodynamics, PV diagrams and probability, electrostatics, electrical circuits with capacitors, magnetic fields, electromagnetism, physical and geometric optics, and other topics in modern physics. *AP Physics 1 should be taken before this course, which covers traditional mechanics and other important introductory topics.*
Emphasis will be placed on understanding physical science literacy and applying physics. The content of this course focuses on material for the AP Physics 2 exam.

FORENSICS **#560**
Grade 11-12 (1 Sem., .5 Credit)

Let evidence reveal the truth... Delve into the limitless world of forensic investigations. This course is designed to emphasize the laboratory techniques used by forensic scientists in the analysis of crimes and the role of evidence in criminal and civil proceedings. Investigative procedures to be studied include crime scene processing and reconstruction, fingerprinting, evaluation of injuries and cause of death, determination of the post-mortem interval, forensic entomology, bite mark analysis, tool marks, ballistics, trajectory analysis, blood spatter analysis, and DNA analysis. Ethical issues and case studies of actual crimes will also be discussed.

ASTRONOMY **#563**
Grades 10-12 (1 Sem., .5 Credit)

Explore the vastness of our universe through an analysis of celestial objects, space, and the physical universe as a whole in this semester-long course available to students in grades 10-12.. Topics of study include the size and scale of our universe, a history of astronomy and important astronomers, tools of astronomy, and the composition of our universe (planets, stars, the solar system, galaxies) and the interaction of these components. Explore the universe with classroom discussion, laboratory experiments, and computer simulation and analysis.

METEOROLOGY **#562**
Grades 10-12 (1 Sem., .5 Credit)

Gain an appreciation for the complexity and delicacy of our atmosphere through this semester-long course available to juniors and seniors. Topics of study include an introduction to the weather and climate enterprise, atmospheric motion and energy transformation, tools and measurements in meteorology, severe weather, and weather forecasting. Investigate how the atmosphere affects humans, and how humans affect the atmosphere through classroom discussion, laboratory experiments, and computer simulation and analysis.

SOCIAL STUDIES

AP ART HISTORY #725
Grades 11/12 (1 Year, 1 Credit)

AP Art History is a year-long course in which students investigate diverse artistic traditions from prehistory to the present. The course fosters an in-depth, holistic understanding of art history from a global perspective. This course helps students become active participants in the global art world, engaging with its forms and content. Through studying various artworks and buildings from different time periods and cultures, students will develop vocabulary and analysis skills that are central to art history. Students will practice and reinforce their skills through engaging in classroom discussions, research projects and presentations on artworks and artists. At the end of the course, students will have the opportunity to take the AP Art History exam for which they may receive college credit.

AMERICAN CITIZENSHIP AS ACTION #204
Grade 9 (1 Semester, .5 Credit)

American Citizenship is designed to provide students with an understanding of the American political system, and the skills necessary to exercise their citizenship in a socially responsible manner, while attempting to foster positive attitudes about the role of the citizen in American democracy. The role and functions of national, state and local governments as they relate to the student/citizen's need for participation in government will be studied. Included will be the Constitution, Bill of Rights, political parties, elections, and the overall functioning of government. An emphasis will be on the practical applications and skills of the citizen in society and his/her relationship with government.

ECONOMICS #205
Grade 9 (1 Semester, .5 Credit)

Economics will describe the role that basic economics plays in understanding and improving the quality of everyday choice making. Economics plays a vital role in society, and that role will be examined through the choices made in the marketplace and the voting booth, especially regarding trade and exchange. The relationships between nations, as well as the everyday political affairs within the U.S. will be examined in an economic context.

WORLD HISTORY #219
Grade 10 (1 Year, 1 Credit)

This course explores the historic contributions of states and individuals from around the world from the Renaissance until today. Students study units on Europe, China, the Middle East, Japan, North, Central and South America, Africa, and South and Eastern Asia. Students will explore developments and conflicts that led to the spread of democracy and capitalism along with other political and economic traditions that continue today. Students will review the social, cultural and political effects of western imperialism and how nationalistic competition helped cause two world wars. Throughout the year, students will consider how past events continue to affect the world today and why it is important to be informed about history and current events.

AP EUROPEAN HISTORY #292
Grades 10 (1Year, 1.0 Credit)

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that shaped the world in which they live. Students will explore the context for understanding the development of contemporary institutions, the role of continuity and change in society and the evolution of art and intellectual discourse. The key goals are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyze and interpret primary sources and (c) an ability to express historical understanding in writing.

Human Culture and Society: Origins #217
Grades I 0-12 (1 Sem., .5 Credit)

This one semester course will focus on the origins of world cultures and how they developed from their earliest expressions until the Renaissance. Students will examine primary sources including artworks, artifacts and written resources to explore western, eastern, middle eastern, and tribal cultures from around the world. The course will begin with the study of archeological and evolutionary records of human development and work through the foundations of western society. Students will study the origins of cultural practices including religion, dance, theater and literature, and consider continuity and changes in these practices over time.

AMERICAN HISTORY **#200**
Grade 11 (1 Year, 1 Credit)

This course is designed to present American history and culture from 1865 to the present. American History is a general survey course which includes such topics as reconstruction, westward and imperialist expansion, military conflicts and their resolutions, civil rights, the presidencies, business, labor, immigration and minority's conflicts and accomplishments.

AP U.S. HISTORY **#293**
Grade 11 (1 Year, 1 Credit)

This course gives students an in-depth course in American History in preparation for the Advanced Placement United States History Test. In addition, college bound students with a strong interest in United States History should benefit from the design and requirements of the course. The course will focus on the intellectual, cultural, social, economic, and political history of the United States. Students should obtain a detailed knowledge of United States History through the use of text and supplemental readings, and individual research and writings.

INTRODUCTION TO PSYCHOLOGY **#245**
Grades 10-12 (1 Semester, .5 Credit)

This course is designed to introduce students to the study of mental processes and human behavior. Course content will explore a variety of topics, including research methods and applications, child and adolescent development, the aging process, altered states of consciousness, and learning through classical and operant conditioning. Students will also study psychologists who have made significant contributions to the field and examine how the scientific study of psychology continues to evolve.

APPLIED SOCIOLOGY **#254**
Grades 11, 12 (1 Semester, .5 Credit)

This introductory course is designed to help students develop a sociological imagination. That is, students will learn to articulate how social groups affect human behavior and society at large. In addition, students will learn about the types of groups people form, why people are prone to conform, and how culture and social structure affect behavior. Students will examine major topics in sociology in a dynamic blend of concept, theory and application. Major content units include 1) founders of the field and research methods, 2) culture and society, 3) the importance of socialization in human development, 4) social structure and inequity, 5) the role of social institutions in social development and 6) forms of deviance and social control. In each unit, students will integrate content from the class text with studies of primary sources and media from popular culture.

AP ECONOMICS **#281**
Grades 11, 12 (1 Year, 1 Credit)

An understanding of economics is important to your everyday life. Economics helps you make more informed decisions as a consumer, worker, and citizen. Economics is divided into two major types of theory. Microeconomics is concerned with individual producing or consuming units and generally involves individual decisions. Macroeconomics is concerned with the economy as a whole and generally examines social economic decisions. This course prepares students for the Advanced Placement examination. Although not required, completion of the AP Exam is highly recommended.

#285
(I Sem, .5 credit)

LIVING GLOBALLY IN THE 21ST CENTURY WORLD
Grades 11-12

This elective course, aligned with Pennsylvania State Standards in History, Geography, Civics & Government, and Economics, will utilize a student-centered approach promoting inquiry into relevant topics of the contemporary world. Issues to be covered will include but are not limited to social movements, political ideologies, economic patterns, cultural events, military conflicts, globalization, evolving technology, trade, treaties, terrorism and the role of media in the modem world. Taught in a seminar format, students will research and discuss topics connecting the significance of today's current events, their historical background and their impact in shaping tomorrow's world.

