

USING THE PROGRAM OF STUDIES

The key to successful program planning is involvement. Our ultimate goal is for each student to have a program that will provide a meaningful and successful educational experience. In order to achieve this goal, we believe it is necessary to have information, counseling, and recommendations to enable the student and his/her parents to make informed decisions. The scheduling process is important so that each student can be successful and plan for their future endeavors. In turn, give very careful consideration to the class scheduling process.

The PHS Program of Studies gives course descriptions including prerequisites and expectations of each course. Students are urged to become familiar with this and other registration materials and to discuss the tentative course selections with parents.

While you look through the Program of Studies to plan your course requests, here are some sections of particular importance for students and their families.

- Grades and Credits
- Educational Options
- Athletics and Activities
- Graduation Requirements
- College Preparation
- Career Exploration
- Career Clusters
- Course Descriptions

NOTE: Some offerings and/or course descriptions may be subject to change.

Junior High Credit Course Retake Option Grading System and Grade Point Average Home Schooled Students Valedictorian and Salutatorian Scheduling

EDUCATIONAL OPTIONS

Success Academy Summer School Flex Credit Physical Education Waiver Upper Valley Career Center Special Education/ ELL/ Intervention Advanced Placement Courses College Credit Plus Discrimination Policy

ATHLETICS AND ACTIVITIES

Extracurricular Eligibility Athletics Extracurricular Activities

GRADUATION REQUIREMENTS

PHS Graduation Requirements End of Course Exams UVCC Graduation Requirements Academic Honors Diploma Career Technical Honors Diploma STEM Honors Diploma Arts Honors Diploma Social Science and Civic Honors Diploma

COLLEGE PREPARATION

College Bound Students How Colleges Select Students College Athletes NAIA/ NCAA

CAREER EXPLORATION

Naviance SuccessBound College Week/College Fair College Visits Job Shadowing Career Clusters

7

6

10

12

15

17

CAREER	CLUSTERS	

Agricultural and Environmental Arts and Communication **Business and Administrative** Construction Education **Engineering and Science** Engineering Finance Government and Public Administration Health Science **Health Sciences** Hospitality and Tourism Human Services Information Technology Law and Public Safety Manufacturing Marketing Transportation

37

39

Planning Sheet

COURSE DESCRIPTIONS

FOUR-YEAR SCHEDULE

39 English
45 Math
48 Science
52 Social Studies
55 Art and Design
59 Family Consumer Sciences
61 Health and Physical Education
62 Music
65 Pre-Engineering

67 Technical

70 World Languages

Table of Contents

18

JUNIOR HIGH CREDIT

Junior high school students successfully completing high school courses offered as part of the junior high curriculum (ex.: Algebra I and Art) will earn high school credit, but the grade will not be included in the high school GPA.

COURSE RETAKE OPTION

A student may retake a course for improved achievement. The credit will be denied for the original course, but the course will remain on the transcript. A letter D will be added next to the original letter grade indicating the credit was denied. For example, Spanish with an original grade of C, would be recorded CD on the final transcript.

GRADING SYSTEM

Piqua High School staff adheres to the following grading scale:

- A = 90 100
- B = 80 89
- C = 70 79
- D = 60 69
- F = Below 60

GRADE POINT AVERAGE

The grade point average (GPA) is figured on the 4.0 scale for all courses, except those that are pass/fail, and it is used to determine class rank. A grade point is computed by multiplying the number of grade points earned in each course (A=4, B=3, C=2, D=1, F=0) times the number of credits the course is worth. The total number of points is divided by the number of credits attempted to determine the GPA. A student that withdraws failing from a class will affect the student's GPA, as it will be calculated into the cumulative GPA and the class rank.

HOME SCHOOLED STUDENTS

Credits for home schooled students may be accepted by the Assistant Superintendent, but grade point average will not be accepted.

VALEDICTORIAN AND SALUTATORIAN

Selections are based on GPA, course selection, and ACT/SAT scores through seven semesters. To be eligible:

- 1. Must qualify for an Honor's Diploma.
- 2. 4.0 GPA will be multiplied by 9.
- 3. The GPA and ACT will then be added together.

4. The top point earner will be the valedictorian. The second point earner will be the salutatorian.

The honor will be based on GPA and test scores at the end of the first semester of the senior year.

ODYSSEYWARE ONLINE LEARNING

Odysseyware Online Learning is a program designed to allow credit-deficient students the opportunity to earn credits online. Students utilize an internet-based academic program to complete classes that will fulfill requirements for graduation. Participation in the program requires permission of the building principal and school counselor.

SCHEDULING

During February, the scheduling process will begin. Please feel free to arrange a conference with your counselor during this time should there be any questions. Please give careful consideration in course selection. The counselors will change schedules for the next year until the last day of school. After the last day of school, students will remain in the course for the first 5 days. They will have the opportunity to change their schedule during days 6-10 by completing a course change request form, which can be obtained in the counseling office. If a student changes a course during the first ten days, there will be no penalty to the student. After that time, the student will be withdrawn with an F which impacts eligibility and GPA. Level changes within the same subject will be handled on an individual basis.

SUMMER SCHOOL

Piqua High School offers selected summer school classes to students in grades 9 - 12 through the online Success Academy. Applications can be obtained in the spring. \$50 deposit required. Deposit will be returned upon successful completion of the summer school course(s) by the end of summer school.

FLEX CREDIT

Per Ohio Revised Code and Piqua School Board policy, Piqua High School allows students the opportunity to experience learning and the acquisition of skills through instruction or study outside of the traditional classroom. Credit flexibility options are designed for those students who demonstrate the ability, interest, and maturity to accept personal responsibility for their learning in a selected curricular area and are willing to pursue it beyond the typical classroom setting. Any student interested in participating in the Credit Flexibility option should see their counselor prior to May 15.

PHYSICAL EDUCATION WAIVER

The PE Waiver is available to athletes, members of after school Marching Band, Color Guard, and Cheerleaders who practice and participate in a Piqua High School sanctioned activity on a daily basis. The guidance department will verify with the athletic department that the students completed 90% of the season. The sport or activity will be documented on the transcript. Excused students must complete one-half unit in another curricular area (not PE). *Two seasons are required to waive the PE requirement; no partial credit can be earned.*

UPPER VALLEY CAREER CENTER

Students who are 16 or older, have completed two years of high school, meet program-specific requirements, and meet the credit requirement of seven credits, including 1 Math, 1 Science, 1 English, and 1 Social Studies are eligible to attend the Upper Valley CC. Applications are available online on the Upper Valley Career Center website and are accepted until the 10th day of school. Special needs students must have an IEP conference and plan prior to admission.

SPECIAL EDUCATION

Special education services are provided to students with disabilities as defined by the Individuals with Disabilities Education Act (IDEA). Special education students are scheduled based upon the recommendations of the student's Individualized Education Program (IEP) team. Our intervention specialists and general education teachers work together to offer a full range of instructional services to meet each student's needs.

ELL

The ELL Program is available to students whose first language is not English. The program helps non-native English speaking students develop the appropriate English language skills to succeed in all aspects of their education. They receive individualized instruction in reading, writing, listening and speaking. ELL students may also be entitled to curriculum and assessment modifications in their core classes based on their language level.

INTERVENTION

Piqua High School offers intervention to students in need of passing End of Course Exams. Sessions are offered prior to retesting.

ADVANCED PLACEMENT (AP) COURSES

AP courses are taught at high schools across the United States and allow students to participate in college level courses. Students could possibly earn college credit while still in high school. High schools and colleges cooperate in this program to give students the opportunity to show mastery in college-level courses by taking the AP exam in May of each school year. Colleges and universities may grant students college credit and/or accelerated placement on the basis of their AP test scores. It is important to note that these policies vary among institutions of higher learning. It is advised that students check with the colleges and universities they are interested in to see if they accept AP exams for credits.

COLLEGE CREDIT PLUS

College Credit Plus allows students to take college classes while in high school. All students interested in College Credit Plus are required to attend one of Piqua High School's College Credit Plus meetings held in February with their parents. The student/parent must provide the counselor with a non-binding notification of intent by April 1. Students must complete the college application and submit an official transcript to the university.

<u>Wright State University</u>: Satisfaction of the Ohio remediation free standards, recommendation of the high school principal/counselor, college-level placement scores as established by the University, and satisfaction of all prerequisites for any selected course(s). To take Math 22 on the ACT (27 ACT for WSU Calc), 550 on the SAT, or a score of 46 or better on the on the Wright State ALEKS mathematics examination. English: 18 on the ACT, 490 on the SAT Reading and Writing examinations, or a score of 84 or above on the Wright State Writing placement examination

Edison Community College: Any high school student with a qualifying ACT or Accuplacer score. ACT: 18 in English and 22 in Math; Accuplacer: 250 in Reading, 263 in Math. Students may take classes on the Piqua High School campus or at Edison. Students must meet with their counselor for proper paperwork prior to registering for their semester classes. Scheduling conflicts of college courses and school activities are not the responsibility of the Piqua City School District.

<u>Cleveland State University</u>: Students must have a 2.3 GPA and qualifying ACT score. ACT requirements include Composite: 16, Math: 22, and English: 20. Test scores must be sent electronically.

College Credit Plus Course Offerings at PHS

Math	WSU Pre-Calculus 4 credits MATH 1280 College Algebra 3 credits MATH 1350 Analytical Geometry and Trigonometry WSU Calculus 4 credits MATH 2300 Calculus I 4 credits MATH 2310 Calculus II WSU Calculus III 4 credits MATH 2310 Calculus II
Science	ECC Organic Chemistry 3 credits CHM 111S Basic Chemistry of Life ECC Chemistry 3 credits CHM 121s General Chemistry I 3 credits CHM 122s General Chemistry II ECC Anatomy and Physiology 4 credits BIO 125s Anatomy and Physiology I 4 credits BIO 126s Anatomy and Physiology II
Social Sciences	ECC US History 3 credits HST 121S History of the United States I 3 credits HST 122S History of the United States II
Electives	<u>CSU Computer Science Principles</u> 3 credits CIS 151 Invitation to Computing <u>ECC American Sign Language</u> 3 credits ASL 121s American Sign Language I 3 credits ASL 122s American Sign Language II <u>ECC Medical Terminology</u> 3 credits ALH 151s Health Care Medical Terminology

DISCRIMINATION POLICY

In compliance with legislation, all students are to be counseled equally when describing the content of a course, program, or field of academic study. All courses offered to the student population of Piqua High School are available to all students. Please refer to BOE policy 2260 - Nondiscrimination and Access to Equal Educational Opportunity.

Educational Options

EXTRACURRICULAR ELIGIBILITY

Students receiving two Fs at the conclusion of a grading period are declared ineligible for the next nine weeks. Athletes must also be passing 5 units of credit each nine week grading period per OHSAA guidelines. Students that withdraw failing from a class will impact the 2 "F" policy for extracurricular eligibility and the 5-credit requirement for the OHSAA. When registering for classes and changing class schedules, students/parents need to double check the total number of credits with the counselor. PE does not count as one of the five classes needed for eligibility.

ATHLETICS

Piqua High School is a member of the Miami Valley League (MVL), participating in sports opposite Sidney, Piqua, Troy, Tipp City, Vandalia, Greenville, W. Carrollton, Fairborn, Stebbins, and Xenia.

Boys' Sports Football Basketball Baseball Cross Country Tennis Track Soccer Wrestling Golf Swimming Bowling

Girls' Sports Volleyball Basketball Softball Cross Country Tennis Track Soccer Golf Swimming Cheerleading Bowling

EXTRACURRICULAR ACTIVITIES

The following extracurricular activities are available to Piqua High School Students

<u>National Honor Society</u>: a group of juniors and seniors having a GPA of 3.6 or higher. The purpose is to uphold the standards of scholarship, leadership, character, and service.

<u>Student Council</u>: an organization of elected students that plans student based activities such as homecoming, honor roll assemblies and teacher appreciation breakfasts. Students must maintain high academic standards and attendance to continue as a member in Student Council.

<u>Key Club</u>: an international student led organization which provides its members with opportunities to provide service, build character, and develop leadership.

<u>Link Leaders</u>: students in grades 11-12 act as mentors to the incoming freshmen to help them transition into high school.

<u>Color Guard</u>: an auxiliary unit mainly concerned with the visual aspect of marching band through the use of flags and movement.

<u>Musical</u>: The Piqua High School Music Department presents an all school musical each spring. The musical is open to any PHS student. Auditions are held prior to holiday vacation. Rehearsals take place January, February, and March.

<u>Muse Machine</u>: promotes the arts in all its forms by bringing artists for in-school performances and providing field trips to members for other events.

<u>Academic Challenge</u>: a winter MVL sport which competes in quiz bowl competitions.

<u>Spanish Club</u>: promotes the understanding of foreign cultures, while providing students with an opportunity to speak Spanish, explore artistic expression, and experience the flavor and diversity of the multi-faceted Hispanic culture.

<u>Art Club</u>: works on various large-scale art projects throughout the year. Members participate in projects to beautify the school and community as well as multiple fundraisers to support the club.

<u>Family, Career and Community Leaders of America (FCCLA)</u>: a dynamic and effective national student organization that helps young men and women become leaders and address important personal, family, work, and societal issues through Family and Consumer Sciences education.

<u>Interact Club</u>: a service organization connected to the Rotary Club. Interact Club sponsors several events during the school year that focus on lifting up the community.

<u>Science Olympiad</u>: an academic competition team that competes in events consisting of building, identifying, modeling, and studying different scientific phenomenon.

<u>FOR Club</u>: Friends of Rachel Club is a student led club designed to promote kindness. Students are involved in a variety of activities centered on creating a positive environment within the school and the community. In this club, members create, design, and implement projects to help enrich the lives of others.

<u>Science Fair:</u> Work with classmates to complete a long-term science project and submit it for prizes at the district, county, and state level.

<u>Dungeons and Dragons Club</u>: Learn how to play the world's most famous roleplaying game and make new friends in the process. Create a character and join a party of adventurers, leveling up in power as you face various monsters and obstacles while telling a story collaboratively.

<u>French Honor Society</u>: To foster and encourage the study of the French language and culture. Qualifications: Two full years of French with a grade of A- or better; a minimum 3.0 GPA in all other coursework (excluding French grades); teacher invitation only.

<u>Harry Potter Club</u>: promotes positivity in the school and community through the magical world of Harry Potter. During each meeting, club members discuss Harry Potter books, movies, topics, news, and trivia.

PIQUA HIGH SCHOOL GRADUATION REQUIREMENTS

Piqua High School students are required to earn 21 credits, meet testing requirements, and complete 6 hours of senior service hours.

- English: 4 credits
- Math: 4 credits including 1 credit of Algebra II or equivalent. Three math credits must be earned at the high school.
- Science: 3 credits including 1 Physical, 1 Biological, and 1 Advanced
- Social Studies: 3 credits including 1 American History, .5 Government, and .5 World History (Class of 2021 and beyond)
- Physical Education: .5 credit--2 semesters
- Health: .5 credit
- Electives: 6 credits including 2 semesters in Fine Arts (grades 7-12) and ¹/₂ credit in the SuccessBound course (Class of 2022 and beyond).
- Financial Literacy: Students must study financial literacy to graduate. This requirement can be met by completing one of the following courses: Economics, Finance and Banking, Personal Finance, or Success Bound.

END OF COURSE EXAMS

Must meet one of three testing options.

Ohio's state tests

Students will take 7 end of course exams in English 9, English 10, Algebra, Geometry, Biology, US History, and Government. Each test is worth a maximum of 5 points. If the student earns 18 points with minimum scores of 4 points in English, 4 points in Math, and 6 points in Social Studies and Science, the testing requirements for graduation are met. Students taking Advanced Placement courses in Biology, American History, or American Government may substitute AP scores for end of course state exams to avoid double testing. Students taking College Credit Plus courses in Biology, American History, or American Government may substitute grades for end of course state exams. Students that use AP scores or CCP scores in Biology, still need to test in Biology.

College and career readiness tests

Students may take a college admissions test to meet graduation testing requirements. Students must earn "remediation-free" scores in English language arts and mathematics on a nationally recognized college admission exam. The ACT remediation free scores are English 18, Reading 22, and Math 22. The SAT remediation free scores are Evidence Based Reading and Writing 480 and Math 530. The state of Ohio will pay one time for all 11th grade students to take the exam free of charge. The school district selects the test each year.

Industry credential and workforce readiness

The Industry credential and workforce readiness option means that students must earn 12 points through a State Board of Education-approved, industry-recognized credential or group of credentials in a single career field and achieve a workforce readiness score on the WorkKeys assessment. The WorkKeys assessment has three sections: reading, applied mathematics and locating information. Students must earn a total of 14 points across the three WorkKeys sections. Students must also earn at least three points on each section of the test. The state of Ohio will pay one time for those who take the WorkKeys assessment.

UPPER VALLEY CAREER CENTER GRADUATION REQUIREMENTS

Upper Valley Career Center students are required to earn 21 credits and meet end of course exam requirements. Senior service hours are not required.

- English: 4 credits
- Math: 4 credits including 1 credit of Algebra II or equivalent. Three math credits must be earned at the high school. Those we are pursuing a career-technical education pathway may be able to replace the Algebra 2/Mathematics 3 requirement with a career-based mathematics course.
- Science: 3 credits including 1 Physical, 1 Life, and 1 Advanced
- Social Studies: 3 credits including .5 American History, .5 Government, and .5 World History (Class of 2021 and beyond)
- Physical Education: .5 credit--2 semesters
- Health: .5 credit
- Electives: 6 credits
- Financial Literacy: Students can meet this requirement by completing requirements at PHS or by taking government at the Upper Valley CC.

ACADEMIC HONORS DIPLOMA

Graduating seniors have the opportunity to earn a Diploma with Honors. To qualify for this diploma, a student must fulfill all but one criterion.

- English: 4 credits
- Math: 4 credits including Algebra I, Geometry, Algebra II
- Science: 4 credits including 2 advanced sciences
- Social Studies: 4 credits
- World Language: 3 credits in one language or 2 credits each in two languages
- Fine Arts: 1 credit (grades 9-12)
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1280

CAREER TECHNICAL HONORS DIPLOMA

Graduating seniors have the opportunity to earn a Career Technical Honors Diploma. To qualify for this diploma, a student must fulfill all but one criterion.

- English: 4 credits
- Math: 4 credits including Algebra I, Geometry, Algebra II, or equivalent and another higher level course or a four-year sequence of courses that contain equivalent content.
- Science: 4 credits including two units of advanced science
- Social Studies: 4 credits
- World Language: 2 credits in one language
- Electives: 4 credits of career-technical courses
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1210 or Workkeys; 6 on Reading and 6 on Applied Mathematics
- Field experience
- Portfolio
- Earn an industry-recognized credential or achieve proficiency benchmark for appropriate Ohio Career-Technical Competency Assessment or equivalent.

STEM HONORS DIPLOMA

Graduating seniors have the opportunity to earn a STEM Honors Diploma. To qualify for this diploma, a student must fulfill all but one criterion.

- English: 4 credits
- Math: 5 credits including Algebra I, Geometry, Algebra II
- Science: 5 credits including 2 advanced sciences
- Social Studies: 3 credits
- World Language: 3 credits in one language or 2 credits each in two languages
- Fine Arts: 1 credit (grades 9-12)
- Electives: 2 credits with a focus on STEM
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1280
- Field Experience
- Portfolio

ARTS HONORS DIPLOMA

Graduating seniors have the opportunity to earn an Arts Honors Diploma. To qualify for this diploma, a student must fulfill all but one criterion.

- English: 4 credits
- Math: 4 credits including Algebra I, Geometry, Algebra II
- Science: 3 credits including 1 advanced sciences
- Social Studies: 3 credits
- World Language: 3 credits in one language or 2 credits each in two languages
- Fine Arts: 4 credits (grades 9-12)
- Elective: 2 units with a focus on fine arts
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1280
- Field Experience
- Portfolio

SOCIAL SCIENCE AND CIVIC ENGAGEMENT HONORS DIPLOMA

Graduating seniors have the opportunity to earn a Social Studies and Civic Engagement Honors Diploma. To qualify for this diploma, a student must fulfill all but one criterion.

- English: 4 credits
- Math: 4 credits including Algebra I, Geometry, Algebra II
- Science: 3 credits including 1 advanced science
- Social Studies: 5 credits
- World Language: 3 credits in one language or 2 credits each in two languages
- Fine Arts: 1 credit (grades 9-12)
- Electives: 3 units with a focus on social sciences
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1280
- Field Experience
- Portfolio

COLLEGE BOUND STUDENTS

The following courses are recommended for college bound students. 4 credits of College Prep or Pre-AP English 4 credits of Math, including Algebra I, Geometry, Algebra II 3 credits of Science 3 credits of Social Studies 2-3 credits of World Language (same language) 1 credit of Art or Music (grades 9-12)

Four-year college bound students will complete college entrance exams. The entrance tests are the ACT and SAT. Both the ACT and SAT are given five to six times each year. A student may take the test as many times as he/she wishes and scores should be sent to the college. Colleges will generally take the best score when considering admission or scholarship. It is best to take the test no later than the spring of the junior year. This allows the student to complete a full three years of English, math, and science courses. Students are encouraged to take the test more than once.

PreACT: The PreACT is a shortened practice ACT test for high school sophomores. It tests English, Math, Reading, and Science. It is an excellent preview in preparation for taking the real ACT.

ACT: Scores on the ACT are reported in English, Math, Reading, Science Reasoning, Writing (optional but required by some schools), and a Composite (average of four). Scores will range from 1 to 36 with 21 being an average national score. The following scores on the ACT indicate college readiness: English-18, Reading-22, Math-22, and Science-23.

PSAT: PSAT scores are used to identify National Merit Scholars and award merit scholars. This test is taken on a request only basis by the 11th graders.

SAT: Highly competitive schools generally prefer the SAT. Scores are reported in critical reading, math, and writing. Scores on the SAT range from 200 to 800 on each part of the test. The following scores on the SAT indicate college readiness: Writing-430, Critical Reading-450, Math-520.

Students should be prepared to apply to college by Thanksgiving but no later than Christmas of their senior year. The student will request transcripts from their counselor and provide a dollar for each request.

Seniors should check the list of scholarships posted in Naviance. All families with college bound students should complete the FAFSA form (Financial Aid Form) after October 1 of their senior year. Colleges have priority deadlines. Complete the FAFSA by the deadline. Financial aid meetings are offered during parent teacher conferences.

HOW COLLEGES SELECT STUDENTS

Colleges select students by the rigor of course work pursued by the student during high school, student rank, GPA, college entrance examination scores, service to the school and the community, extracurricular activities, attendance record, personal profile of the student, neatness and accuracy of the college application, letters of recommendation, and personal interview (if required).

College Preparation

COLLEGE ATHLETES

Students planning to participate in intercollegiate athletics must pay close attention to the courses they select. They may need to go through the NAIA or NCAA eligibility center during their junior year, and they want to make sure they are eligible.

NAIA

If you are playing NAIA, you must register at <u>www.playnaia.org/</u>. You must meet two of the three criteria: GPA (2.0/4.0), class rank (top 50%), and ACT (18) or SAT (860). Student must send an official transcript at the end of their junior year and a final transcript once they graduate. All ACT scores need to be sent directly from the testing agency using code 9876.

NCAA

If you are playing at a Division I or II institution, you must register at <u>www.eligibilitycenter.org</u>. GPA, ACT/SAT scores, and course requirements determine eligibility. Check with your counselor your freshman year to make sure you are taking a core curriculum that meets NCAA requirements. Student must send an official transcript at the end of their junior year and a final transcript once they graduate. All ACT scores need to be sent directly from the testing agency using code 9999.

Students must meet the following criteria:

Graduate from high school

• Complete 16 core courses: 4 years of English (Must be College Prep English), 3 years of math, 2 years of science, 1 extra year of English, math, or science, 2 units of social science, 4 years of extra core courses (from any category above or world language, nondoctrinal religion, or philosophy). For Division I, 10 core courses must be completed prior to the 7th semester of high school (January of your senior year). These course are locked in and cannot be retaken for improved credit. 7 of the 10 courses must be in English, Math, or Science.

• Division I: Uses a sliding scale to match test scores and grade point average to determine athletic eligibility. Must have a core GPA of at least 2.3. Grade point average is based on core courses.

• Division II: Earn a 2.200 grade-point average or better in your core courses and earn a combined SAT score of 840 or an ACT sum score of 70.

NAVIANCE

Naviance is a one-stop site to help students prepare for future careers. The website allows students to take career assessments, research careers, locate universities, apply for scholarships, and explore job opportunities. Each student has a Naviance account. The account can be accessed from the guidance webpage.

SUCCESS BOUND

The Success Bound course introduces students to a variety of career fields and business people from a range of career clusters.

COLLEGE WEEK

Piqua High School offers college week for sophomores, juniors, and seniors. Sophomores take the PreACT test. Juniors and seniors visit college, military, and employment recruiters of interest.

COLLEGE FAIR

Edison Community College offers a college fair for juniors and seniors. The high school will take students to the event. Over 60 college and university representatives from Ohio, Indiana, and Tennessee attend.

COLLEGE VISITS

Juniors are allowed to attend 2 college visits. Seniors are allowed to attend 3 college visits. *See your counselor prior to attending for the correct paperwork (college visit form).*

JOB SHADOWING

Students are able to arrange to job shadow. See your counselor for an application.

CAREER CLUSTERS

The Career Clusters are separated into sixteen areas and are designed to help students plan their educational experiences culminating in a rewarding career and independent adulthood. The information on the following pages is provided by Ohio Means Jobs.

- Agricultural Engineers
- Agricultural inspector
- Agricultural Scientist
- Animal Breeders
- Animal Scientists
- Animal Trainers
- Commercial Fishers
- Conservation Scientists
- Farm and Rank Workers
- Farm Equipment Mechanics
- Fish and Game Wardens
- Food Processing Workers
- Foresters
- Loaaers
- Meat Cutters
- Nursery Workers
- Park Naturalists
- Recycling Workers
- Rock Splitters
- Trash Collectors
- Veterinarians
- Veterinary Assistants
- Water Treatment Plant Operators
- Zoologists

Agricultural and Environmental Systems

Do you enjoy working with animals? Do you have a green thumb? Do you collect rocks? Are you interested in protecting the environment? Do you enjoy working outdoors? Are science classes your favorite?

If you answered yes to two or more of the questions above, you might be interested in considering a career in agriculture, food, and natural resources.

If you chose to work in occupations in the Agriculture, Food, and Natural Resources cluster, you could raise plants and animals as sources for food and shelter. On the other hand, you could focus on selling and making products from plants and animals. These products include food, lumber, and fabrics. You might also provide advice and services that farmers and ranchers need to improve products. Another option in this cluster is to work to conserve natural resources and protect the environment.

Helpful Piqua High School Electives

AP Biology AP Chemistry Higher Level Math Classes ECC Chemistry

Upper Valley Career Center Offerings

Ag and Power Technologies Environmental Occupations Horticulture and Landscape Management Veterinary Science

Edison Community College Offerings Geology/Earth Science A.S.

Arts and Communication

Do you like to perform in front of an audience? Are you interested in working in the movies or television? Do you like to work with technology? Is artistic expression important to you? Are you active with the school or community theatre? Does computer animation interest you? Are you visually oriented?

If you answered yes, you might be interested in considering a career in arts, audio/video technology, and communications. If you are interested in working in this cluster, you have two avenues. One is to be the performer or artist. The other is to work behind the scenes to make the performance or publication happen. As a reporter, actor, or fine artist, you would use your creative talents. To assure that a concert or magazine is successful, you would use computers and sound equipment. The occupations in this cluster allow you to use your creativity, talent, and technical skills.

Helpful High School Electives

Women's, Men's, Concert, & Show Choir Show Choir Combo, Marching Band & Symphonic Band Music Appreciation and Theory Art I: Introduction to Art Intermediate Painting Art III: Studio Art AP Studio Art: 2 D Design and Drawing Photography Ceramics Speech World Languages Yearbook Newspaper Drama History of Rock and Roll Introduction to Design Visual Design **Digital Video** Interactive Design Premiere Pro Textile Design Construction and Maintenance

Upper Valley Career Center

Design and Digital Print Technologies

Edison Community College Offerings

Fine Arts, AA Photography Fast Track English, AA Communication, AA Telecommunications AA

- Actor
- Agent & Business
 Manager
- Animator
- Announcer
- Art Director
- Broadcast Technician
- Camera Operator
- Cartoonist
- Choreographer
- Costume and
 Wardrobe Specialist
- Curator
- Dancer
- Editor
- Fashion Designer
- Film and Video Editor
- Fine Artist
- Graphic Designer
- Music Composers, Directors, and Arrangers
- Musicians
- News Reporters
- Photographers
- Printing Press
 Operator
- Producer and Director
- Proofreaders
- Set Designer
- Singer
- Technical Writer
- Video Game Designer
- Writer

- Administrative
 Services Managers
- Advertising Managers
- Billing Clerks
- Bookkeeping and
 Accounting Clerks
- Business Executives
- Computer Operators
- Court Reporters
- Data Entry Keyers
- Employment
 Interviewer
- Employment Recruiter
- Executive Secretary
- File Clerks
- Human Resources
 Manager
- Mail Clerks
- Office Manager
- Payroll and Timekeeping Clerks
- Property and Real
 Estate Manager
- Receptionist
- Secretaries
- Statisticians

Business and Administrative Services

Do you enjoy working with other people? Are you good at working with numbers? Do you like to plan and organize activities? Have you started your own business? Do you keep your checkbook balanced? Are you an officer of an organization?