AP GOVERNMENT & POLITICS
Grade 12

#290
(I Year, 1 Credit)

This one-year seminar examines the Constitution, the federal system, and the social, political and judicial traditions that have promoted continuity and change in the United States. The course begins with a study of primary sources that were foundational to the writing of the Constitution. Students will use these sources to determine why the founding fathers made the decisions they did and describe the federal system that resulted. Following, students will analyze key political and legal debates that assured a system of checks and balances in a large democratic republic. In discussions on civil liberties and civil rights, students will study key court cases and sections of the Constitution that allowed for the incorporation of federal rights to the states. The course will cover how public opinion is formed, monitored and used to inform the political process. Students will study how political socialization, demographics and interest groups affect political parties, campaigns and voting behaviors. The course will also cover the role of the media in politics and how the Internet and social media have affected modern campaigns. The core of the course will focus on the powers and limitations of the three branches of governments and how the branches interact with one another and the states. At the end of the semester, students will examine economic, domestic and foreign policy and how those policies have changed over the course of U.S. history. Throughout the course, students will read and use current events to support ideas in class discussions.

WELLNESS

Students must have a Physical Education class or a Lifetime Fitness class each semester.

PHYSICAL EDUCATION

Grades 9-12

#320 Semester 1
#321 Semester 2
(.25 credit each)

Students in grades 9-12 will be given the opportunity to participate in team, individual as well as fitness activities during the school year. Activities may include soccer, speedball, lacrosse, field hockey, basketball, volleyball, softball, ultimate Frisbee, floor hockey, team handball, pickleball, badminton, weight training, core training, or cardiovascular conditioning. Students will participate in all of these activities over the four years of high school. Students will have the opportunity to assess personal strengths and weaknesses to allow them to select activities most appropriate to their personal goals. Through active participation, opportunity is given to students to develop desirable attitudes of sportsmanship, cooperation, responsibility, appreciation of the skill of others, and an understanding of the strategies employed while playing a particular sport.

LIFETIME FITNESS

Grades 9-12

#313 Semester I
#314 Semester 2
(.25 credit each)

This course will be offered as an alternate Physical Education Elective in place of the Physical Education 9-12 Course. Students will develop and follow a personal fitness program with the approval of the instructor. Students will participate in various activities that will help them stay active and fit throughout life. Activities will include walking, use of cardio machines, weight training exercises, stability ball exercises, stretching and yoga exercises, jogging etc.

HEALTH EDUCATION
Grade 10

#339
(1 Semester, .5 Credit)

Health Education is an introductory course that covers a variety of health-related topics that includes personal health, nutrition, and fitness, preventing disease and injury, growth, development, and sexuality, substance abuse, and mental health and community health issues.

DRIVERS EDUCATION
Grade 9/10

#307
(1 Semester, .5 Credit)

This course prepares students for the Knowledge Exam to acquire a learner's permit. Driver Education then continues to describe, discuss, and practice various driving techniques in preparation for the Road Test to acquire a junior license as well as independent driving throughout a lifetime. Along with the testing process, other topics covered in this course include, but are not limited to, driver responsibility; signs, signals, and pavement markings; basic car controls; decision making process of driving (IPDE: Identify, Predict, Decide, Execute); natural laws of physics in regard to driving; basic car maneuvers; Pennsylvania Point System; negotiating intersections safely; sharing the road with other vehicles; differences between rural, city, and highway driving; driving in adverse weather conditions; the dangers of distracted driving; and handling emergencies.

WORLD LANGUAGES

** **For Level III and Above, it is recommended that students obtained an 83% in the previous year's world languages courses.**

FRENCH I **#600**
Grades 9-12 (1 Year, 1 Credit)

This introductory course in French is designed to help students communicate in the French language and to acquaint them with various aspects of French culture. Students will begin to develop their listening, speaking, reading, and writing skills in French. Among the cultural topics covered is the geography of France. Students will be evaluated based on their class participation, tests/ quizzes, homework, and projects.

FRENCH II **#605**
Grades 9-12 (1 Year, 1 Credit)

In this course, students will continue to develop their listening, speaking, reading, and writing skills in French. They will again be exposed to various aspects of French culture. Assessment will be based on the student's class participation, tests/quiz scores, homework, and projects.

FRENCH III **#610**
Grades IO- I 2 (1 Year, 1 Credit)

In this course, listening, and speaking skills continue to be refined, while reading and writing skills are more strongly emphasized. The study of complex grammar and various verb tenses gains emphasis. Class participation, tests, quizzes, homework, and projects remain the major forms of assessment.

FRENCH IV **#615**
Grades **11-12** (1 Year, 1 Credit)

This course is an elaboration and refinement of the skills previously acquired. The study of grammar continues to be important. As in previous French courses, the student will gain knowledge of and an appreciation for the unique contributions of France to world history and culture. The major assessments are the same as in previous French courses.

FRENCH V **#620**
Grades I 1-12 (1 Year, 1 Credit)

In this course writing, speaking, reading and listening skills are constantly refined and practiced. A majority of the course will be devoted to the study of various French literary works and aspects of French culture. It is recommended that students have a final grade of 83% or higher in French IV to enroll in this course. Although the course is not designed to prepare students to take the Advanced Placement Examination, they may choose to do so. Materials will be provided for students to study independently for this exam.

GERMAN I **#625**
Grades 9-12 (1 Year, 1 Credit)

Communication is the function of all language. To that end, the basic skills of listening, reading, speaking and writing German will be taught. Students will be introduced to the culture and geography of German speaking countries. A good grasp of English grammar is desirable and a willingness to participate orally in class.

GERMAN II
Grades 10-12

#630
(1 Year, 1 Credit)

The skills of listening, reading, speaking and writing German will continue to be developed in various formats. The study of German culture is expanded.

GERMAN III
Grades 11-12

#635
(1 Year, 1 Credit)

The skills of listening, reading, speaking and writing German will continue to be the focus of this course. The course will build on what was taught in German I and 2 with the goal of higher proficiency in all four skills.

GERMAN IV
Grades 12

#640
(1 Year, 1 Credit)

The skills of listening, reading, speaking and writing German are taught with the goal of a higher degree of proficiency. More advanced grammar concepts will be studied. Students' knowledge of culture and history is developed through the readings of Grimm's Fairy Tales and other short selections. Modern German culture is also examined.

SPANISH I
Grades 9-12

#665
(1 Year, 1 Credit)

Communication is the function of all languages. For this reason, students are strongly encouraged to participate actively and orally in class in a variety of activities. Students will also practice reading and writing skills using a variety of formats including essays, skits, and presentations.

SPANISH II
Grades 9-12

#670
(1 Year, 1 Credit)

Students will continue to study vocabulary and grammar. Students will also practice writing, reading, and speaking skills using a variety of formats including essays, conversations, skits, and presentations.

SPANISH III
Grades 10-12

#675
(1 Year, 1 Credit)

Students will refine and add fine detail to the grammatical aspects studied in Spanish I and II as well as expand their grammatical studies and vocabulary. Students will practice these skills using a variety of formats including essays, conversations, skits, and presentations.

SPANISH IV
Grades **11-12**

#680
(1 Year, 1 Credit)

Students will continue to refine the skills previously acquired. The class will be conducted largely in Spanish. The students will practice newly acquired vocabulary and grammatical concepts using a variety of formats including essays, conversations, skits and presentations.

SPANISH IV/V
Grades **11.** 12

#683
(1 Year, 1 Credit)

Prerequisite: Due to the accelerated pace and intensity of study in this course, students shall show demonstrated understanding of Spanish Ill, having attained an 88% average or better in the course and on the Spanish Ill final exam. Students should enroll in this class with the expectation or the course rigor and the end goal of taking AP Spanish and AP Spanish exam in the senior year. The course will hold honors weight.

This course is designed to prepare students for AP Spanish. This class will move at an accelerated pace and cover units of study that are normally taught during Spanish 4 and 5. This course focuses on reinforcing students' skills across the three modes of communication (interpretive, interpersonal, and presentational) and will continue to develop and refine proficiency in reading, writing, listening, and speaking. Students will communicate using more complex language structures on a variety of topics.
Readings include a variety of authentic texts, including poetry, fiction, and newspaper articles. More formal writing is introduced. Students will also make connections to other disciplines (art, history, and geography), and develop insight into the nature of language and culture. Classes are taught primarily in Spanish and students are encouraged to communicate, even among themselves, in Spanish. Class participation is essential towards the development of oral proficiency. Daily practice and preparation outside of class is necessary for language skill development.

SPANISH V **#685**
Grades **11-12** (1 Year, 1 Credit)

The course is designed to refine the four skills; listening, speaking, reading and writing. Students are expected to speak only in Spanish. The study of vocabulary and grammar continues to be important. Daily speaking and spontaneous descriptions of situations will enhance the student's oral skills. Students will explore the history and culture of the Spanish-speaking world through the reading of Mexican legends and adapted versions of Hispanic literature.

AP SPANISH **#691**
Grade 12 (I Year, 1 Credit)

AP Spanish Language and Culture is equivalent to an intermediate level college course in Spanish and directly prepares students for the AP exam. Students cultivate their understanding of Spanish language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges. This course stresses vocabulary, oral skills, composition and grammar, and requires students to use Spanish for active communication. It also focuses on the integration of authentic resources including online print, audio, and audiovisual resources; as well as traditional print resources that include literature, essays, and magazine and newspaper articles; and also, a combination of visual/print resources such as charts, tables, and graphs; all with the goal of providing a diverse learning experience. In order to promote language proficiency, this class is conducted exclusively in the target language. The successful completion of Spanish 4/5 or its equivalent is a requirement for this course.

SUN AREA TECHNICAL INSTITUTE PROGRAM

SUN Area Technology Institute (SUN ATI) courses are designed to prepare students for future employment and/or education beyond high school. All SUNATI programs are tech prep certified leading to higher education choices at over 45 Pennsylvania post-secondary schools. Students electing this program may attend the technical school full-time in the twelfth grade or earlier with the permission of the high school principal. Students will follow the SUNATI school calendar. Students attending SUNATI remain students at Lewisburg Area High School, and they may participate in all athletic programs, assemblies and graduation activities. SUNATI is an extension and a vital part of Lewisburg Area High School.

Students who plan to attend the SUN Area Technical Institute during their senior year should complete the following credits by the end of their junior year:

English:	3.0 credits
Social Studies:	3.0 credits
Mathematics:	3.0 credits
Science:	3.0 credits
Health:	0.5 credit
Physical Education:	1.5 credits (.5 to be completed during senior year)

In addition, beginning with the Class of 2016, students must demonstrate proficiency in Algebra, Biology, and English Literature through a proficient score on each respective Keystone Exam or through successful completion of the Performance Based Assessment in each subject.

Note: Students attending SUNATI during their senior year need 3.0 credits each of Math, Science and Social Studies, 3.5 credits of English, a Graduation Project and successful completion of a course of study from S UNATI for graduation.

Sun Tech to Lewisburg Grading conversion

Lewisburg	A 100-92	B 91-83	C 82-74	D 73-65	F 64-
Sun Tech	5 100-94	4 93-86	3 85-78	2 77-70	1 69-

example: 94 at SUN ATI = 92 at Lewisburg

Students registering for SUNATI should complete an Application Form available in the Guidance Office. On the LAI-IS Course registration form, students should register for

1. **SUNATI PROGRAM** **#999**
2. **SUNATI PHYSICAL EDUCATION** **#306**

All contract physical education students are required to fulfill the time requirements set forth by their individual elected activities. The activities may include jogging, walking, tennis, volleyball, roller skating, varsity sports, dance, exercises, weight training and bowling. This is a requirement for graduation.

3. **SUNATI MATH** **#997**
SCHEDULED BY GUIDANCE

SUN TECH MATHEMATICS PROGRAM

The programs at SUN Area Technical Institute require that every student have proficiency in basic math including addition, subtraction, multiplication, division, usage of decimals, usage of fractions and percentages. Every student takes a diagnostic test at the beginning of the school year. If students do not pass this test they must take a remedial math course in order to graduate from SUNATL

We also offer Math courses to those students who need Math credits in order to graduate or to those students who are furthering their education and want to keep their math skills sharp. The courses offered are Integrated Math, Pre-Algebra, Algebra I, Algebra 2, Geometry, Trigonometry, and Calculus. Our goal is to have students prepared for post high school employment, trade school, two-year and/or four-year college programs.

Integrated math covers basic math skills as well as probability and statistical measure. It also covers selected topics in Algebra,

Geometry and Trigonometry.

Pre-Algebra covers topics such as solving equations, inequalities, factors, fractions, exponents, ratios, proportions, percents, graphing, area, volume and right triangles.

Algebra 1 includes working with real numbers, solving equations and inequalities, polynomials, factoring, fractions, exponents, and graphing and working with functions.

Algebra 2 expands on all concepts in Algebra I and also includes linear functions and equations, rational expressions, irrational and complex numbers and solving quadratics.

Geometry topics include, angle relationships, congruent and similar triangles and polygons, circles and constructions, coordinate geometry and areas and volumes of polygons, quadrilaterals and circles.

Trigonometry covers all of the trigonometric functions (including graphing), application of trigonometric identities, solving triangles, inverse functions and equations, and polar coordinates.

Calculus topics include functions, graphs, limits, differentiation, exponential and logarithmic functions and integration.

SUN
AREA TECHNICAL INSTITUTE

Course Catalog
2021/2022

SUN Tech will provide equal access regardless of race, color, age, creed, religion, sex, sexual orientation, ancestry, national origin, handicap/disability or genetic information, in its admission procedures, educational programs and activities or employment practices as required by Title VI, Title IX and Section 504.

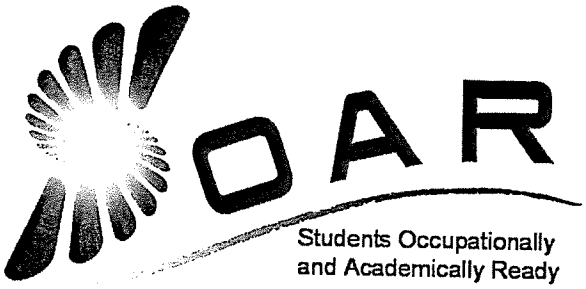
About SUNTech

18 Programs of Study:

- ⇒ Advertising Art & Design
- ⇒ Auto Technology
- ⇒ Carpentry
- ⇒ Collision Repair
- ⇒ Computer Networking & Technology
- ⇒ Cosmetology
- ⇒ Criminal Justice
- ⇒ Dental
- ⇒ Diesel & Truck Technology
- ⇒ Electrical
- ⇒ Electronics
- ⇒ Health 114 & 201
- ⇒ HVAC
- ⇒ Masonry
- ⇒ Precision Metalworking
- ⇒ Welding
- ⇒ Wood Design & Technology

Student Occupationally & Academically Ready (SOAR) Credits

SOAR is a Pennsylvania Department of Education Program that eases student's path from high school to college into high demand occupations by allowing students to earn college credits while still in high school. Learn more at www.collegetransfer.net.



Dual Enrollment Programs

Here's How Penn College NOW Courses Benefit Students

SAVE MONEY!

Tuition for Penn College NOW is free for students! The more Penn College NOW courses a student takes (*at no per-credit cost),* the less money a student has to spend once it's time to earn a degree after high school.

BUILD CONFIDENCE!

No matter what you plan to do after graduation, if you have already shown success in college courses, you will be more competitive in both the job market and the college admissions process. Success in challenging coursework builds confidence as well as skills!

SAVE TIME!

Students who have already taken college coursework spend less time earning a degree.

PREP FOR COLLEGE

Connect to "the college experience!" Through Penn College NOW, students have the chance to visit our campus, see our facilities, and meet our college faculty.