If you answered yes to two or more of the questions above, you might be interested in a career in business management and administration.

If you are interested in the Business Management and Administration cluster, there are many career options. You may provide the needed support to keep a business in operation. Or you might keep track of the expenses and income. You could manage the financial activities of a business. Another option is to be sure that a business has qualified employees who are trained to do their jobs. Or after years of education or experience, you might direct the operations of a business.

Helpful High School Electives

Speech Finance and Banking AP Calculus AP Statistics Introduction to Design Visual Design Digital Video

Edison Community College Offerings

Business Management, AAB, certificate, and fast track Business Management, General Business Studies Option, AAB Business Management, Human Resources Management Option, AAB, certificate, and fast track Business Management, Marketing Option, AAB and certificate Business Management Entrepreneurship AAB, Certificate Real Estate Certificate and fast track Office Systems and Administration, Administrative Assistant Option AAB or certificate Office Systems and Administration, Medical Office Support Option, AAB Medical Coder, Certificate Medical Office Support, Certificate

Construction Technologies

Do you often observe and note the buildings around you? Do you like to work with your hands? Can you visualize objects and projects in your mind? Do you like to create models or make designs? Do you like to work with tools, objects, and numbers? Do you like to use both mental and manual skills to solve problems?

Do you like to work both alone and with others?

If you answered *yes* to two or more of the questions above, you might be interested in considering a career in architecture and construction.

If you work in occupations in the Architecture and Construction cluster, you would be responsible for buildings and other structures such as highways and bridges. You might make designs and plans for new structures. Or, you would use the plans to build new structures and manage construction workers. Another option would be to take care of, repair, and restore existing structures.

Helpful Piqua High School Electives

Exploring Technology Engineering Design Construction Technology Textiles and Interior Design Art I: Introduction to Art Intermediate Painting Art III: Studio Art AP Studio Art: 2 D Design and Drawing

Upper Valley Career Center Offerings

Masonry, Plumbing, and Mechanical Systems Carpentry Electrical Trades HVAC/R

Edison Community College Offerings

Equipment Maintenance Technology, AAS HVAC/R, certificate

- Architect
- Cabinetmaker
- Carpenter
- Cement Mason
- Construction Manager
- Drafters
- Drywall Installers
- Electrician
- Floor and Carpet
- Installer
- General Construction
 Worker
- Heating and Cooling
 System Mechanics
- Highway Maintenance
 Worker
- Interior Designer
- Janitor
- Landscape Architect
- Painter
- Plumber
- Roofer
- Sheet Metal Worker
- Surveyor

- Adult and Vocational Education Teachers
- Coaches and Scouts
- College and University
 Administrators
- Elementary School
 Teachers
- Fitness Trainers and Aerobics Instructors
- High School Teachers
- Librarians
- Middle School Teacher
- Preschool and Kindergarten Teacher
- Special Education Teacher
- Speech Pathologies and Audiologist
- Teacher Aides
- University and College Teacher

Education and Training

Are you patient? Have you coached sports activities? Do you like to speak in front of groups? Have you helped out in a school or library? Do you enjoy teaching games to children? Are you outgoing? Do you like being in school?

If you answered yes to two or more of the questions above, you might be interested in considering a career in education and training.

In the Education and Training cluster, you would have the opportunity to guide and train young people. As a teacher, you could influence young lives. In addition, you could support the work of the classroom teacher as a counselor, librarian, or principal. If you are interested in working with adults, you could provide training to employees in a business. Each of these settings provides you with the chance to help people learn and improve their lives.

Helpful Piqua High School Electives

Speech Psychology Child Development Mentoring Sociology AP Physics I AP Physics II AP Biology AP Chemistry

Upper Valley Career Center Programs Early Childhood Education Teacher Academy

Edison Community College Offerings

Early Childhood Education, AAS Child Development Associate Credential, fast track Education, AA Education, AS

Engineering and Science Technologies

Is science one of your favorite subjects? Do you prepare projects for science fairs? Do you enjoy reading science magazines? Are you detail-oriented? Do you want to know how things work?

If you answered yes to two or more of the questions above, you might be interested in considering a career in science, technology, engineering, or mathematics.

If you choose to work in the Science, Technology, Engineering, and Mathematics cluster, you have several avenues. One avenue is to do scientific research in laboratories or the field. Another option is to be involved in the planning and design of products and systems. The last avenue is to provide support to the scientists, mathematicians, and engineers so they can do their work.

Helpful High School Electives

AP Biology AP Chemistry/ECC Chemistry Physics/AP Physics I/AP Physics II Exploring Technology Robotics CIM Astronomy Sociology WSU Pre-Calculus WSU Calculus AP Statistics Engineering Design AP/CSU Computer Science Principles

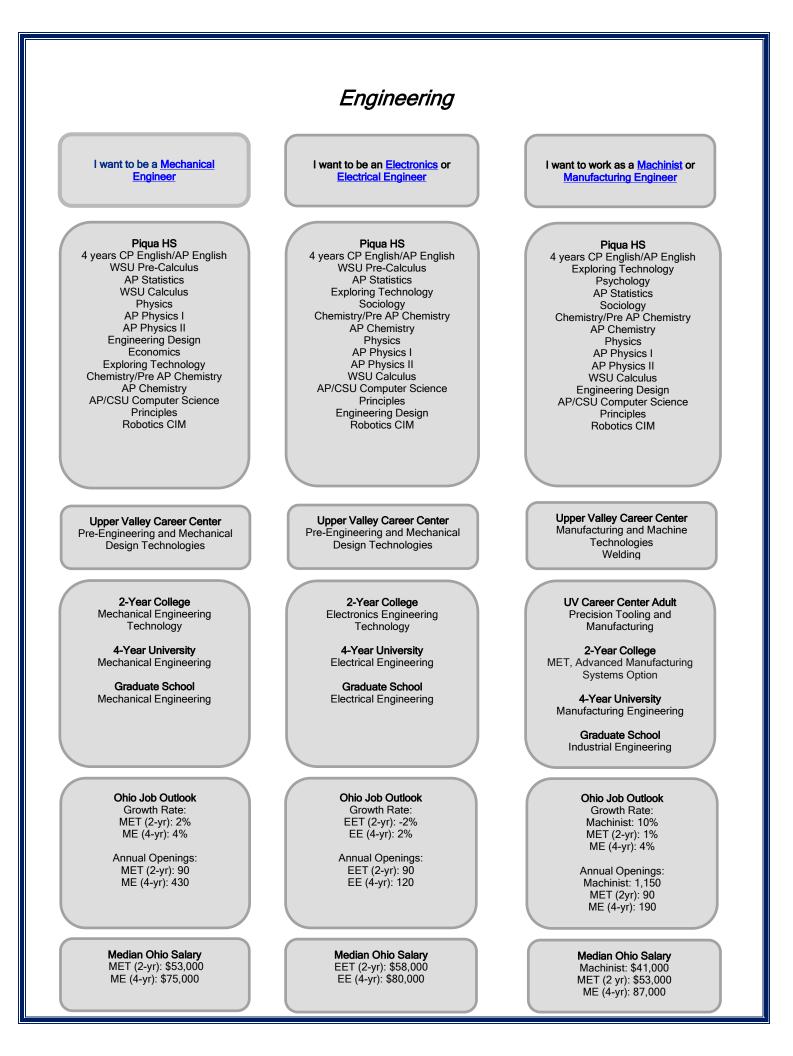
Upper Valley Career Center Offerings

Electronics and Automation Pre-Engineering and Mechanical Design Technologies

Edison Community College Offerings

Mechanical Engineering Technology, AAS Advanced Manufacturing, certificate and fast track CAD, certificate and fast track CNC Programming, fast track Electronics Engineering Technology, AAS Automation and Robotics, certificate Electro-Mechanical Certificate Electronics Networking, certificate and fast track Renewable Energy Technology, certificate Basic Electricity, fast track Factory Automation, Fast track Industrial Electrical Controls, fast track Print Reading and Controls, fast track Biology, AS

- Aerospace Engineers
- Anthropologists
- Archeologists
- Astronauts
- Bioengineers
- Biologists
- Biomedical Engineers
- Cartographers
- Chemists
- Civil Engineers
- Electrical and Electronics Engineers
- Energy Engineers
- Engineering Technicians
- Environmental Engineers
- Environmental Scientists
- Geographers
- Geologists and
 Geophysicists
- Historians
- Industrial Engineers
- Manufacturing
 Engineers
- Marine Biologist
- Mathematicians
- Mechanical Engineers
- Meteorologists
- Nuclear Engineers
- Physicist
- Political Scientists
- Science Technicians
- Sociologists



Finance

Are you the treasurer of a club or organization? Do you enjoy working with numbers? Do you balance your checkbook? Are you interested in the stock market? Do you like to operate calculators? Are you comfortable following detailed plans for work?

If you answered yes to two or more of the questions above, you might be interested in considering a career in finance. In the occupations in the Finance cluster, you would keep track of money. You might provide financial services to a business or individual. Your work could include maintaining records or giving advice to business executives on how to operate their business. You could work in financial planning, banking, or insurance.

Helpful High School Electives

Speech Finance and Banking WSU Calculus AP Statistics AP Calculus Economics

Edison Community College Offerings

Accounting, AAB and certificate Accounting Clerk, fast track Tax Consultant, fast track Economics, AS Mathematics, AS

- Accountants and Auditors
- Actuaries
- Appraisers
- Bank Tellers
- Bill Collectors
- Brokerage Clerks
- Budget Analysts
- Credit Analysts
- Credit Checkers
- Economists
- Financial Analysts
- Financial Examiners
- Insurance Adjusters
- Insurance Agents
- Insurance Underwriters
- Loan Clerks
- Loan Officers
- Securities
 Salespeople
- Tax Preparers
- Title Examiners

- Compliance Officers
 and Inspectors
- Construction and
 Building Inspectors
- Foreign Service Officers
- Government Benefits
 Interviewers
- Interpreters and
 Translators
- License Clerks
- Mail Carriers
- Meter Readers
- Postal Clerks
- Postmasters and Mail
 Superintendents
- Social and Community Services Managers
- Social Science
 Research Assistants
- Tax Examiners
- Transportation
 Inspectors
- Urban and Regional
 Planners

Government and Public Administration

Have you served as an officer of a club or organization? Do you like to plan and organize activities? Are you interested in politics? Would you like to work in another country? Are rules and laws important to you?

If you answered yes to two or more of the questions above, you might be interested in considering a career in government and public administration.

Through the national, state, and local governments, the public can express its will and make our way of life possible. Through government, individuals can act together to accomplish what cannot be done alone. Most of these actions are carried out only by the government. For example, the federal government includes the military for protection. It also includes ambassadors who represent us in foreign countries. It is Congress that passes laws. The Administration carries out and enforces those laws. You would find almost every occupation within the government. However, this Government and Public Administration career cluster focuses on those occupations that are unique.

Helpful High School Electives

AP Government Economics World Language Psychology Sociology AP World History AP Statistics ECC US History Current Events

Health Science

Are science classes your favorite? Do you enjoy helping people? Have you served as a volunteer in a hospital? Do you follow instructions exactly? Can you work fast in an emergency? Do you take good notes in class?

If you answered yes to two or more of the questions above, you might be interested in considering a career in health science.

In the Health Science cluster you would promote health and wellness or diagnose and treat injuries and disease. You could work directly with people. Or you could work in laboratories to get information used in research or diagnosis. Health service employees may work in hospitals, offices, or laboratories. Others work on cruise ships, at sports arenas, or within communities.

Helpful High School Electives

Child Development AP Chemistry ECC Chemistry AP Biology Speech Athletic Training Sociology AP Statistics Psychology Higher level math classes Anatomy and Physiology Medical Terminology Intro to Medical Investigation

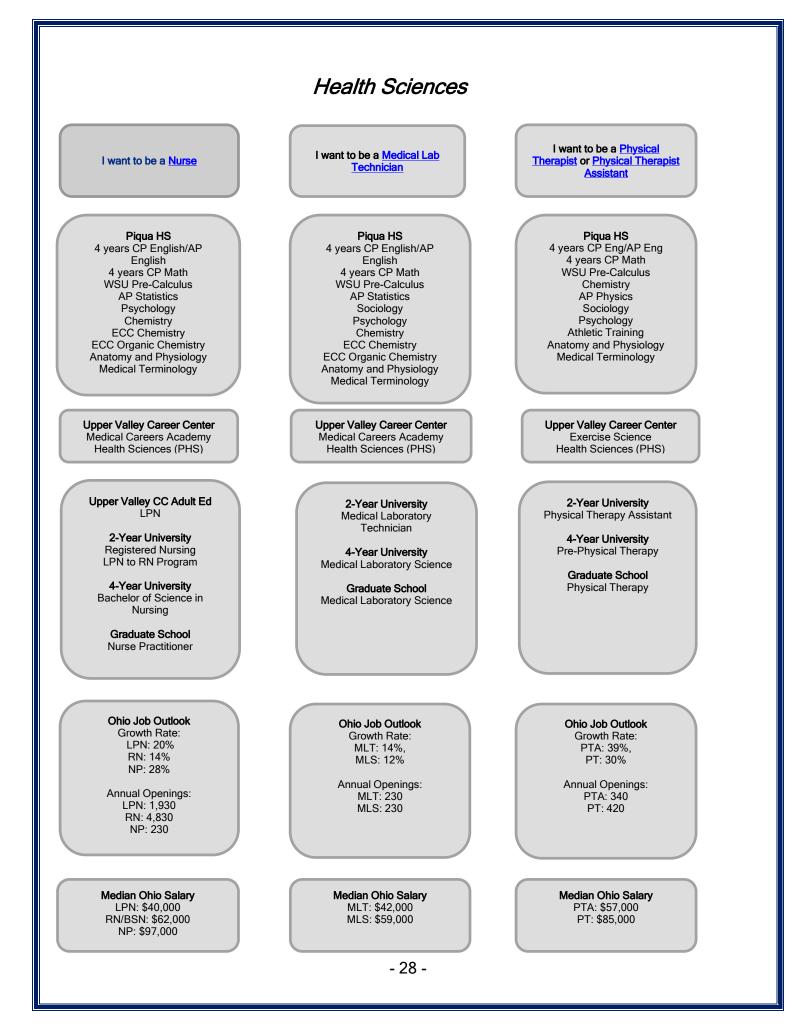
Upper Valley Career Center Offerings

Medical Careers Academy Exercise Science Health Sciences (Lab offered at PHS)

Edison Community College Offerings

Phlebotomy, certificate Physical Therapy Assistant, AAS Registered Nursing, AAS Medical Lab Technician, AAS

- Anesthesiologists
- Athletic Trainer
- Chiropractor
- Dental Hygienists
- Dental Lab Techs
- Dentist
- Dermatologists
- Dietitians
- Emergency Medical
 Technicians
- Exercise Physiologist
- General Practitioner
- Health Services
 Administrators
- Home Health Aides
- Licensed Practical Nurses
- Massage Therapists
- Medical Assistants
- Medical Lab Techs
- Medial Scientists
- Medical Secretaries
- MRI Technologist
- Nuclear Medicine
 Technologies
- Nurse Anesthetists
- Nurse Practitioners
- Gynecologists
- Optometrists
- Pediatrician
- Pharmacists
- Phlebotomists
- Physical Therapists
- Physicians Assistants
- Podiatrists
- Psychiatrist
- Radiologists
- Registered Nurses
- Surgeons



Hospitality and Tourism

Can you talk easily with all kinds of people and put them at ease? Do you participate in athletic activities? Do you enjoy travel? Have you worked in a restaurant? Do you like to plan family recreational activities? Do you like to cook?

If you answered yes to two or more of the questions above, you might be interested in considering a career in hospitality and tourism.

In the Hospitality and Tourism cluster, you could work in a restaurant, hotel, sports arena, or travel agency. You might manage operations of a college cafeteria. Or you might guide high school students on a trip to Spain. Or you might rent equipment at a recreation center.

Helpful High School Electives

World Languages Culinary Fundamentals Global Foods Nutrition and Wellness Speech

Upper Valley Career Center Offerings Culinary Arts

- Baggage Porters and Bellhops
- Baristas
- Caterers
- Chefs and Dinner
 Cooks
- Concierges
- Counter Attendants
- Fast Food Cooks
- Food Preparation
 Workers
- Hotel and Motel
 Managers
- Janitor and Housekeeper Supervisors
- Recreation Attendants
- Recreation Workers
- Reservation and
 Ticket Agents
- Restaurant Hosts
- Restaurant Managers
- Tour Guides
- Travel Agents
- Waiters and Waitresses
- Wedding Planners

- Addictions Counselors
- Barbers
- Child Care Workers
- Clergy
- Customer Service
 Representatives
- Embalmers
- Financial Counselors
- Funeral Attendants
- Funeral Directors
- Genetic Counselors
- Hairstylists and Cosmetologists
- Dry Cleaning Workers
- Manicurists
- Marriage and Family
 Therapists
- Mental Health
 Counselors
- Professional
 Organizers
- Psychologist
- Rehabilitation
 Counselors
- Residential
 Counselors
- School Counselors
- School Psychologists
- Social and Human
 Services Assistants
- Social Workers
- Tattoo Artists

Human Services

Do you help friends with their personal problems? Have you planned programs for school or community organizations? Are you a good listener? Do you care about people and want to help in some way? Have you cared for children or done babysitting? Do you like to help friends and family members look their best?

If you answered yes to two or more of the questions above, you might be interested in considering a career in human services.

In the Human Services cluster, you would work with individuals and families to meet their personal needs.

Helpful High School Electives

Child Development Psychology Sociology Speech Mentoring AP World History AP Statistics World Languages

Upper Valley Career Center Offerings Cosmetology

Edison Community College Offerings Social Services, AAS Psychology, AA or AS Philosophy, AA

Information Technology

Do you enjoy working with computers and learn new programs quickly? Have you created your own webpage? Is mathematics a favorite subject? Are you organized and able to focus on details?

If you answered yes to two or more of the questions above, you might be interested in a career in information technology.

Information Technology (IT) is an area that is growing and always changing with new developments. In IT, you would be part of a cluster that continues to make an impact on society and individuals. You would have the opportunity to work in all types and sizes of businesses.

Employees in Information Technology work with computer hardware, software, multimedia, and network systems. In this cluster, you might design new computer equipment or computer games. Or you might make sure that the software or networks are working. In addition, you might have to make sure that people know how to use them. Or you might manage whole networks that link workers in all parts of the world.

Helpful High School Electives

AP/CSU Computer Science Principles WSU Pre-Calculus WSU Calculus AP Statistics Introduction to Design Visual Design Digital Video Interactive Design Premiere Pro

Upper Valley Career Center Offerings

Computer Information Technologies Interactive Media

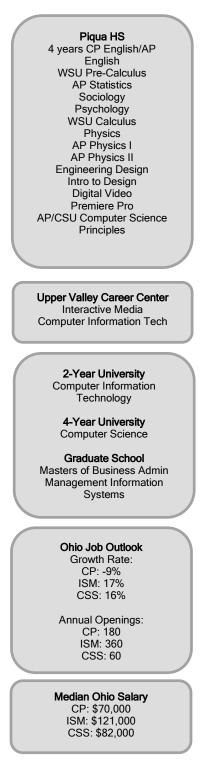
Edison Community College Offerings

Business Systems Option, AAB and certificate Interactive Technology Programming and Design, AAB Network and Computer Security Option, AAB Network Computer Management Option, AAB and certificate Programming Option, AAB and fast track Systems Administrator Option, AAB and certificate CIT. certificate Computer Languages, certificate Database Specialist, certificate and fast track .Net Programming, fast track Basic Computer Skills, fast track Cisco Certified Network Associate, fast track Computer Maintenance, fast track Help Desk, fast track Microsoft Academic Training, fast track Mobile Application Development, fast track Networking, fast track Regional Cisco Academy, fast track

- Computer and
 Information Systems
 Managers
- Computer Engineers
- Computer Security Specialists
- Computer Support
 Specialists
- Computer Systems
 Administrators
- Computer Systems Analysts
- Database
 Administrators
- Web Developers

Information Technology

I want to work as a <u>Computer</u> <u>Programmer</u>, Information <u>Systems Manager</u>, or <u>Computer</u> <u>Security Specialist</u>



Law and Public Safety

Are you able to work under pressure? Can you work with various kinds of people? Do you like to help people? Can you work in the face of danger? Are you good at winning arguments? Do you instruct friends and family members on laws and regulations?

If you answered yes to two or more of the questions above, you might be interested in considering a career in law, public safety, or security.

If you are interested in working in this cluster, you have several options. One option is to guard the public by enforcing the law. Or you might provide fire protection and security. Another option is to provide legal services to people who commit crimes.

Helpful High School Electives

AP Government World Language Psychology Speech Intro to Medical Investigation

Edison Community College Offerings

Criminal Justice (computer forensics option), AAS Peace Officer Academy, fast track Paralegal Studies, AAB

Occupations

- Ambulance Drivers
- Animal Control
 Workers
- Mediators
- Bailiffs
- Border Patrol Agents
- Coroners
- Corrections Officers
- Court Clerks
- Crossing Guards
- Detectives
- Emergency

Management Specialists

- Fire Fighters
- Fire inspectors
- Fire Investigators
- Forensic Science Technicians
- Judges
- Law Clerks
- Lawyers
- Legal Secretaries
- Life Guards and Ski Patrollers
- Paralegals
- Parking Enforcement Officers
- Police Supervisors
- Police Patrol Officers
- Private Detectives
- Probation Officers
- Secret Service Agents
- Security Guards
- Sheriffs
- Transportation Security Agents

- Chemical Engineers
- Chemical Plant
 Operators
- Coin and Vending
 Machine Repairs
- Forklift OperatorsGeothermal
- Technicians
- Home Electronic
 Repairs
- Hydroelectric Production Managers
- Jewelers
- Locksmiths
- Machinists
- Packers and
 Packagers
- Power Plant Operators
- Precision Assemblers
- Quality Control
 Inspectors
- Safety Engineers
- Security/Fire Alarm Systems Installers
- Sewing Machine Operators
- Shoe and Leather
 Workers
- Tailors
- Tool and Die Makers
- Tool Grinders
- Watch Repairers
- Welders
- Wind Turbine Technicians
- Woodworking Machine
 Operators

Manufacturing Technologies

Are you good with working with your hands? Can you explain to others how a machine works? Do you set up and repair stereo equipment for yourself or friends? Do you enjoy reading the latest developments in electronics?

Can you visualize how a machine works?

If you answered yes to two or more of the questions above, you might be interested in considering a career in manufacturing, installation, or repair.

In the Manufacturing career cluster, you can choose one of several options. You might design a new product or determine how the product will be made. Another option is to make the product. The final option is to install and repair the product once it has been purchased.

Helpful High School Electives

Exploring Technology AP/CSU Computer Science Principles Engineering Design Robotics CIM

Upper Valley Career Center Offerings

Electronics Manufacturing and Machining Technologies Welding Logistics (Lab offered at PHS)

Edison Community College Offerings

Industrial Management, AAS Operations Technology, certificate Supply Chain Management, certificate and fast track Six Sigma, fast track Quality Management, fast track Manufacturing Management, fast track Lean Manufacturing, fast track Basic Human Relations, fast track

Marketing

Do you sell advertising space for the school yearbook or newspaper? Do you like to do public speaking or debating? Are you good at organizing your own time? Have you helped convince people to participate in an activity? Are you friendly and outgoing?

If you answered yes to two or more of the questions above, you might be interested in considering a career in marketing, sales, and service.

If you are interested in working in the Marketing cluster, you would help businesses sell products. You might advertise and promote products so customers would want to buy them. Or you might sell products and services directly to customers. Or you might use the Internet to reach customers.

Helpful High School Electives

Newspaper Speech Yearbook AP Statistics WSU Pre-Calculus WSU Calculus Economics (Online only) Intro to Design Visual Design Digital Video Interactive Design Premiere Pro

Edison Community College Offerings

Business Management, Marketing Option, AAB and certificate Real Estate, certificate and fast track

- Advertising Salespeople
- Buyers and Purchasing Agents
- Cashiers
- Counter and Rental Clerks
- Customer Service Manager
- Demonstrators and
 Promoters
- Floral Designers
- Market Research
 Analysts
- Marketing Managers
- Merchandise Displayers
- Models
- Opticians
- Parts Salespeople
- Public Relations
 Managers
- Purchasing Managers
- Real Estate Agents
- Retail Salespeople
- Route Salespeople
- Sales Managers
- Sales
 - Representatives
- Sales Worker
 Supervisors
- Telemarketers

- Air Traffic Controllers
- Aircraft Mechanics
- Airplane Pilots
- Auto Body Repairers
- Bus and Truck
 Mechanics
- Bus Drivers
- Deckhands
- Dispatchers
- Flight Attendants
- Freight Handlers
- Heavy Equipment
 Mechanics
- Heavy Truck Drivers
- Light Truck Drivers
- Locomotive Engineers
- Motorboat Mechanics
- Motorcycle Mechanics
- Parking Lot Attendants
- Riggers
- Service Station
 Attendants
- Ship Engineers
- Taxi Drivers and Chauffeurs
- Train Conductors
- Transportation Agents
- Vehicle Cleaners

Transportation Systems

Would you enjoy working outdoors in all kinds of weather? Do you have good eyesight and quick reflexes? Can you estimate distances accurately? Do you drive trucks or tractors to do work on a farm? Would you like to learn to fly an airplane? Do you repair your or your family and friends' vehicles? Do you like to read automotive or mechanical magazines?

If you answered yes to two or more of the questions above, you might be interested in considering a career in transportation, distribution, and logistics.

If you are interested in working in this cluster, you have three avenues. One is to move people and products by road, air, rail, or water. You would drive or pilot different means of transportation. The second is to repair and maintain the vehicles, trains, plains, and ships to keep people and products moving. The third option is to work behind the scenes to make sure the products and people get to the right place on time.

Helpful High School Electives

Exploring Technology Engineering Design Robotics CIM

Upper Valley Career Center Offerings

Auto Collision Repair Technologies Auto Services Automotive Technologies

Four-Year Schedule

Check one box for your intended career plans:

College

Employment Military Undecided

Do you want to attend the Upper Valley Career Center?_____

What do you want to study after high school?

9 th	Semester I: Course and Number	Semester II: Course and Number	Credits
1			
2			
3			
4			
5			
6			
7			

10 th	Semester I: Course and Number	Semester II: Course and Number	Credits
1			
2			
3			
4			
5			
6			
7			

11 th	Semester I: Course and Number	Semester II: Course and Number	Credits
1			
2			
3			
4			
5			
6			
7			

12 th	Semester I: Course and Number	Semester II: Course and Number	Credits
1			
2			
3			
4			
5			
6			
7			

109/111 ENGLISH 9 COLLEGE PREP and RTI INTERVENTION PREREQUISITE: Teacher Recommendation

GRADES: 9 2 CREDITS

The course will concentrate on reading, writing in various genres including a research project, and using communication skills needed for successful completion of college. Students will study a variety of literary genres, use analytical and critical thinking skills, and learn advanced composition skills. Grammar skills will be reinforced. Requirements for this class include independent reading, independent study, group work, in-class reading and discussion, and at least one classic novel. Students are expected to complete homework on a regular basis. This course will meet 2 consecutive periods per day, and it requires the ability to learn both independently and in small groups. The English RTI Support class will count as an elective credit. To qualify for this course, students' scores on standardized tests will be evaluated and students must be recommended by their English teacher.

112 ENGLISH 9 COLLEGE PREP PREREQUISITE: Passing English 8

GRADES: 9 1 CREDIT

The course will concentrate on reading, writing in various genres including a research project and using communication skills needed for successful completion of college. Students will study a variety of literary genres, use analytical and critical thinking skills, and learn advanced composition skills. Grammar skills will be reinforced. Requirements for this class include independent reading, independent study, group work, in-class reading and discussion, and at least one classic novel. Students are expected to complete homework on a regular basis.

113 PRE-AP ENGLISH 9

GRADES: 9

PREREQUISITE: B English 8, Accelerated or Advanced on AIR1 CREDITStudents are required to complete a summer assignment. This course is for
students who are planning to take Advanced Placement (AP) English in their
junior and/or senior year. It is recommended for students who are highly
motivated and definitely college-bound. The course concentrates on extensive
reading, writing, analysis, and vocabulary. Students in this class should have
a working knowledge of the rules of grammar and of literary elements and
terms. Students should be able to work independently. Selections follow the
College Board's recommendation for pre-AP ninth grade reading.