WHY CHOOSE SUN TECH?

Here are the Top 5 Reasons Why You Should Attend SUN Tech.

5. WE HAVE A HISTORY OF SUCCESS

A driven individual combined with a SUN Tech education is a proven recipe for success, and our reputation in the Snyder, Union and Northumberland county areas tells us that employers like what we're cooking. SUN Tech graduates are coveted by local businesses, but they also go on to become successful business owners too!

4. YOU CAN EARN COLLEGE CREDITS AND ADVANCED PLACEMENT

SUN Area Technical Institute has worked *tirelessly* with local colleges and universities to add value to your technical education. Through dual enrollment programs with institutions like Penn College of Technology and Bloomsburg University, you can **earn up to 15 college credits during your senior year** of high school which translates to *thousands of dollars in savings* on tuition!

3. YOU CAN EXPERIENCE THROUGH COOPERATIVE EDUCATION

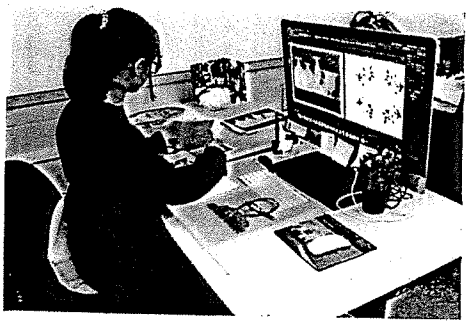
Employers want to hire candidates with experience, but in order to gain experience somebody needs to hire you first. Talk about a vicious cycle! SUN Tech has the reputation and connections to get students hired through our co-op program while they're still in high school. You'll gain valuable on-the-job experience, you'll have a blast doing it, and some co-op students are even offered full-time employment after graduation.

2. YOU'LL GIVE BACK TO YOUR COMMUNITY

SUN Tech is actively involved in community outreach and community service efforts. We actively engaged in our community by building projects to support our local community and their organizations. We also participate in raising money and goods for many local charities.

1. YOU CAN EARN VALUABLE INDUSTRY CERTIFICATIONS

The Harvard Graduate School of Education released a report which claims that industry certifications are just as valuable as a college degree– if not more so– in the pursuit of employment in many fields. At SUN Tech *we prepare you so* you can fly into employment or higher education: you have the potential to leave certified or ready to test for certification.



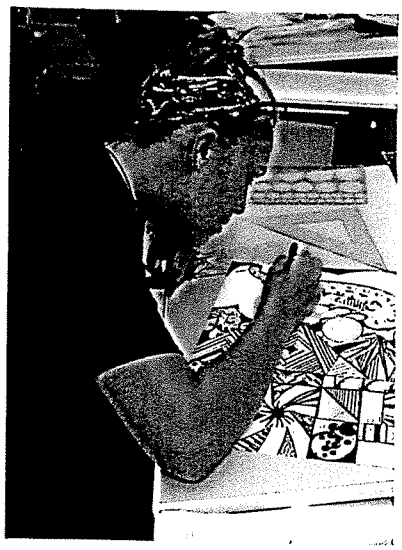
ADVERTISING ART & DESIGN

Are you an aspiring designer? Would you like to get paid for your creativity?

If you have a passion for design, a need to be creative, and a dream of becoming a successful graphic designer, then the Advertising Art & Design program at SUN Tech is for YOU!

Certifications Offered:

- OSHA 10



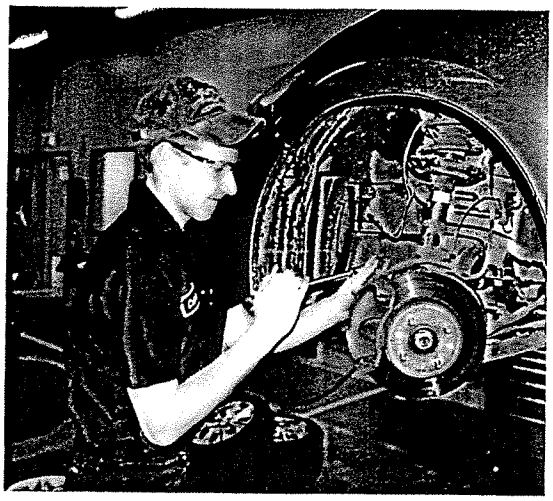
Outcomes: You can experience a broad range of creative careers while still in high school so that you can:

- Discover where your talent lies
- Develop a professional portfolio
- Be successful at design college
- Obtain a job you actually love

You will use the most modern technology and techniques to increase your skills in graphic design, illustration and photography.

Description: The program emphasizes your creative growth through instruction in art principles as well as technology skills through computer-based projects. You will gain a working knowledge of color, typography, layout, and printing while you master Adobe software on the Mac and PC. You may find employment in graphic design, advertising, publishing, web page design, illustration, or photography. Salaries in this field range from $27,200 to $81,620 yearly within our local area

AUTO TECHNOLOGY



Do you like to take things apart to see how they work? Do you like mechanical things like motors and engines?

Make money while enjoying what you do! The Automotive Technology Program at SUN Technical Institute will teach you what you need to know to diagnose and repair vehicles, so you can make a great living doing something you love to do!

Outcomes: You will have the opportunity to obtain a PA State Inspection License, Air Conditioning Certification, SP/2 Safety Certification, Valvoline Oil Certification, and NATEF Certification. The certifications and skills learned allow you to enter the automotive repair industry with skills and certification to back up those skills. You also have the opportunity to qualify for advanced placement at post-secondary institutions such as Penn College, Harrisburg Area Community College, and Northwestern Ohio.

Entry-level auto technicians generally earn around $10.00 per hour, progressing up to $30.00 per hour with experience and training. An "A" level technician in a mid-sized city such as Scranton can earn up to $100,000 per year. The education received through the Automotive Technology Program allows you to climb this salary ladder very quickly.

Description: In the Automotive Technology course at SUN Tech, you are given the opportunity to learn the necessary skills and competencies to maintain, diagnose and repair the advanced systems on modern automobiles. You can use common hand tools as well as power tools such as impact wrenches, grinders, drills, tire machines and automotive lifts. You will also be using state-of-the-art equipment such as electronic engine analyzers, oscilloscopes, scan tools and internet -based information systems.

Certifications:

- PA State Inspection
- Section 609 Cert
- ASE Brake
- ASE Elect Systems
- ASE Engine Repair
- ASE Suspension/Steer
- ASE Engine Performance
- SP2 Pollution Prevention
- SP2 Mechanical Safety
- SP2 Land that Job
- American List
  Valvoline Motor Oil Cert

CARPENTRY

If you like working with your hands, if you love to build projects, problem-solve, and tackle new challenges every day, visit the Carpentry Program at SUN TECH.

Outcomes: Learn skills in carpentry that you will use the rest of your life whether on the job in construction or on your own home. You will also have the opportunity to earn dual enrollment college credits while completing the carpentry curriculum.

Description: As a SUN TECH carpentry student, you will learn all aspects of residential and light commercial construction through classroom theory and practical shop instruction and projects. All areas of residential construction will be covered, including but not limited to, floor, wall and roof framing, exterior and interior finish

Certifications Offered:

- OSHA 10

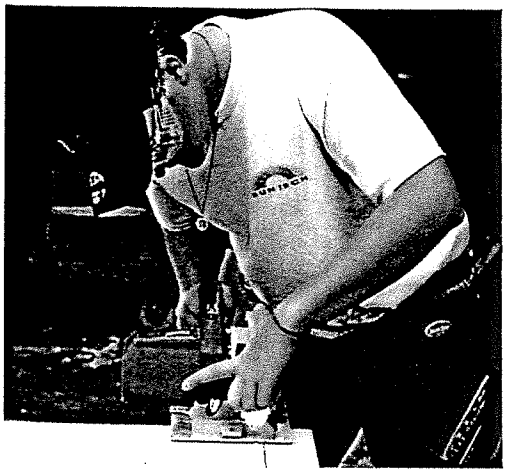
Dual Enrollment PC NOW Courses you can complete while in this program:

- BCT102 Construction Hand & Power Tolls– 1 credit

Look what you can learn in the Carpentry Program:

- Learn the skills necessary to properly build a house
- Work in a team setting.
- See the day go by so quickly you will wonder what happened to the time.
- Work on community service projects off campus.
- Use the most advanced tool, equipment and materials
- Be challenged every day by your instructor
- Earn college credits
- Do something different everyday

Emphasis is placed on developing the skills you will need for your future as a contractor.