English

122 ENGLISH 10 COLLEGE PREP

GRADES: 10

PREREQUISITE: English 9 CP or teacher approval

1 CREDIT

This course is designed for the student planning to attend college. Students will be studying world literature with an emphasis on the 10th grade Ohio Academic Standards, including the areas of reading, writing, acquisition of vocabulary, research, and oral and visual communications. Collaborative learning and independent study will be used to complete projects and assignments.

123 PRE-AP ENGLISH 10

GRADES: 10 1 CREDIT

PREREQUISITE: C or better in Pre-AP Eng 9 or Eng 9 CP with teacher approval

Students are required to complete a summer assignment. This course is designed for students who are planning to take Advanced Placement English in their junior and/or senior year. Extensive reading and writing will be the focus. Oral participation and organizational and time management skills are essential for success. Thematic studies of literature will concentrate on analytical and critical thinking skills. Students should be able to work independently.

131 ENGLISH 11 PREREQUISITE: English 10

GRADES: 11 1 CREDIT

This class is for students who need to improve their reading comprehension, writing skills, and vocabulary. Students will be studying American literature with an emphasis on the 11th grade Ohio Academic Standards, including the areas of reading, writing, acquisition of vocabulary, research, and oral and visual communication. The NCAA does not accept this course.

132 ENGLISH 11 COLLEGE PREP

GRADES: 11 1 CREDIT

PREREQUISITE: English 10 CP or Teacher Approval

American literature, composition, vocabulary, and oral communication are the focus of English 11. Students who take this class should be planning to attend a four-year college or university after graduation. Students are expected to work independently and utilize critical thinking skills. Students will also prepare to take the ACT and SAT tests for admission to college.

133 AP ENGLISH LANGUAGE AND COMPOSITION GRADES: 11

PREREQUISITE: Pre-AP Eng 10 or Eng 10 CP with teacher approval 1 CREDIT Students are required to complete a summer assignment. It is strongly recommended that students planning to attend a selective four-year university after graduation consider taking this course regardless of planned major. Advanced Placement Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Students will discover the interactions among a writer's purposes, audience expectations, and subjects as well as the way conventions and the resources of language contribute to effectiveness in writing. Writing assignments focus on expository, analytical, and argumentative essays as well as personal and reflective writing. A focused research project will be required towards the end of the course. The course prepares students for the AP test in the spring when college credit may be earned. Students must have access to a working, reliable printer as multiple copies of essay assignments are required for peer review.

English

141 ENGLISH 12 PREREQUISITE: English 11

Students will review and continue to improve their reading, writing, and vocabulary skills in this class. Students will also work on collaborative and organizational skills. There is an emphasis on reading process skills and opportunity for literary analysis. Writing will focus on a variety of purposes and audiences. The course will be divided into guarterly themes which will be explored through various novels, memoirs, non-fiction texts, plays, poems, short stories, and current events from around the world. The NCAA does not accept this course.

142 ENGLISH 12 COLLEGE PREP PREREQUISITE: English 11 CP

GRADES: 12 1 CREDIT

Students enrolling in this course should be planning to attend a two-year or four-year university. Emphasis will be on developing post-secondary skills in reading comprehension, advanced composition, research, vocabulary, and collaborative activities. An independent, substantial, literary-based research project will be required of all students. The course will be divided into quarterly themes which will be explored through various novels, memoirs, non-fiction texts, plays, poems, short stories, and current events from around the world. Students should expect to invest time outside of class in reading. Those who do not study regularly do not tend to be successful in this class.

143 AP ENGLISH LITERATURE AND COMPOSITION

PREREQUISITE: AP Eng Lang & Comp or English 11 CP with teacher approval 1 CREDIT

GRADE: 12

Students are required to complete a summer assignment. It is strongly recommended that students planning to attend a selective four-year university after graduation consider taking this course regardless of planned major. Advanced Placement Literature and Composition engages students in the careful reading and critical analysis of imaginative literature. Through an intensive study of representative works from various genres and periods, accompanied by thoughtful discussion and writing, students should deepen their understanding of the ways authors use language to provide meaning. Careful attention to both textual detail and historical context will be considered when analyzing the works. Writing assignments focus on the critical analysis of literature, and include expository, analytical, and argumentative essays. The course prepares students for the AP test in the spring where college credit may be earned. The AP Literature and Composition course develops critical and analytical reading and writing skills.

GRADES: 12 1 CREDIT

151 YEARBOOK

PREREQUISITE: Application and teacher approval

GRADES: 10-12 1 CREDIT

The purpose of the Yearbook Class is to develop the skills needed to produce a quality high school yearbook. Emphasis is placed on writing, graphics, photography, and advertising. Students will participate in all phases of production. Journalistic writing, photography analysis, and promotional advertising will be studied and used as the book is created. Students with photography experience and interest in writing or business management are especially encouraged to enroll. Yearbook work is frequently time consuming, and students will be required to participate in some after school sessions. There will be a summer assignment. This course is for elective credit.

150 NEWSPAPER WRITING PREREQUISITE: None

GRADES: 10-12 1 CREDIT

The purpose of Newspaper Writing will be to develop the skills needed to write publishable newspaper articles. Emphasis will be placed on deciding what is a newsworthy item, writing a good lead, interviewing for information, and creating interesting titles. Students will be writing articles for the school newspaper *The Tomahawk Beat,* which is published online, as well as *Smoke Signals,* which appears in the local paper, *The Piqua Daily Call,* once a week. They will be required to meet weekly deadlines, and may have to do some reporting outside of the school day. Photography and graphic design experience, while not required, is also a plus for this class. This course is for elective credit.

155 SPEECH PREREQUISITE: None

GRADES: 10-12 1 CREDIT

Students will learn about the communication process and the types of oral communication, concentrating on public speaking. Students will research, compose, and deliver informative, process, and persuasive speeches. Listening to and evaluating others' speeches will also be stressed. This course is for elective credit.

153 ACT/SAT TEST PREP PREREQUISITE: None

GRADES: 11-12 ¼ CREDIT

The course is designed to help prepare students for the ACT and SAT standardized tests. Students will explore the tests and various testing strategies to improve their chances of success. The course will last one quarter. Beyond the quarter, students will be able to flex or take a study hall for the rest of the semester.

English

152 THE NOVEL PREREQUISITE: None

GRADES: 10-12 ½ CREDIT

The course will explore the relatively recent origin and evolution of the novel. The majority of the coursework will involve reading, discussion, and written analysis of the novels read. Class time will be given for reading assignments, but students will be expected to read outside of class. Approximately 4-5 novels will be read in the semester. Students may be required to purchase some paperback titles. Novels read in this class will not count toward independent reading in regular English classes. Novels may contain mature content. This course is for elective credit.

156 FILM AS LITERATURE PREREQUISITE: None

GRADES: 10-12 ½ CREDIT

This course will use both film and literature terminology to better understand the craft of story-telling through film. Both classic and modern films will be viewed, offering students not only enrichment in critical thinking skills, but an education in our shared culture as well. The heart of the class is discussion. Since careful viewing of the film is important for good class discussion, excellent attendance is imperative for success in this class. Students will write various papers in response to films. You'll never see a movie the same way again! This course is for elective credit only.

310/311 ALGEBRA I & MATH RTI SUPPORT I PREREQUISITE: Teacher approval

GRADES: 9 2 CREDITS

This course will meet the requirements of the Common Core Standards for Algebra I. The course will include pre-algebra, linear algebra, polynomials, functions, exponents, and quadratic equations. Problem solving techniques and application of math concepts to real situations will be the emphasis of this course. This course will meet 2 consecutive periods per day, and it requires the ability to learn both independently and in small groups. Students must pass 16 Algebra units to earn an Algebra credit, thus allowing them to move on to Geometry. The Math RTI Support class counts as elective credit. To qualify for this course, students must take an Algebra Readiness Assessment in 8th grade AND be recommended by their math teacher. Materials Needed: A TI-84 Plus calculator

312 ALGEBRA I

PREREQUISITE: None

GRADES: 9 1 CREDIT

This course meets the requirements of the Common Core Standards for Algebra I. The course will include pre-algebra, linear algebra, polynomials, functions, exponents, and quadratic equations. Problem solving techniques and application of math concepts to real situations will be the emphasis of this course. Materials Needed: A TI-84 Plus calculator

322 GEOMETRY

PREREQUISITE: Algebra I

GRADES: 9-12 1 CREDIT

This course will meet the requirements of the Common Core Standards for Geometry. The course will include plane geometry, logical reasoning, right triangle trigonometry, and probability. Problem solving techniques and application of math concepts to real situations will be the emphasis of this course. Materials Needed: A TI-84 Plus calculator

331 ALGEBRA II & MATH RTI SUPPORT III PREREQUISITE: Geometry

GRADES: 9-12 1 CREDIT

This course is designed for students who had difficulty in Geometry and are not prepared for an Algebra II course at this time. Topics covered include algebraic concepts, geometric concepts, functions, and graphing calculator skills. Successful completion of this course will allow students to move onto Algebra II. *This course will NOT fulfill the graduation requirement for Algebra II.* The Math RTI Support class counts as elective credit. This course does not meet NCAA clearinghouse requirements. Materials Needed: A TI-84 Plus calculator

332 ALGEBRA II

GRADES: 9-12

PREREQUISITE: Alg C, Pass Algebra EOC Exam or PreAlg II

1 CREDIT

This course will meet the requirements of the Common Core Standards for Algebra II. The course will include linear algebra, polynomial functions, exponential and logarithmic functions, rational equations, trigonometry, and data analysis. Problem solving techniques and application of math concepts to real situations will be the emphasis of this course. This course will fulfill the graduation requirement for Algebra II. Materials Needed: A TI-84 Plus calculator

333 ADVANCED ALGEBRA II

GRADES: 9-12

GRADES: 10-12

GRADES: 10-12 2 CREDITS

1 CREDIT

PREREQUISITE: A/B in Algebra and Geometry or teacher approval

1 CREDIT This course will meet the requirements of the Common Core Standards for Algebra II. The course will include linear algebra, polynomial functions, exponential and logarithmic functions, rational equations, trigonometry, and data analysis. Problem solving techniques and application of math concepts to real situations will be the emphasis of this course. These topics will be studied in more depth than in Algebra II. Advanced Algebra II will also include the study of arithmetic and geometric sequences and series, the binomial theorem, polynomial functions, and the remainder and factor theorems. This course will fulfill the graduation requirement for Algebra II. Materials Needed: A TI-84 Plus calculator

343 PRE-CALCULUS

PREREQUISITE: A/B in Algebra II & Geometry

Pre-Calculus is designed for the college bound student. This course will give the student the necessary background to succeed in math at the college level. Emphasis is placed on using mathematical concepts to solve practical application problems, such as compound interest, growth and decay, etc. Students will learn about graphing linear and guadratic equations, polynomials as well as rational, exponential, and logarithmic functions. Trigonometry topics include basic trigonometric ratios, radians as an angle measure, trigonometric functions and their graphs, trigonometric identities, trigonometric description of complex numbers and roots and powers of real and complex numbers. Materials Needed: A TI-84 Plus calculator

344 WSU PRE-CALCULUS

PREREQUISITE: Algebra II, Geometry, WSU CCP requirements

This is a college level class. Students will receive 4 credits in Math 1280 College Algebra and 3 credits in Math 1350 Analytical Geometry and Trigonometry from Wright State University. This course is one period long. Emphasis is placed on using mathematical concepts to solve practical application problems, such as compound interest, growth and decay, etc. Students will learn about graphing linear and quadratic equations, polynomials as well as rational, exponential, and logarithmic functions. Trigonometry topics include basic trigonometric ratios, radians as an angle measure, trigonometric functions and their graphs, trigonometric identities, trigonometric description of complex numbers and roots and powers of real and complex numbers. Materials Needed: A TI-84 Plus calculator

350 AP STATISTICS PREREQUISITE: Algebra II

GRADES: 10-12 1 CREDIT

The purpose of Advanced Placement 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: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. The course prepares students for the AP test in the spring where college credit may be earned. Materials Needed: A TI-84 Plus calculator

351 WSU CALCULUS

GRADES: 11-12 2 CREDITS

PREREQUISITE: Pre-Calculus, meet WSU CCP requirements2 CREDITSThis is a college level class. Students will receive 4 credits in Math 2300Calculus I and 4 credits in Math 2310 Calculus II from Wright StateUniversity. This course is one period long. In the first semester, studentswill examine limits, the derivative, differentiation, applications of thederivative, antiderivatives, Riemann sums, the definite integral, and theFundamental Theorem of Calculus. In the second semester, students willinvestigate integration techniques, applications of the definite integral, first-order differential equations, vectors and vector operations, parametricequations and polar coordinates, and indefinite series. The option will begiven to take the AP Calculus BC Exam in May per the student's request.Materials Needed: A TI-84 Plus calculator

352 AP CALCULUS AB

PREREQUISITE:

GRADES:11-12 1 CREDIT

Advanced Placement Calculus AB is designed to both utilize and expand upon the algebraic and trigonometric concepts learned in Pre-Calculus and previous math courses. It is to introduce the student to a rigorous study of both differential and integral calculus, which a student would typically encounter in a first year college calculus course. In addition, material will also cover an introduction to sequences and series, differential equations and vectors. Students will have the opportunity to earn college credit by taking the AP Calculus AB exam in the spring.

353 FINANCE & BANKING PREREQUISITE: None

GRADES: 12 1 CREDIT

The subject content is designed to provide students an opportunity to apply the math skills/concepts they have learned throughout high school to real life situations involving personal finance and investments. Topics include wages, taxes, loans, checking and saving accounts, budgeting, credit cards, insurance, transportation, and politics. This class does not meet the NCAA's standards for core Math. It is designed to meet State Financial Literacy requirements. Materials Needed: Scientific calculator Math

Students may decide to double up in science. Freshman students may double up Core Physical Science and Biology. Sophomore students may double up Biology and Chemistry (Not Pre-AP Chem). All science courses are one period long with the exception of Pre-AP Chemistry and AP Chemistry.