COLLISION REPAIR TECHNOLOGY

DON'T GET BENT OUT OF SHAPE OVER YOUR FUTURE.

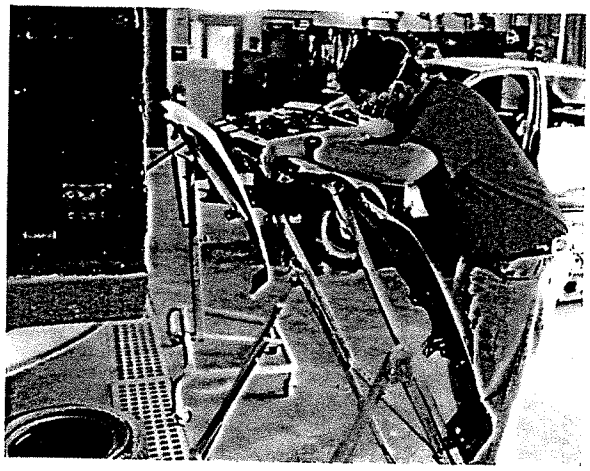
Become a Collision Repair Technician and learn to straighten damaged cars and your future. You will learn many techniques seen on the TLC channel with host "Chip" Foose and others.

Outcomes: By developing the skills necessary to become an entry level Collision Repair technician you can secure a high paying job and earn college credits. You will have instruction in State-of-the-Art I-CAR certified repair techniques in the following areas: Non-structural analysis and damaging repair, painting and refinishing, plastics and adhesives, structural, analytic and damage repair. With great attendance and grades, you can participate in the Co-op program and earn a salary during second semester of the school year.

Description: The Collision Repair Technology course at SUN Tech has been evaluated by the "National Automotive Technicians Education Foundation, Inc." (NATEF) and certified by the "National Institute for Automotive Service Excellence" (ASE). The course includes theoretical study and practical application in all areas related to the collision repair industry including major and minor collision repair, MIG welding, base-clear and tri-coat refinishing, color matching and blending, SMC and urethane plastic repair, glass service, and supplement restraint systems. You will be evaluated on practical hands-on application skills and through ASE type-written examinations. You may be eligible for one-year service credit toward applying for ASE certification in any or all of the four specialized technical areas within the trade. Related areas of employment are: insurance adjustor, automotive refinish, parts and sales, and assembly line refinishing.

Dual Enrollment PC Now Courses you can complete while in this program:

- ABC100-Introduction to Non-Structural Collision Repair 2 credits
- ABC104-Introduction to Non-Structural Collision Repair Applications 3 credits
- ABC125-Basic Refinishing 2 credits
- ABC129-Basic Refinishing Applications 3 credits



COMPUTER & NETWORKING TECHNOLOGY

ARE YOU A COMPUTER GEEK OR HAVE GEEK ENVY? Do you love working with computers?

Do you love taking computers apart and putting them back together? Do you ever wonder how you can send an email half-way around the world in less than a second? Do you ever think about how data travels down fiber optic cable as modes of light, turning on and off millions of times per second? Would you love to know how to build that water cooled, Monster Machine that will make all your friends green with envy? If you answered "yes" to any of these questions, you need to check out the Computer Networking Technology program at SUN Tech.

Outcomes: You can learn entry level skills in Computers, Network installation, Web Design, Web Animation, Network Administration, and Fiber Optics that will help you prepare for an exciting and well-paying career in the computer field

Description: As a SUN Tech Computer and Networking Technology student, you will learn a wide range of skills that will enable you to get an entry level job, skills to give you a head start on college, and even a way to make good money while going to college!

- Build, upgrade and repair computers
- Setup and configure routers, switches, firewalls, and servers
- Design web pages and flash animations
- Administer a computer network, setting up user accounts, servers, etc.
- Become certified in copper and fiber option network cabling
- Use cutting edge technology to prepare you for the workforce.
- Build laptop computers that you will use throughout the year.

Certifications Offered:

- C-Tech Network Cabling Copper Based Systems
- C-Tech Network Cabling Fiber Optic-Based System
- Levit on Cabling Cert

Dual Enrollment PC NOW Courses you can complete while in this program:

- EET 145-Introduction to Networking 4 Credits

COSMETOLOGY

Whether you have always had a love for hair and makeup, nail care and beauty or whether you are looking for a career with exciting diverse opportunities, driven by a sense of fashion and business; Cosmetology at SUN Tech can set you on a fast track to a successful future.

By starting your cosmetology training while you are in high school you will be able to make a smooth transition to a college related partner career, pursue advanced training in the cosmetology profession or you can opt to begin a lucrative wage-earning career working in or owning a salon or spa. And best of all, you have the choice of working in a local salon and staying close to home or traveling to Hollywood, the fashion stages of New York or the platform arenas of competitive styling around the world!

Outcomes: The Cosmetology Program at SUN Tech is designed to provide you with the necessary education needed to pass the Pennsylvania State Board Exam for licensing; but more importantly prepares you to successfully pursue career opportunities in all aspects of the beauty industry. Whether you wish to pursue a job as a hair stylist, beauty therapist, or nail technician; or whether you wish to pursue a job working in sales, marketing, education or business management for a beauty manufacturer or company; it can all begin with a decision to start your beauty education while in high school.

Description: The Cosmetology course at SUN Tech includes: theoretical studies and the application of all aspects of hair, skin and nail care; including anatomy/physiology, decontamination, safety and management. Eighty percent of all course activities are hands-on applications including the operation of a clinic/salon area where you will work on clients just as you would in a licensed salon.

The topics and skills covered include hairstyling, hair cutting, hair coloring and lightening, chemical texture services, braiding, skin care, massage, makeup, hair removal, nail care, artificial nails, male hair cutting and styling and product knowledge.

Cosmetology Licensing:

- 1250 hours of supervised instruction required for the PA State Board of Cosmetology licensing examination
- 300 hour summer program at SUN Tech prior to your senior year at SUN Tech.

Students who successfully complete 1250 hours of instruction will have the opportunity to complete their PA State Board Certification for Cosmetology. In order to obtain the certification you must pass the exam.

Certifications:

- OSHA 10

CRIMINAL JUSTICE

Are you a people person who enjoys interacting with all types of people, using your mind to look at things from different perspectives, or solving puzzles?

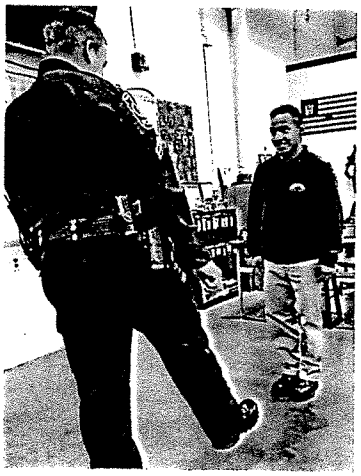
Become a part of an exciting criminal justice career! Television, movies, and video games only show a portion of the many rewarding career opportunities awaiting you. Criminal justice is the second largest employer in the Susquehanna Valley and offers entry level salaries ranging from $ 30,000 to over $75,000 annually.

Outcomes: As a SUN TECH criminal justice student, you will have the opportunity to earn up to 6 college credits while building an impressive resume with many industry recognized certifications.