411 PHYSICAL SCIENCE PREREQUISITE: None

Core Physical Science addresses the state's ninth grade standards. The first semester will focus on the basic physics topics such as reference point of view, motion, Newton's Laws, energy, and the transfer of energy. The second semester will focus on the basic chemistry topics such as physical/chemical properties, atomic theory, atomic structure, bonding, law of conservation, and nuclear chemistry. Materials Needed: Calculator School Fee: \$7

412 BIOLOGY

PREREQUISITE: None

Biology is a college prep level course designed to address the state's tenth grade standards and teach the fundamental principles of modern life science. Biology will include and expand upon basic concepts such as measurement, graphing, and laboratory procedures. The course will be taught on a precollege level and will include the following topics: evolution, genetics and heredity, cell structure and function, ecology classification systems, and life processes. School Fee: \$10

413 PRE-AP BIOLOGY

PREREQUISITE: Current science teacher approval

Pre-AP Biology is an advanced college prep level course and is designed to prepare the student for AP Biology. Basic science concepts such as measurement, graphing and lab practices will be reinforced. The bulk of the topics will include; but are not limited to the following: ecology/ecosystems, animal behavior, DNA, gene expression, cellular processes, genetics, and evolution.

422 CHEMISTRY

PREREQUISITE: Geometry

Chemistry is a college prep level course designed to teach the fundamental concepts of matter, its properties and interactions. Basic science concepts such as measuring, graphing, and analyzing data will be reinforced. The bulk of the topics covered will include atomic theory and structure, the mole concept, states of matter, nomenclature, reactions stoichiometry bonding, acids and bases, and organic chemistry. Materials Needed: Scientific calculator School Fee: \$10

GRADES: 9 1 CREDIT

GRADES: 9-10

1 CREDIT

GRADES: 9 1 CREDIT

1 CREDIT

- 48 -

GRADES: 10-12

423 PRE-AP CHEMISTRY

GRADES: 10 2 CREDITS

PREREQUISITE: Biology and Geometry

Pre-AP Chemistry is an advanced college prep level course and is designed to prepare the student for AP Chemistry. *This course will take two periods*. Basic science concepts such as measuring, graphing, and analyzing data will be reinforced, along with an introduction to advanced problem solving. The bulk of the topics will include; but are not limited to the following: atomic theory and structure, the mole concept, states of matter, nomenclature, reactions, stoichiometry, bonding, electrochemistry, kinetics, equilibrium, and organic chemistry.

432 PHYSICS I

GRADES: 10-12 1 CREDIT

 PRE/COREQUISITE:
 Biology or Chemistry
 1

 Physics is a college prep level course and is designed to teach the

fundamental concepts of modern physics. Basic science concepts such as measuring, graphing and analyzing data will be reinforced. The bulk of the topics covered will include forces, motion, energy, electricity, thermodynamics, light, sound, and atomic structure. Materials Needed:

Scientific calculator. School Fee: \$10

442 PHYSICS II

GRADES: 10-12 1 CREDIT

PRE/COREQUISITE: Biology or Chemistry & Algebra II

Physics II is a college prep level course and is designed to teach the fundamental concepts of modern physics. This course is taught at a slightly slower pace than AP Physics II and may not go as in-depth on some of the topics. Being a college prep level course emphasis is placed on critical thinking and mathematical problem solving. Topics include Fluids, Temperature and Heat, Kinetic Theory/Thermodynamics, Conductors & Capacitors, Current Electricity, Magnetic Fields, Light and Optics, Modern Physics School Fee: \$10

453 AP PHYSICS I PRE/COREQUISITE: Pre-AP Bio

GRADES: 10-12 1 CREDIT

Advanced Placement Physics I is a college level ALGEBRA-BASED physics course. The objective of this course is to prepare students for the AP exam given in May, which can qualify the student to receive up to one semester of college lecture and lab credit for <u>non-major</u> freshman physics. More emphasis is placed on mathematical problem solving and critical thinking. Topics include: kinematics, dynamics, work, power, energy, linear momentum, circular motion & rotation, gravitation, oscillation, waves, electrostatics, and current electricity. Materials Needed: A graphing calculator School Fee: \$10

Science

455 AP PHYSICS II

PRE/COREQUISITE: Pre-AP Chemistry & Algebra 2

GRADES: 10-12

1 CREDIT

Advanced Placement Physics II is a second year college level ALGEBRA-BASED physics course covering concepts not covered in AP Physics I. The objective of this course is to prepare students for the AP exam given in May, which can qualify the student to receive up to one semester of college lecture and lab credit for <u>non-major</u> freshman physics. More emphasis is placed on mathematical problem solving and critical thinking. Topics include Fluids, Temperature and Heat, Kinetic Theory/Thermodynamics, Conductors & Capacitors, Current Electricity, Magnetic Fields, Light and Optics, Modern Physics. Materials Needed: A graphing calculator School Fee: \$10

451 AP BIOLOGY

GRADES: 11-12

GRADES: 11-12

2 CREDITS

PREREQUISITE: Pre-AP Bio, Pre-AP Chem, & Alg II or teacher approval 1 CREDIT Biochemistry, bioenergetics, cytology, taxonomy, molecular biology, genetics and ecology are studied in a college laboratory setting. The objective of this course is to prepare students for the AP exam in May, which can qualify the student to receive college credit. At least an hour of homework each night should be expected. School Fee: \$15

452 AP CHEMISTRY

PREREQUISITE: Pre-AP Chemistry

Advanced Placement Chemistry is a second year college level chemistry course covering more difficult material and in greater depth than Chemistry. The objective of this course is to prepare students for the AP exam in May, which can qualify the student to receive college credit. Topics include stoichiometry, nomenclature, equilibrium, kinetics, thermodynamics, bonding, and atomic theory. *This class is an extended class period*. Materials Needed: Scientific calculator School Fee: \$15

424 ECC CHEMISTRY

PREREQUISITE: Chemistry and Algebra 2

GRADES: 11-12 2 CREDITS

Fundamental concepts, principles and theories of chemistry. Scientific measurement, chemical formulas and nomenclature, the mole, molarity, stoichiometry, metathesis reactions, acid-base theory, electronic structure of atoms, chemical bonding, molecular structure, and thermochemistry. Continuation of Chemistry I including states of matter and intermolecular attractive forces, properties of solutions, chemical thermodynamics, chemical equilibriu, acid-base theories and equilibria, redox reactions, pH, chemical kinetics and electrochemistry. *This class is an extended class period.*

ISTRY

457 INTRODUCTION TO MEDICAL INVESTIGATION PREREQUISITE: None

GRADES: 9-12 ½ CREDIT

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a

skeletal Maniken; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

459 ANATOMY AND PHYSIOLOGY

PREREQUISITE: Biology

GRADES: 10-12 1 CREDIT

Anatomy and physiology is a course that will enable students to develop an understanding of the relationships between the structures and functions of the human body. Students will study the major body systems and understand how the body systems work together to provide homeostasis along with how the body functions in the healthy and diseased states. The class is designed for students interested in biological, medical, and healthoriented programs, such as nursing, medicine, and lab technology.

456 MEDICAL TERMINOLOGY PREREQUISITE: Biology

GRADES: 10-12 1 CREDIT

This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures.

Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. The class is designed for students interested in biological, medical, and healthoriented programs, such as nursing, medicine, and lab technology. This class will be for elective credit only.

450 ASTRONOMY

PREREQUISITE: Physical Science and Biology

GRADES: 11-12 1 CREDIT

Astronomy is a course designed for students of all levels who wish to learn more about the universe. The topics to be covered include, but are not limited to: The Earth-Moon-Sun system, the Solar System, Space Exploration, Stars, The Big Bang, Relativity, and Astrobiology. This class utilizes the grid method for mastery learning, and students will be expected to work at their own pace through the material. Activities will include several major, long-term projects, as well as daily activities, notes, and labs.

211 WORLD HISTORY

GRADES: 9 1 CREDIT

PREREQUISITE: None

World Studies is a general survey of the history of the world from the Age of Enlightenment to the present. The course will focus on the events and trends in both European and non-European cultures.

222 U. S. STUDIES COLLEGE PREP PREREQUISITE: None

GRADES: 10 1 CREDIT

The course focus will be on twentieth century America and events in the world that have shaped, altered, and turned the course of our development. Included will be additional out of class work and projects. Students will be required to take the Americanism Test.

223 ECC US HISTORY

GRADES: 10-12

PREREQUISITE: Meet Edison CCP requirements, Teacher Approval 2 CREDITS This is a college level course designed to survey U.S. history from the prehistoric period of North America to the present. Major themes and significant topics to be explored include the settlement of the North American continent, including the European explorations and the native people's responses and reactions to that contact: Colonial British North America; the war for American independence; early agricultural and industrial development; the issue of slavery; western expansion; and the American Civil War: American industrialization: America's involvement in foreign affairs; the World Wars and international conflicts; the Great Depression; the Civil Rights Movement; and contemporary issues. Students enrolling in this course will earn 3 credits from Edison in HST 121S and 3 credits in HST 122S. Could be taken for a semester per teacher approval. This course will take one period. Students will go on a co-curricular study trip to Gettysburg as part of the course.

231 GOVERNMENT

PREREQUISITE: US Studies

GRADES: 11-12 1 CREDIT

This course will help the learner understand the American political system, with emphasis on the national government's foundations, structure, and operation. Discussions will cover the role of politics, political parties, the Bill of Rights, public policies, public opinion, voting, and the election process.

233 AP GOVERNMENT AND POLITICS

GRADES: 11-12 1 CREDIT

PREREQUISITE: US Studies and teacher approval

AP Government and Politics a college level course. It is designed to give students an analytical perspective on government and politics in the US and involves the study of general concepts used to interpret politics and the analysis of specific case studies. Topics covered in this discussionoriented course include: constitutional underpinnings of the US government, political beliefs and behaviors, political parties and interest groups, institutions, and processes of the national government. Students will take the AP exam in the spring with the goal of obtaining college.

256 CURRENT EVENTS PREREQUISITE: None

GRADES: 9-12 ½ CREDIT

Current Events promotes student awareness of daily occurrences at the national and international level. Participation in classroom discussions will be strongly emphasized. Course may not be repeated for credit. In addition, a minimal fee may be charged for a limited subscription to a news magazine.

263 HISTORY OF ROCK AND ROLL	GRADES: 9-12
PREREQUISITE: None	1/2 CREDIT
x	

You will explore modern instruments, the recording industry, the evolution of popular and rock music, music and the media, and the role music plays in our society (NHV curriculum guide). This course is designed to provide a historical perspective and insight into popular music of the twentieth century. Students will gain knowledge of rock and rolls roots, and will explore artists throughout the decades that have influenced the art form.

257 SOCIOLOGY	GRADES: 11-12
PREREQUISITE: None	½ CREDIT

Sociology is a study of basic human motivation in group settings. The emphasis is on the study of the basic social institutions, cultures, minority relations, deviant and conformist behavior, socialization phases, and stratification. Three (3) project papers are required as part of this course.

255 PSYCHOLOGY PREREQUISITE: None

GRADES: 11-12 ½ CREDIT

Psychology is the study of the factors and forces that shape the individual human being. In psychology, the student will study those things that make the individual human like and different from all other humans. Topics to be covered will include learning, development, personality, mental health and altered states of consciousness, and abnormal psychology. Psychology is approximately 60% lecture and discussion.

253 ECONOMICS PREREQUISITE: None

GRADES: 11-12 ½ CREDIT

Economics is a study of how individuals, businesses, and nations deal with the problem of scarcity, unlimited wants and limited resources (finances). How we deal with this to gain financial stability is called Economics. A student is encouraged to take this course to better understand how the economy works. Fulfills financial literacy requirement.

261 AP WORLD HISTORY

GRADES: 11-12

PREREQUISITE: US History CP or ECC US History**1 CREDIT**This is a college level course. This course will cover broad themes dating back
from 8,000 B.C.E. to the present. The themes that will be studied are
interaction between humans and the environment; development and interaction
of cultures; state-building, expansion, and conflict; creation, expansion, and
interaction of economic systems; and development and transformation of social
structures. The intense study of this course will look to examine these broad
themes, as opposed to more detailed study of individuals and events. Students
completing this course will also be required to participate in History Day
projects. By studying AP World History, the student will take the AP exam in
the spring with the goal of obtaining college credit for work completed in high
school. Students will complete a summer assignment.

750 ART I: FUNDAMENTALS OF ART A (previously Art I) PREREQUISITE: None

GRADES: 9-12 ½ CREDIT

A PREREQUISITE FOR ALL OTHER ART CLASSES. This is an introductory class into the study of art and design. Students will develop an understanding of the Elements and Principles of Art. Projects will focus on basic composition, drawing, shading and measuring skills; as well as the overall quality of individual artwork. The purpose of this class is to build skills in art and design as well as developing a strong work ethic. This is an important foundation class for those wishing to continue the study of art or design. School Fee: \$10

756 ART I: FUNDAMENTALS OF ART B PREREQUISITE: None

GRADES: 9-12 ½ CREDIT

This class will focus on projects that are specific to certain design careers, including graphic design, illustration, industrial design, character design, typography, page layout and more. This class will teach students the foundations of design and the design process. Students will connect the work that is done with paper and pencil, to the finished digital work that results in various design careers. Students will receive an introduction to the Adobe Illustrator, Photoshop and InDesign programs. They will gain experience using the programs to enhance and finish projects. This class is for any student that plans to continue with the other Design Foundations classes or plans to complete to Credentialed Pathway for graduation. School Fee: \$10

751 INTERMEDIATE PAINTING (previously Art II) PREREQUISITE: Art I: Fundamentals of Art A

GRADES: 10-12 ½ CREDIT

In this course students will further their painting skills developed in Art 1. Students will be challenged with small and large scale paintings while learning about various painting mediums (including oil, acrylic, tempera, fresco, and watercolor). Students will learn the process of painting on different surfaces and stretching their own canvases. Art entrepreneurship will be introduced as students learn the time value of their projects. Students will study color theory and learn about the history behind different painting techniques and movements. Documenting artwork will also be expected as students will be adding to their Art 1 websites (or starting one) in creating their digital art portfolio. School Fee: \$10

752 ART III: STUDIO ART PREREQUISITE: Art II: Drawing/Painting

GRADES: 11-12 1 CREDIT

This class will help students transition into a future AP Art student. This is the course where students will begin to build a portfolio for college. Expectations are always set high for the encouragement of outstanding quality work. Students will work with a diverse amount of art mediums available. They must meet all deadlines and requirements given per project. Each student will strengthen his/her ability to express ideas and technical knowledge behind the projects both verbally and in written form. Studio Art students will work alongside the AP Art students as they learn how to develop a personal style with top quality design and technique. Most of the junior year artwork created in this class will become portfolio pieces added to their senior year AP Art work. Materials needed: Sketchbook School Fee: \$10

754 PHOTOSHOP (previously Photography) **PREREQUISITE**: Introduction to Design

GRADES: 10-12 ½ CREDIT

Photoshop is a project-based course detailing step-by-step techniques for working in Photoshop, including how to correct, enhance, and distort digital images, create image composites, and prepare images for print and the web. The course is aligned to the objectives required for students to be successful in their future digital career and to satisfy the objectives for the Adobe Certified Expert Exams. School Fee: \$10

755 CERAMICS

PREREQUISITE: Art I: Fundamentals of Art A

GRADES: 11-12 ½ CREDIT

This course will be largely an independent exploration of Ceramics. Students will complete a progressive series of projects that will promote exploration of the traditional building techniques in ceramic work. Firing, glazing, and surface decoration techniques will be taught. Students must meet deadlines to reach performance goals that will culminate in a series of finished ceramic pieces including both functional and non-functional work. School Fee: \$10

753 AP STUDIO ART: 2 D DESIGN/DRAWING

GRADES: 12 1 CREDIT

PREREQUISITE: Art III or teacher recommendation

This is a top level art course geared towards the serious art student. Expectations are set high to ensure superior quality work. Students are required to complete various art projects in class, meet deadlines, and exceed the basic requirements given per project. Each student will continue to strengthen his/her ability to express ideas and technical knowledge behind the projects both verbally and in written form. The main goal of this course is to prepare and provide each and every student with an obtainable opportunity to g5020 to college through the completion of their portfolio. This portfolio may be used for admission into college as well as various scholarship competitions into his/her college or art school of choice. In addition to regular class work, all AP Art students are expected to do research and develop their own projects outside the art room in the form of a "concentration". These projects will also be included within the final portfolio due at the end of his/her senior year. Any senior planning to go into art or design, whether it be digital art or fine art, should take this class, to help build their portfolio. Through AP testing, this course also provides a fantastic opportunity to receive college credit. Materials Needed: Sketchbook School Fee: \$10

500 INTRODUCTION TO DESIGN (previously Media I) PREREQUISITE: None

GRADES: 9-12 ½ CREDIT

This class will focus on projects that are specific to certain design careers, including graphic design, illustration, industrial design, character design, typography, page layout and more. This class will teach students the foundations of design and the design process. Students will connect the work that is done with paper and pencil, to the finished digital work that results in various design careers. Students will receive an introduction to the Adobe Illustrator, Photoshop and InDesign programs. They will gain experience using the programs to enhance and finish projects. This class is for any student that plans to continue with the other Design Foundations classes or plans to complete to Credentialed Pathway for graduation. School Fee: \$20

501 VISUAL DESIGN: FOUNDATIONS OF DESIGN AND PRINT PRODUCTION (previously Media 2) PREREQUISITE: Introduction to Design

½ CREDIT

GRADES: 9-12

Visual Design is a project-based curriculum that develops key digital communication skills such as design, project management, research and communication, and photography, graphic design and illustration, and page layout technical skills using Adobe tools. Projects in this course includes: Collages and photography, logos, business cards, advertisements, and portfolios. The course is aligned to the objectives required for students to be successful in their future digital career and to satisfy the objectives for the Adobe Certified Associate Exams. School Fee: \$20

504 DIGITAL VIDEO: FOUNDATIONS OF VIDEO DESIGN AND PRODUCTION

PREREQUISITE: Introduction to Design

½ CREDIT

GRADES: 9-12

Digital Video is a project-based curriculum that develops key digital communication skills such as design, project management, research and communication, and video and audio design and production technical skills using Adobe tools. Projects in this course include: News stories, Public service announcements, portfolios, commercials, and mini-documentaries. The course is aligned to the objectives required for students to be successful in their future digital career and to satisfy the objectives for the Adobe Certified Associate Exams. School Fee: \$20

505 INTERACTIVE DESIGN: FOUNDATION OF ANIMATION AND INTERACTION DESIGN PREREQUISITE: Introduction to Design

½ CREDIT

GRADES: 9-12

Interactive Design is a project-based curriculum that teaches digital communication skills in the context of professional animation and interaction design process, using Adobe tools. Interactive Design develops four key skill areas: project management and collaboration; design; research and communication; and professional interactive media authoring tools. Projects in the course include: game design and planning, building a flash game, and constructing a portfolio. The course is aligned to the objectives required for students to be successful in their future digital career and to satisfy the objectives for the Adobe Certified Associate Exams. School Fee: \$20

506 PREMIERE PRO

GRADES: 10-12 ½ CREDIT

PREREQUISITE: Introduction to Design and Digital Video

Premiere Pro is project-based course detailing step-by-step key techniques for working in Premiere Pro. Students will learn to edit video in Adobe Premiere Pro CC. Students will also learn to organize media, add audio, create transitions, produce titles, and add effects. The course is aligned to the objectives required for students to be successful in their future digital career and to satisfy the objectives for the Adobe Certified Expert Exams School Fee: \$20

502 PIQUA DIGITAL WEEKLY (previously Media Mkt)GRADES: 10-12PREREQUISITE: Instructor Approval1 CREDIT

Piqua Digital Weekly will incorporate marketing techniques along with media technology to promote the students, Piqua City School District, and Piqua Community. Students will use different resources such as social media (twitter, Instagram), video production equipment (Apple computers, cameras, Final Cut Pro), website design, and graphic design for various projects. Throughout the course students will be assigned athletic teams, school organizations, clubs, and events and businesses in the community to market to the public. Materials Needed: Flash drive, notebook, and pencil/pen. School Fee: \$20

Family and Consumer Science courses help students develop skills for life. The courses feature a hands-on approach to learning life skills in a fun and lively manner. Students enrolled in Family and Consumer Science courses also have the opportunity to participate in FCCLA (Family, Career and Community Leaders of America) which focuses on community service both in and beyond the classroom. The Family and Consumer Science program is a satellite of the Upper Valley Career Center.

553 CULINARY FUNDAMENTALS **PREREQUISITE:** None

GRADES: 9-12 ½ CREDIT

In this course, students will apply fundamental culinary techniques, such as knife handling skills and the recognition, selection and proper use of tools and equipment. An emphasis will be placed on mise en place, the management of time, ingredients and equipment. Students will apply standard recipe conversions using proper scaling and measurement techniques. School Fee: \$30

554 NUTRITION AND WELLNESS PREREQUISITE: None

GRADES: 9-12 ¹/₂ CREDIT

In this course, students will use principles of nutrition to ensure a healthy body throughout the lifecycle. An emphasis will be placed on planning and preparing meals with an understanding of nutrients and their benefits, portion control and dietary needs. Additional information will include steroid and supplemental use, body weight and management and the implementation of physical activity to maintain a healthy lifestyle. School Fee: \$30

552 CHILD DEVELOPMENT PREREQUISITE: None

GRADES: 9-12 1/2 CREDIT

In this course, students will study the principles of child growth, development and behavior. An emphasis will be place on the cognitive development of a child and sensory and motor skills. Additional topics will include childhood diseases, immunizations, theories of development, learning styles and evaluating childcare services. School Fee: \$20

551 TEXTILE DESIGN CONSTRUCTION & MAINTENANCE

GRADES: 9-12

PREREQUISITE: None

½ CREDIT

In this course, students will study the visual appearance of fabric and fashion design. Students will identify, analyze and apply production processes and techniques to textiles. Additional topics will include the maintenance and alterations of textiles products, including home interior accessories and garments. School Fee: \$30

550 INTERIOR DESIGN, FURNISHINGS, & MANAGEMENT PREREQUISITE: None GRADES: 9-12 ½ CREDIT

In this Family and Consumer Sciences career field course, students will examine design principles used in residential interiors. An emphasis will be placed on incorporating anthropometrics, ergonomics and psychological responses. Additional topics will include the selection and organization of furnishings, floors and wall coverings in living spaces, kitchens and baths. School Fee: \$30

555 GLOBAL FOODS PREREQUISITE: None

GRADES: 9-12

PREREQUISITE: None ½ CREDIT In this course, students will compare cuisines, ingredients and preferred cooking methods of various cultures. The influence of traditions and regional and cultural perspectives on food choices and culinary practices will be emphasized. Students will examine the issues and conditions that affect the availability and quality of food in the global market, and apply advanced cooking techniques, including the use of specialty and advanced equipment in the preparation of food dishes. School Fee: \$30

850 HEALTH PREREQUISITE: None

GRADES: 9-10 ½ CREDIT

During this one semester graduation requirement course, students will: comprehend concepts related to health promotion and disease prevention; demonstrate the ability to access valid health information and healthpromoting products and services; demonstrate the ability to practice healthenhancing behaviors and reduce health-related risks; analyze the influence of culture, media, technology, and other factors on health; demonstrate the ability to use interpersonal communication skills to enhance health; and demonstrate the ability to advocate for personal, family, and community health.

864 WELLNESS PE PREREQUISITE: None

GRADES: 9-12 ¼ CREDIT

The mission is to empower all students to sustain regular, lifelong physical activity as a foundation for a healthy, productive and fulfilling life. The Piqua High School Physical Education program provides each student with the opportunity to participate in an all-inclusive program consisting of skill development, lead up games, team sports, individual sports, and physical fitness activities. The goal is to provide every student with a wide variety of physical activities and challenges that will contribute to the development and maintenance of their physical, cognitive, and affective well-being. Ultimately, students will be provided with a foundation to make informed decisions that will empower them to achieve and maintain a healthy lifestyle. School Fee: \$20

851 ATHLETIC TRAINING PREREQUISITE: Biology and Health

GRADES: 10-12 ½ CREDIT

This course is designed to provide students with information pertaining to careers in the Sports Medicine field as related to athletic training. This course is geared towards students who may have an interest in pursuing a career in any health-related field. Students will study anatomy, physiology, and kinesiology as related to injury prevention, evaluation, treatment, and rehabilitation. Other topics will include nutrition, therapeutic use of heat and cold, taping/bracing and other selected topics including careers in the Physical Therapy field. The class will have both a lecture and a lab component. School Fee: \$25

800 WOMEN'S CHORUS **PREREQUISITE:** Audition

GRADES: 9-12 1 CREDIT

Open to female students to provide an initial high school choral experience. Emphasis is on vocal skill development and public performance experience. Concert attendance is mandatory. OMEA district and state contests require additional time outside of school day. Materials Needed: Correct concert attire and \$15 robe rental/cleaning fee.

801 MEN'S CHORUS **PREREQUISITE:** Audition

GRADES: 9-12 1 CREDIT

GRADES: 10-12

GRADES: 9-12

GRADES: 9-12

1 CREDIT

1 CREDIT

1 CREDIT

Open to gualified male voices to provide a choral experience for the beginning to advanced singer. Emphasis is on advanced vocal skill development and public performance. Concert attendance is mandatory. OMEA district and state contests require additional time outside of school day. Materials Needed: Correct concert attire and \$15 robe rental/cleaning fee.

802 CONCERT CHOIR PREREQUISITE: Audition

Open to gualified students to provide an advanced mixed-choir experience. Emphasis is on advanced vocal skill development, exploration of traditional and contemporary choir literature, and public performance. Concert attendance is mandatory. OMEA district and state contests require additional time outside of school day. Materials Needed: Correct concert attire and \$15 robe rental/cleaning fee.

803 SHOW CHOIR PREREQUISITE: Audition

Show Choir provides a development of vocal, instrumental, dance, and dramatic presentation skills through public performance of contemporary literature. Costume and accessory fees as well as a commitment to public performances and a rigorous competition schedule are mandatory for class membership. Show Choir performance season includes second and third grading periods. A student may not be a member of Winter sports from November 15 through March 15. Must attend show choir camp in the summer.

805 SHOW CHOIR COMBO PREREQUISITE: Audition

Show Choir Combo provides for development of instrumental skills through public performance of contemporary literature. Costume and accessory fees as well as a commitment to public performance schedule are mandatory for class membership. Show Choir performance season includes second and third grading periods. A student may not be a member of Winter sports from November 15 through March 15. Wind and percussionists are expected to participate in concert or symphonic band unless a scheduling conflict exists.

804 RED MARCHING BAND PREREQUISITE: None

GRADES: 11-12 ½ CREDIT

"Pride of Piqua" Marching Band rehearses during the first half of semester one. Band camps in July are <u>mandatory</u> to be a member of the marching band. Marching band is a performance based class which includes but not limited to football games, parades, contest, and pep band games. The marching band will transition into a concert band the last half of first semester for the annual Christmas/Holiday Concert in December

808 BLUE MARCHING BAND
PREREQUISITE: None

GRADES: 11-12 ½ CREDIT

"Pride of Piqua" Marching Band rehearses during the first half of semester one. Band camps in July are <u>mandatory</u> to be a member of the marching band. Marching band is a performance based class which includes but not limited to football games, parades, contest, and pep band games. The marching band will transition into a concert band the last half of first semester for the annual Christmas/Holiday Concert in December.

809 CONCERT BAND

PREREQUISITE: None

GRADES: 9-10 ½ CREDIT

Concert Band starts 2nd semester. Concert Band is made up of Freshman and Sophomores, and is a performance based class. Performances include, but not limited to, OMEA Large Group Contest, preview concerts, and spring concert. Students are encouraged to participate in the Pep Band for basketball games. Concert Band will play a variety of concert band literature to help develop fundamental skills. Music literature will range from a grade 2-3 difficulty level.

812 SYMPHONIC BAND PREREQUISITE: None

GRADES: 11-12 ½ CREDIT

Symphonic Band starts 2nd semester. Symphonic Band is made up of Juniors and Seniors, and is a performance based class. Performances include, but not limited to, OMEA Large Group Contest, preview concerts, and spring concert. Students are encouraged to participate in the Pep Band for basketball games. Symphonic Band will play a variety of symphonic band literature to challenge music abilities. Music literature will range from a grade 3-4 difficulty level.

Music

810 MARCHING BAND EXEMPTION PREREQUISITE: None

GRADES: 9-12 ½ CREDIT

This course is designed for students attending Upper Valley Career Center, Local College, or students not able to schedule marching band because of course conflict. All of these option must be approved by counselor and band director. Students must meet the requirements for marching band (see marching band OR contact band director).

811 COLOR GUARD

PREREQUISITE: Audition

Color guard is an auditioned group that is part of the "Pride of Piqua" Marching Band. Color guard members will enhance the marching band through dance, saber/riffle work, and spinning of silks. Auditions for the group will be posted towards the beginning of 2nd Semester (see band director). Color Guard members will be held to the same expectations and grading policy as those signed up for Piqua's 810 Marching Band class. See details regarding marching band in course class.

807 DRAMA PREREQUISITE: None

PREREQUISITE: None ½ CREDIT This class will serve as an introduction to all aspects of theatre. It will cover memorization skills, performance, evaluation, characterization, and history of theatre. This class will use readings, projects, movies, TV shows, and handson activities to survey a broad field of theatre. Class requirements include participation and performing memorized pieces on stage and reading aloud. Because of the participatory nature of this class, attendance is graded.