Description: This program offers the entry-level skills and knowledge required for employment in criminal justice professions such as police officer, security officer, correctional officer, 911 dispatcher, store security and military police. These skills are acquired through a combination of classroom training and hands-on experience. The program offers job shadowing experiences, featured guest speakers, and field trips.

Requirements: You must possess the desire to learn and be of strong moral character. Many careers in criminal justice are closed to individuals with any arrest history. Due to the required additional training and education beyond high school, this program will require excellent written and oral communication skills, emphasizing high academic standards. Hand/eye coordination, following and applying instructions, problem solving skills, and physical fitness are also strongly encouraged.

- Federal Emergency Management Agency National Incident Management System (FEMA NIMS) certificates, 100, 200, 700, and 800
- American Safety Health Institute - CPR
- American Safety Health Institute – AED/First Aid
- Federal Emergency Management Intro to Hazmat Materials
- The Association of Public Safety Communication Officials (APCO) Telecommunicator 1



CULINARY ARTS

Do you want to be the next Food Network Star? Attending the SUN Tech Culinary Arts Program will put you on the right track to achieving this goal! In America, Service Workers make up 60% of the workforce. SUN Tech's Culinary Arts Program will teach you the skills needed to enter the exciting world of

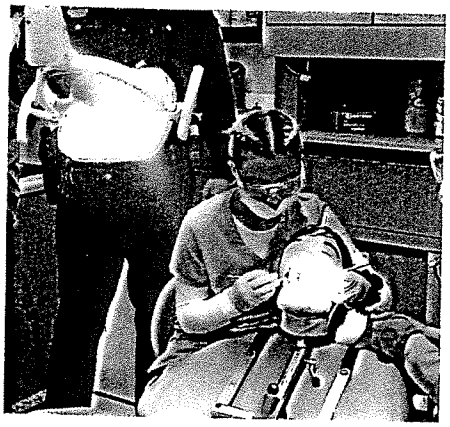
Outcomes: As a SUN Area, Technical Institute student enrolled in the Culinary Arts Program, you will have the opportunity to learn the skills necessary to work in a variety of food service positions. Your educational experience in this program will prepare you for a career in the food service industry and provide you with the prerequisites to continue your education at a post-secondary school or college in a food-related field. You will have an opportunity to work towards earning your ServSafe Certification; a recognized industry certification increasing your employability. You may also have the opportunity to earn advanced placement credits at the college level. Does working and earning money while enrolled at SUN Tech sound interesting? Culinary Arts Program students may also choose to participate in the Co-op program and work in the Culinary industry.

Requirements: You must possess a desire to learn and an interest in a career in the Culinary industry. The program requires strong verbal communication skills and the ability to work with others in a positive manner. Hand-eye coordination and fine motor dexterity skills are necessary. It is important that you are able to count money, follow instructions, remain flexible to changing routines, and take direction from others.

Description: The SUN Tech Culinary Arts Program will provide you with the skills and experience needed to prepare for an entry-level position in the Culinary industry.

The skills you will learn include:

- Basic operation of a restaurant
- Food preparation
- Safety and Sanitation
- Operation and maintenance of restaurant tools and equipment
- Creating and planning of menus for restaurant and catering functions
- Cooking & Baking
- Customer service including; hosting, serving, and bussing



DENTAL HEALTH AND TERMINOLOGY

Get the root of your education in Dental Assisting. By coming to SUN Tech, you will be prepared with a variety of hands-on experiences and practical clinical training that will lead to careers as a Dental Assistant and other dental auxiliaries.

Certifications Offered:

- Pennsylvania Radiology Registration Exam through Dental Assisting Nation Board
- CPR/AED
- First Aid
- Career Safe

Dual Enrollment:

- Harrisburg Area Community College 11 credits
- PC Now 1 credit: Dental Terminology

Description: Students who enroll in the Dental Health Technology program learn a variety of skills that enables them to become an important qualified member of a dental team. As a dental assistant, you will learn to prepare patients for treatment, sterilize instruments, practice infection control, prepare materials, and make study models from impressions. You will also be exposed to digital x-ray technology and provide chairside assisting with a local dentist to gain clinical experience.

Requirements:Radiology Registration examination through the Dental Assisting National Board (DANB); practical's, tests, quizzes, homework, and completion of clinical rotations.

- Participation in a clinical rotation to gain valuable skills, procedures, and patient care for all aspects of the dental profession
- Participation in job shadows of Dental Professions

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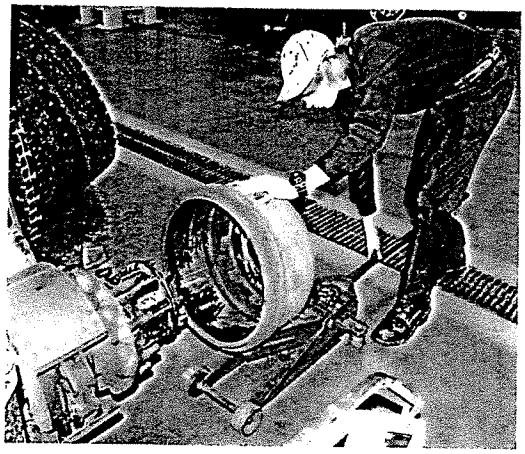
DIESEL & TRUCK TECHNOLOGY



Would you like to learn how to service, repair and maintain the trucks that bring you everything that you come in contact with every day?

If you enjoy solving problems, working with your hands, and learning new things every day, then the Diesel and Truck Technology program may be for you.

Outcomes: By developing the skills that are necessary to maintain and repair today's sophisticated trucks and other Diesel-powered equipment you can earn a good starting wage as an entry level technician. You will also have the opportunity to earn college credits though the Penn College Now Program while completing the Diesel curriculum that will help you get a start on furthering your education.

Description: The Diesel and Truck Technology course at SUN Tech prepares you for higher education or employment in the field of truck and bus repair or maintaining diesel engines and other related equipment used to power ships, trains, electric generators and construction machinery. A working knowledge of the trade is taught through theory and practice, disassembly of diesel engines, clutches, brakes (hydraulic and air brakes), electrical systems and electronic trouble shooting. If you are trained in Diesel Technology you can secure employment as a technician working on trucks, buses, agricultural and construction equipment. You will be given the opportunity to attain a Pennsylvania Vehicle Safety Inspection license and prepare to take the Automotive Service Excellence (ASE) tests.

Prerequisites Requirements: Along with a strong desire to learn and good work ethic, knowledge in the following academic areas would be to your advantage, but are NOT required: General sciences, Mechanical Drawing, Basic Math, Business Math, Trade Math, and a basic understanding of electronic/ electrical and computers.

Dual Enrollment PC Now Courses you can complete while in this program:

- DSM 109 Basic Fuel Systems
  3 credits
- DSM 141 Heavy Duty Brake Systems
  2 credits

Certifications:

- **PA State Inpsection**
- **S/P2 Heavy Duty**
- **S/P2 Safety**
- **Cummins Engine Electrical & Insight**

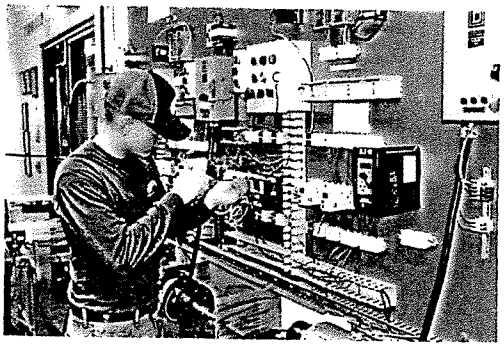
ELECTRICAL SYSTEMS TECHNOLOGY

A HIGH PAYING JOB IS WAITING FOR YOU!

Be a success in life by starting an exciting career in the electrical industry by gaining skills that demand high wages! Today the demand for electricians is at an all-time high. From linemen to residential electricians many career opportunities are available. Electrical maintenance technicians, copper networking and fiber optic installers, and electrical construction are just a few of the jobs in high demand.

Certifications Offered:

- OSHA
- C-Tech Network Cabling Copper-Based Systems
- C-Tech Network Cabling Fiber Optic Based Systems
- Levit on Certificate



Outcomes: After graduation you will be ready to continue your education with advanced placement earned at many institutions of higher learning or you can enter directly into the electrical field with a wealth of knowledge and skills attained in the Electrical Systems Technology class. You will be prepared for positions such as an Electrician's Assistant, Residential Electrician, Commercial Electrician, Electrical Maintenance Technician, Copper & Fiber optic Cabling Technician, or a variety of positions related to providing electrical products and services.

Description: The Electrical Systems Technology class provides training through a combination of classroom instruction and practical, hands-on assignments. Projects, both within and outside of the school, give you hands-on experience in a safe, supervised environment. You will learn to design and build electrical systems to meet the requirements of the National Electrical Code and OSHA. Emphasis is placed on developing skills used in residential, commercial, and industrial installation, design and repair. Local methods, materials and requirements are taught, therefore making you highly employable.

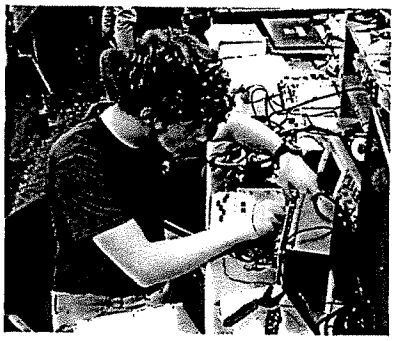
ELECTRONICS TECHNOLOGY

Ever picture yourself as a Commercial Unmanned Aircraft Pilot, engineer for NASA, gaming engineer or medical equipment engineer?

Outcomes: You will develop the skills needed to design and build electronic circuits dealing with drones, phones, computers, robots, audio, video and much more. You can also earn a semester of college credits in the PC Now dual enrollment program at SUN. You will enter the workforce or college with a definite advantage over people that do not have any electronic skills.

Description: The Electronics Technology course at SUN Tech teaches you the basic laws of electricity and applications of electronic circuitry through study and laboratory experimentation. You will also train for your FAA Part 107 Unmanned Pilot's License as well as the following list of projects and challenges.

- Learn to fly drones correctly and legally.
- Create your own circuit designs!
- Work on campus with Penn College Instructors
- Fly drones, build computers, setup security systems, setup home theater systems, build robots, build laptops, fix your phone.
- Repair your own equipment
- Complete your first semester of Penn College Electronics courses during your senior year of High School.
- Learn wind, solar technology on real windmills and tracking solar panels arrays.



Dual Enrollment PC Now Courses you can complete while in this program:

- EET114 Digital Circuit Applications *1 Credit*
- EET115 Introduction to Digital Electronics *3 Credits*
- EET116 Electronic Circuits and Devices *5 Credits*
- EET124 Engineering, Technology and Society *3 Credits*

Certifications:

- OSHA
- FAA Part 107 UAS Pilots Certification

HEALTH PROFESSIONS & RELATED SCIENCES

HAVE YOU EVER HAD A DREAM TO BE A DOCTOR, NURSE, OR TAKE CARE OF THE ELDERLY?

The Health Professions Program here at SUN Tech allows you to live out your childhood dream. If you like working with the public, show empathy to others, have good communication skills and have a desire to become a health care worker, visit the Health Professions Program at SUN Tech.

Certifications:

- **BLS Health Care Provider**
- **Heartsaver First Aide**
- **Heartsaver AED**
- **Heartsaver CPR**
- Nurse Aide Registry
- OSHA

PC Now Credits:

- Medical Terminology (MTR 104) *3 credits*

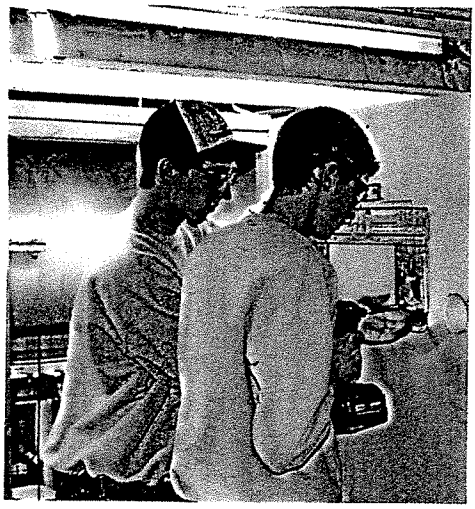
Requirements *(Prior to the first day of school)*:

- PA-Criminal Records Check ACT 34
- FBI Act 141 Federal Fingerprinting
- Physical Exam
- TB Test
- Immunization Record
- Uniforms

Outcomes: The skills that you will be taught in the Health Professions Program you will use on a daily basis. You will have the opportunity to earn a Certified Nurse Aide Certification which is valuable whether you choose to enter the work force immediately after graduation or further your education. You can also earn college credits while completing the health curriculum at SUN Tech.

Description: The Health Professions program at SUN Tech helps you learn the theory and practical skills required to help prepare you for a career in the health field. You will learn the duties of a Certified Nurse Aide and have the opportunity to perform skills learned as you deliver quality resident care while at our clinical affiliations at a local long-term care facility and local community hospital. You will learn the importance of commitment to other members of the health care team. Preparation is primarily in a simulated work environment combined with clinical application.

HVAC & PLUMBING TECHNOLOGY



How would you like to learn more about green energy? Become an HVAC service technician or an HVAC installer of residential or commercial systems! If this sound interesting than the HVAC program at SUN AREA TECHNICAL INSTITUTE is the program for you.

Outcome: You can learn the skills necessary to gain employment in the HVAC and plumbing field. Your training will prepare you for residential or commercial installation and or service of all types of heating and air conditioning equipment. The primary goal of the HVAC program is to provide you with theoretical and a practical hand on learning environment. You will have the opportunity to obtain either entry-level employment in the trade or earn advanced placement credits toward furthering your education at many institutions of higher learning while still in high school.

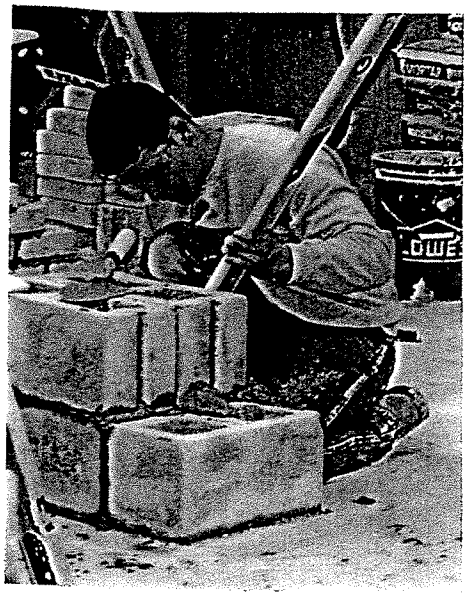
Description: HVAC & Plumbing Technology students at SUN Tech learn through classroom instruction and practical shop assignments. You will learn basic system design as well as the installation and servicing of modern HVAC systems through practice in the laboratory or at an actual job site. Emphasis is placed on developing student skills used in residential and commercial installation and repair jobs. Additional training within this trade area is available in green technology learning about solar and geothermal energy. **Please contact me at gsnook@sun-tech.org for more details or visit the www.sun-tech.org for more information.**

Dual Enrollment PC Now Courses you can complete while in this program:

- **ARC111 Introduction to Refrigeration: *5 credits***

Certifications:

- **EPA 608**
- **OSHA**
- **CSST (TracPipe)**



MASONRY

WOULD YOU LIKE TO LEARN A HIGH-PAYING AND IN-DEMAND TRADE THAT WILL PROVIDE FOR A GREAT FUTURE?