806 MUSIC APPRECIATION AND THEORY

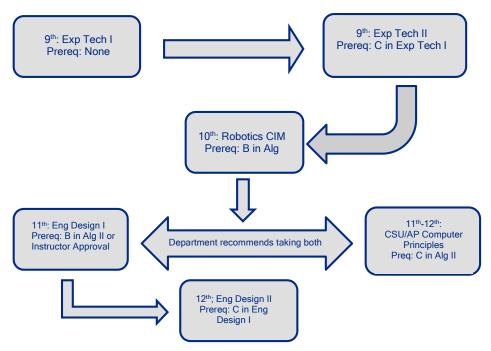
PREREQUISITE: Instructor approval

GRADES: 10-12 ½ CREDIT

This semester course will review various periods of music history, different styles of music, and the artists associated with these periods and style. The course is designed to give a comprehensive overview of the basics of Music Theory. Note names, staff reading and notation, scales, intervals, and triads will be covered at length in the course. The student will complete both in-class and out-of-class projects. It is suggested to have some music background and be able to read music prior to this course.

GRADES: 9-12 ½ CREDIT

GRADES: 10-12



650 EXPLORING TECHNOLOGY I PREREQUISITE: None

GRADES: 9 ½ CREDIT

Exploring Technology introduces students to a broad spectrum of engineering disciplines. These technologies may become of interest as a future career choice. There are twelve modules in the program. Six are studied during the first semester (Exploring Technology I) and the remaining six during the second semester (Exploring Technology II). Technologies studied are CAD/CAM, Machine Trades, Robotics, Plastics, Engineering Stresses, Artificial Intelligence, Fiber Optics and Lasers, Computer Graphics, Fluid Power, and Residential Design. *Students cannot be enrolled in Exploring Tech I or II and R & D.* School Fee: \$15

651 EXPLORING TECHNOLOGY II

GRADES: 9 ½ CREDIT

PREREQUISITE: C in Ex Tech I and instructor approval

This course is the completion of Exploring Technology I. In addition to the modules listed above, students will have teaming exercises designed to acquaint them to real world mock customers. Everything from public relations, design, specifications, environmental issues, product quality and financing; all from an engineer's perspective. *Students cannot be enrolled in Exploring Tech I or II and R & D*. School Fee: \$15

653 ROBOTICS CIM

GRADES: 10 1 CREDIT

 PREREQUISITE: B in Algebra and Instructor approval
 1 CRED

 In this course, students will be introduced to all aspects of computerintegrated manufacturing. They will learn about robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems School Fee: \$10

Pre-Engineering

659 COMPUTER SCIENCE ESSENTIALS (CSE) **PREREQUISITE:** None

GRADES: 9-12 1/2 CREDIT

This semester course is designed to introduce students to the innovations and creativity involved in the computer and technology career paths. Students will collaborate to create mobile apps, solve problems and create value for others through innovation and creativity, and explore how innovations in computing impact and connect our world. Students will be introduced to computer programming and learn how to put your designs into practice.

654 ENGINEERING DESIGN I

PREREQUISITE: B in Algebra II and Instructor approval

1 CREDIT The focus of Engineering Design is the application of the engineering design Topics include work-processes, optimization methods, design process. optimization, and risk management tools. Students will use 2D and 3D modeling software to help them design solutions to solve proposed problems, document their work, and communicate solutions. Additionally, students will interpret industry prints and create working drawings from functional models. Emphasis is given to experimental problem solving in real systems.

655 ENGINEERING DESIGN II

GRADES: 12 1 CREDIT

GRADES: 11-12

1 CREDIT

PREREQ: C in Eng Design I and Instructor approval Students will learn the principles and practices of advanced 2D and 3D modeling, machine operation, and machine applications. Students will learn how machine components such as gears, belts, sprockets, bearings, clutches, couplings, and springs contribute to the application for which the machine is designed. They will also examine the basic drives of such mechanisms as electric motors and hydraulic & pneumatic actuators. Students will compete in battle bots competitions.

657 AP COMPUTER SCIENCE PRINCIPLES **PREREQ**: C in Algebra II and Instructor approval

AP Computer Science Principles is a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

GRADES: 11-12

900A MENTORING S1 PREREQUISITE: Instructor approval

GRADES: 9-12 ½ CREDIT

This course provides a unique opportunity for the learner to assume the role of a student mentor to work with same-age disabled peers. Students will gain knowledge of different handicapping conditions and will interact with the students using modified learning task materials. Students must complete assignments, be a positive role model, and accompany the class on a community outing. More importantly, this class facilitates appreciating the similarities between themselves and the disabled. Class size is limited and all students will be subject to a two-week trial period

900B MENTORING S2

GRADES: 9-12 ½ CREDIT

 PREREQUISITE: Instructor approval
 ½ CREDIT

 This course provides a unique opportunity for the learner to assume the role of a student mentor to work with same-age disabled peers. Students will gain knowledge of different handicapping conditions and will interact with the students using modified learning task materials. Students must complete assignments, be a positive role model, and accompany the class on a community outing. More importantly, this class facilitates appreciating the similarities between themselves and the disabled. Class size is limited and all students will be subject to a two-week trial period.

904 EMPLOYABILITY SKILLS PREREQUISITE: Must be on an IEP

GRADES: 9-10 1 CREDIT

This is an elective class for students currently on an IEP. It will cover a basic course in social skills and social interaction, employability skills such as proper introductions and effective communication, and interactive role playing. The second semester of the course will get more in depth with social skills, social media safety, and dealing with emergencies. Employability skills will focus on how to get and keep a job, making change and counting money, and effective communication

907 SUCCESSBOUND PREREQUISITE: None

GRADES: 9-12 ½ CREDIT

In this course, students will begin exploring career interests through job shadowing, guest speakers, fieldtrips, and coursework. Students will be required to complete assignments and participate in activities, in order to develop skills necessary for post-secondary and financial success. Upon the conclusion of the course, students will be able to create a SuccessBound career path and educational plan that they will continue to develop throughout their secondary term at Piqua High School. Students will earn their financial literacy credit in this course.

<u>rechnica</u>

915 LOGISTICS LAB PREREQUISITE: None

GRADES: 11-12 4 CREDITS

Students will learn the production processes applied across manufacturing operations and supply chain logistics. Students will be able to demonstrate abroad array of technical skills with an emphasis given to logistics, quality practices, measurement, maintenance and safety. Students will have the opportunity to earn a Certified Logistics Associate (CLA) credential, Certified Logistics Technician (CLT) credential and an Occupational Safety and Health Administration (OSHA) credential.

908 & 910 WORK BASED LEARNING

GRADES: 11-12 1 CREDIT*

PREREQUISITE: Staff recommendation and application1 CREDIT*Work-based learning experiences are conducted at a work site during or after
school. They are designed to provide authentic learning experiences to
students that link academic, technical and professional skills. Business and
education partners work together to evaluate and supervise the experience,
which must be documented with training or learning plans and evaluation
forms. WBL is for students in the 11th & 12th grade and are interested in
gaining employment during high school. Enrolled students will attend school
periods 1-5A. Students will also be required to work a minimum of 15 hours
per week and must have reliable transportation to their work site. Students
are encouraged to obtain employment prior to program entrance. Students
under the age of 18 will be required to obtain a work permit once
employed. Students benefit by being on the job daily and develop good work
habits. There will be a related course that accompanies this class. *Half
credit given per five hours of work a week for each semester

911 HEALTH CAREERS LAB PREREQUISITE: None

GRADES 11-12 1 CREDIT

Students will apply knowledge and clinical skills necessary to assess, plan, provide, and evaluate care to patients in varied healthcare settings. Students will apply first aid principles and techniques needed for response to choking, cardiopulmonary resuscitation, and other life-threatening emergencies. Emphasis will be placed on regulatory compliance, patient safety, pathophysiology, and medical interventions. Additionally, this course introduces psychomotor skills needed to assist individuals in meeting basic human needs. Students will have the opportunity to sit for the State Tested Nursing Assistant Exam during junior year. During senior year, students will have the option to do an internship, take Edison classes for registered nursing degree, or go to the career center for LPN. Students will meet with their counselor to plan their course of action.

905 CONSTRUCTION TECHNOLOGIES PREREQUISITE: None

GRADES: 10 1 CREDIT

In this course, students will learn physical principles and fundamental skills in construction. Students will select materials and assemble a basic project. Students will test basic electrical circuits. Students will select materials and assemble a basic plumbing system. They will perform simple maintenance of electric fixtures and plumbing fixtures. Students will also spend time exploring the HVAC, Electrical Trades and Carpentry programs at Upper Valley Career Center. This course takes place at the Upper Valley Career Center. Students travel to the UVCC for two periods during the first semester. Materials Needed: work boots or shoes.

World Languages

721 AMERICAN SIGN LANGUAGE I PREREQUISITE: None

GRADES: 9-12 1 CREDIT

This course will introduce students to the language and culture of Deaf Americans. Students will learn basic vocabulary and grammar structures with a heavy emphasis on expressive and receptive language use. Information about Deaf Culture and Community will be introduced through authentic and nonauthentic materials. By the end of ASL I students will have the ability to converse in basic ASL, have basic narrative and questioning skills, use tense and aspect markers, and be able to identify and understand the use of classifiers/depicting verbs. School Fee: \$20

722 AMERICAN SIGN LANGUAGE II PREREQUISITE: ASL

GRADES: 10-12 1 CREDIT

This course will continue to develop vocabulary and grammar with a heavy emphasis on expressive and receptive language use. Knowledge of the American Deaf Culture and Community will be expanded through authentic and non-authentic materials. By the end of ASL II students will have refined their grammatical skills and be able to incorporate classifiers and depicting verbs into their discourse. Spatial referencing, parts of speech, directionality, temporal, and distributional aspects will be introduced. School Fee: \$20

723 AMERICAN SIGN LANGUAGE III PREREQUISITE: ASL II

GRADES: 11-12 1 CREDIT

This course is designed for students who are serious about advancing their mastery of receptive and expressive ASL. This course will continue to develop vocabulary and dive deeper into the structures of grammar. Conversation skills will be heavily increased as the expectation of voice-off communication is imperative for this course. By the end of ASL III students will be able to communicate using a multitude of grammatical structures, tenses, and incorporation of different aspects. School Fee: \$20

724 ECC AMERICAN SIGN LANGUAGE IV PREREQUISITE: ASL III

GRADES: 11-12 2 CREDITS

This course is designed for students who wish to develop proficiency in receptive and expressive communication in ASL. Intense vocabulary development will continue along with the linguistic study of phonology and morphology of ASL. A regular emphasis on culture will be studied- both current and historical events related to the Deaf Community and ASL. School Fee: \$20

711 FRENCH I PREREQUISITE: None

GRADES: 9-12 1 CREDIT

French I presents the vocabulary and grammar needed for basic oral and written communication in French. Students will be able to carry on a simple conversation in French over topics such as name, age, and weather. They will be able to ask the time, order in a restaurant, etc. Our program uses up-to-date videos shot on location in France to acclimate students to authentic accent and usage, as well as introduce them to French culture and geography. The smart board listening access through the online textbook component helps students build oral comprehension. School Fee: \$20

712 FRENCH II

PREREQUISITE: French I

GRADES: 10-12 1 CREDIT

French II continues to increase the students' vocabulary and grammar skills while exposing them to a significant number of beginning readings in French, along with simple sentence structure and paragraph responses to these readings. The video and CD formats are maintained, while students continue to learn about French culture, civilization, and geography. School Fee: \$20

713 FRENCH IIIGRADES: 11-12PREREQUISITE: French II1 CREDIT

This course is designed for students who wish to explore and master the French language as a means of oral and written communication. Besides the work on language structure, reading, writing, and speaking in French are the main objectives of this program. School Fee: \$20

714 FRENCH IV PREREQUISITE: French III

GRADES: 12 1 CREDIT

This course is designed for students who wish to augment and improve their level of French across the three means of communication: interpretive, interpersonal and presentational. Authentic materials and literature will be used in this class to increase the students' knowledge of French and Francophone culture. School Fee: \$20

731 SPANISH I PREREQUISITE: None

This course will introduce the student to the fundamentals of Spanish vocabulary and grammar. Students will develop all four essential skills of learning a World Language such as reading, writing, listening and speaking. Some cultural and geographical information will be covered as well. By the end of Spanish I, students will have the ability to use the present tense. They will be able to initiate basic conversations with Native Spanish speakers using basic vocabulary and common greetings and expressions School Fee: \$20

732 SPANISH II PREREQUISITE: Spanish I

GRADES: 10-12 1 CREDIT

This course will continue to build vocabulary and continue to develop grammar using the four essential skills of learning a World Language: reading, writing, listening, and speaking. Cultural and geographical knowledge will be expanded through various authentic and non-authentic materials. By the end of Spanish II, students will be able to use multiple tenses to speak, listen, read and write including the present and past, as well as uses of pronouns. Assessments will be based on Integrated Performance Assessments (IPA's) and be completely performance based. School Fee: \$20

733 SPANISH III

PREREQUISITE: Spanish II

GRADES: 11-12 1 CREDIT

GRADES: 12

This course will include a continuation of the study of vocabulary and grammar using all four essential skills of learning a World Language: reading, writing, listening and speaking. Conversation skills will be further developed through practical thematic units. Difficulty and relevance of vocabulary will also increase. By the end of Spanish III, students will be able to use multiple tenses to communicate including the present, past, imperfect, future, and command tenses. Assessments will be based on Integrated Performance Assessments (IPA's) and be completely performance based. School Fee: \$20

735 SPANISH LANGUAGE IV (previously AP Spanish) PREREQUISITE: Spanish III

PREREQUISITE:Spanish III1 CREDITSpanish 4 is for students who wish to develop proficiency and integrate theirlanguage skills, using authentic materials and sources. Students will furtherdevelop their Spanish skills in reading, writing, speaking and listening. The coursewill include an intensive overall review of grammar, with a substantial increase invocabulary as is related to the reading and conversation topics of the text.Spanish "humanities" will be studied – art, architecture, music and literary greats,as well as current events and social issues. Materials Needed: A college-rulednotebook with at least one pocket or a three-ring binder at least 1 inch or largerwith at least one pocket, loose leaf paper, a pencil, and a highlighter (no pens). ASpanish/English dictionary will be available in class. Students have the option totake the AP Spanish Language and Culture exam in May. School Fee: \$20

GRADES: 9-12 1 CREDIT