By attending the Masonry Program at SUN Area Technical Institute, you can learn the skills necessary to enter the Masonry workforce immediately upon graduation, or to advance onto higher education opportunities. Perhaps you want to become a supervisor or even own your own business someday, YOU CAN MAKE IT HAPPEN! Take the first step by contacting your guidance counselor and arranging a visit to the Masonry Program.

BUILD YOUR FUTURE.... BRICK by BRICK!!

Outcomes:

- You will process through a program where the mastery of new skills will go hand-in-hand with the potential for bigger paychecks
- Your advancement will not only be measured in terms of dollars, it will also be measured in terms of accomplishment.
- By the time you enter the workforce you will possess literally hundreds of complex construction skills.
- You may even advance as a site foreman, as estimator, or a contractor. It is individual motivation more than anything else that will determine how far you will advance in Masonry.

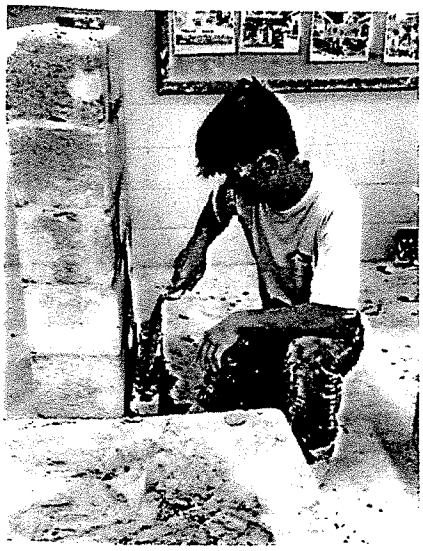
Description: Work in Masonry is a combination of physical and mental activity. Skills to master the tools of the trade along with efficient work habits are what you will learn at SUN. These skills will enable you to construct quality work that will stand the test of time. You will also develop an understanding of mathematics as it relates to building materials as well as blueprint reading, jobsite organization, and jobsite safety.

Certifications Offered:

OSHA

PC Now Credits offered in this program:

- BCTE234– Masonry Principles
  5 credits



PRECISION METALWORKING

Become a CNC machinist in this program, just like the ones seen on TV's "Titans of CNC" and "How It's Made". Imagine designing or inventing something and being able to build it yourself

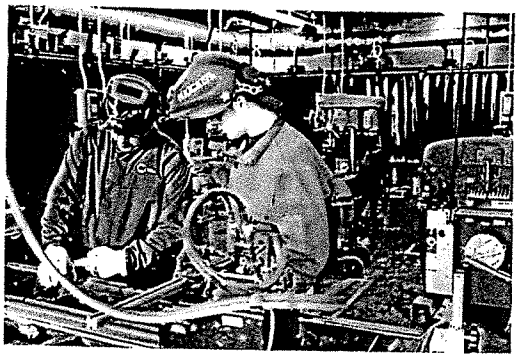
Outcomes: By developing the skills necessary to operate computerized (CNC) and conventional machinery you can secure a high paying job and earn college credits. Working with the latest Mastercam software, you can design and build amazing projects using CNC and laser machines just like the ones used in industry. Students can start earning up to $16.00 per hour or more working through the Co-Op program while still in school.

Description: A machinist doesn't think of metal as something hard and unchangeable, because they can change it into anything they want. Students setup and operate machinery to fabricate and repair parts and components. A machinist performs cuts on materials to bring it to the desired shape and dimensions. Metal blocks can be transformed into intricate parts such as sprockets, gears, pistons, tools, wheels, and molds. These parts are then assembled into cars, bikes or the machinery which mass produce every conceivable manufactured good. **Machinists are the foundation of all industries, and without them no manufacturing or construction job would exist.** Machinists are the only skilled workers capable of reproducing the actual tool they are using! Advanced Precision Machining students are highly sought out by local employers and have one of the highest job placement rates in the school. Many students pursue careers in engineering.

Certifications Offered:

- NIMS (National Institute for Metalworking Skills)
  - Measurement, Materials & Safety
  - Manual Drill Press
  - Manual Milling
  - Turning Between Centers

You can qualify for advanced placement and/or dual enrollment at the Pennsylvania College of Technology, Thaddeus Stevens School of Technology and the Harrisburg Area



PC Now Dual Enrollment Courses:

- WEL114 Shielded Metal Arc
  2 credits
- WEL116 Shielded Metal Arc II
  2 credits
- WEL120 Gas Metal Arc 1
  2 credits
- WEL124 Gas Metal Arc II
  2 credits
- WELL123 Gas Tungsten Arc 1
  2 credits
- WEL129 Gas Tungsten Arc II
  2 credits
- WEL132 FLUX Cored I
  2 credits
- WEL136 FLUX Cored II
  2 credits

Certifications:

- Level 1– Entry Welder AWS
- AWS D1.1
- AWS D1.5
- OSHA 10

WELDING

Start your career with a spark!

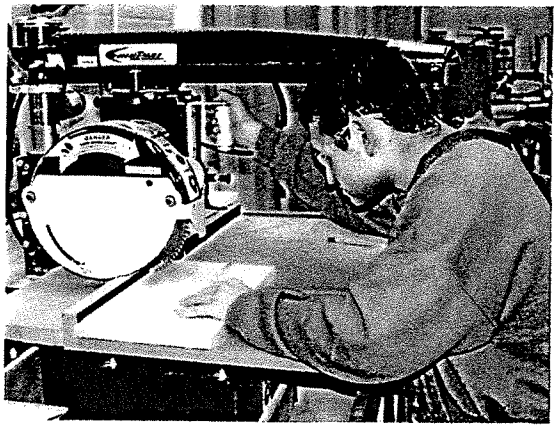
A Professional Welder's career options are nearly endless. Careers range from structural welding and pipe fitting to manufacturing and fabrication. Best of all, the demand for welders worldwide continues to grow. Nine months in the Welding Program will benefit you for the rest of your life.

Outcomes: By enrolling in the Welding Program you can learn the skills needed to succeed in this challenging field. If you are interested in furthering your education, you can earn up to 16 Penn College Now credits and advanced placement credits while attending SUN Tech. You may also choose to participate in Co-op and earn pay while being trained.

Description: The SUN Tech Welding Program provides you with the hands-on training in all positions and theoretical backgrounds required for an entry-level position in the field of welding. You will learn:

- Shielded Metal Arc Welding
- Gas Metal Arc Welding
- Gas Tungsten Arc Welding
- Nondestructive Testing
- Methods/Inspection
- Flux Core Arc Welding
- Oxyfuel Cutting/Welding/ Brazing
- CNC/ Manual Plasma cutting
- Blueprint Reading
- Fabrication skills

WOOD DESIGN & TECHNOLOGY



Are You Interested in Learning A Hands-on Skill That Will Make You MONEY And Also SAVE You MONEY For The Rest of Your Life? If the answer is yes, then consider a career in Wood Design and get your FREE training at SUN Tech!!! Visit the Program and Check It Out!!!!

Outcomes: You can:

- Learn skills that you will have forever and will enable you to MAKE MONEY!
- Create different and challenging projects each day
- Express your creativity
- Participate in community service projects off campus
- Work by yourself and as a team member
- Go to college.....possibly for FREE
- Enter the workforce upon graduation

Certifications Offered:

- OSHA

Description:

As a Wood Design & Technology (WDT) student, you can be trained to be a quality machine operator, production worker, finisher, or technician. You will learn to have a strong emphasis on quality and professionalism. Wood products manufacturing remains one of the top career fields locally and throughout the State. WDT is a State Approved Program of Study. When you complete all of the required state tasks, you can earn college credits to numerous colleges throughout the State.

Requirements: You should possess creativity and a willingness to learn and experience new things. Good hand-eye coordination, attention to detail, basic math and measurement skills are important skills to have when entering this program

ENROLLMENT

Are you a Junior or Senior?

If so, its not too late to contact your guidance counselor to sign up for one of our 19 unique programs!

1. Let your school district guidance counselor know you are interested in attending SUN Tech!

2. Obtain and submit an application from your guidance counselor by February 1st!