

# Piqua High School

Program of Studies 2018-19











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#### JUNIOR HIGH CREDIT

Junior high school students successfully completing high school courses offered as part of the junior high curriculum (ex.: Algebra I, Geometry, Physical Science) 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, students must qualify for an Honor's Diploma. Next the 4.0 GPA will be multiplied by 9. The GPA and ACT will then be added together. 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.

#### **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.

# Educational Options

# **SUCCESS ACADEMY**

Success Academy 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. Students may take classes during the school day or after school. Participation in the program requires permission of the building principal.

# SUMMER SCHOOL

Piqua High School offers selected summer school classes to students in grades 9 - 12 through the online Success Academy. Classes will meet Monday through Friday for three weeks in June. Applications can be obtained in the spring. Students must pay to take summer school courses.

#### **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 10<sup>th</sup> 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.

Wright State University: 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. 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 2320 Calculus III
Science	ECC Organic Chemistry 3 credits CHM 111S Basic Chemistry of Life
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	CSU Computer Science Principles 3 credits CIS 151 Invitation to Computing

# **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 Greater Western Ohio Conference (GWOC), participating in sports opposite Beavercreek, Butler, Centerville, Fairborn Fairmont, Greenville, Lebanon, Miamisburg, Northmont, Sidney, Springboro, Springfield, Stebbins, Tipp City, Trotwood-Madison, Troy, Wayne, West Carrollton, and Xenia.

Boys' Sports
Football
Basketball
Baseball
Softball

Cross country Cross country

Tennis
Track
Track
Soccer
Wrestling
Golf
Golf
Swimming
Swimming
Bowling
Tennis
Track
Soccer
Soccer
Soccer
Soccer
Wrestling
Golf
Swimming
Swimming
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 GWPC 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>: FOR (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>E-Sports Club</u>: Join with fellow gamers to participate in video game tournaments in casual and league competitions.

<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>Fellowship of Christian Athletes (FCA)</u>: an organization of student-athletes designed to present to coaches and athletes, and all whom they influence, the challenge and adventure of receiving Jesus Christ as Savior and Lord; serving Him in their relationships both on and off the court/field and in the fellowship of the church.

Harry Potter Club: 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 ½ 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, Introduction to Business, ECC Introduction
  to Business, Personal Finance, ECC Personal Finance, Career Connections,
  Success Bound, or CBI.

# **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 21, and Math 22. The SAT remediation free scores are English 430, Reading 450, and Math 520. The state of Ohio will pay one time for all 11th grades 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 in the Class of 2019 must earn a total of 13 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.
- 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 scaleACT: 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.

# Graduation Requirements

# Graduation Requirements

# 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 scaleACT: 27 or SAT: 1280Field 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 scaleACT: 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 sciences
- 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 Preparation

#### **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.

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 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 <a href="www.playnaia.org/">www.playnaia.org/</a>. 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.

# **NCAA**

If you are playing at a Division I or II institution, you must register at <a href="https://www.eligibilitycenter.org">www.eligibilitycenter.org</a>. 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. 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 7<sup>th</sup> 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.

# 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.

# Career Exploration

- 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
- Loggers
- 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 Organic 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

Art II: Drawing and Painting

Art III: Studio Art

AP Studio Art: 2 D Design and Drawing

Photography Ceramics Speech

Media I & II

World Languages

Yearbook

Newspaper

Drama

History of Rock and Roll

Digital Media Marketing

**Advanced Media Production** 

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
Media I & II
Digital Media Marketing
Advanced Media Production

# **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

Art II: Drawing and Painting

Art III: Studio Art

AP Studio Art: 2 D Design and Drawing

# **Upper Valley Career Center Offerings**

Building and Grounds Maintenance 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
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 ves to two or more of the guestions 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 Organic Chemistry Physics** AP Physics **Exploring Technology** Robotics CIM Astronomy Sociology WSU Pre-Calculus WSU Calculus **AP Statistics Engineering Design** 

# **Upper Valley Career Center Offerings**

AP/CSU Computer Science Principles

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

# Menlo Park: Engineering

I want to be a Mechanical **Engineer** 

I want to be an **Electronics** or **Electrical Engineer** 

I want to work as a Machinist or **Manufacturing Engineer** 

Piqua HS

4 years CP English/AP English WSU Pre-Calculus **AP Statistics** WSU Calculus **Physics** AP Physics Engineering Design **Economics Exploring Technology** Chemistry/Pre AP Chemistry AP Chemistry AP/CSU Computer Science Principles Robotics CIM

Piqua HS

4 years CP English/AP English WSU Pre-Calculus **AP Statistics Exploring Technology** Sociology Chemistry/Pre AP Chemistry AP Chemistry **Physics** AP Physics Economics WSU Calculus AP/CSU Computer Science **Principles** Engineering Design Robotics CIM

Piqua HS

4 years CP English/AP English Exploring Technology Psychology AP Statistics Sociology Chemistry/Pre AP Chemistry AP Chemistry **Physics** AP Physics WSU Calculus Engineering Design AP/CSU Computer Science Principles Robotics CIM

**Upper Valley Career Center** 

Pre-Engineering and Mechanical Design Technologies

**Upper Valley Career Center** 

Pre-Engineering and Mechanical Design Technologies

**Upper Valley Career Center** 

Manufacturing and Machine Technologies Welding

2-Year College

Mechanical Engineering Technology

4-Year University

Mechanical Engineering

**Graduate School** 

Mechanical Engineering

2-Year College Electronics Engineering Technology

4-Year University

Electrical Engineering

**Graduate School Electrical Engineering**  **UV Career Center Adult** 

Precision Tooling and Manufacturing

2-Year College

MET, Advanced Manufacturing Systems Option

4-Year University

Manufacturing Engineering

**Graduate School** 

Industrial Engineering

Ohio Job Outlook

Growth Rate: MET (2-yr): 2% ME (4-yr): 4%

**Annual Openings:** MET (2-yr): 90 ME (4-yr): 430

**Ohio Job Outlook** 

Growth Rate: EET (2-yr): -2% EE (4-yr): 2%

Annual Openings: EET (2-yr): 90 EE (4-yr): 120

Ohio Job Outlook

Growth Rate: Machinist: 10% MET (2-yr): 1% ME (4-yr): 4%

**Annual Openings:** Machinist: 1,150 MET (2yr): 90 ME (4-yr): 190

Median Ohio Salary

MET (2-yr): \$53,000 ME (4-yr): \$75,000

Median Ohio Salary

EET (2-yr): \$58,000 EE (4-yr): \$80,000

Median Ohio Salary

Machinist: \$41,000 MET (2 yr): \$53,000 ME (4-yr): 87,000

# **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
Economics
WSU Calculus
AP Statistics

# **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 Organic Chemistry
AP Biology
Speech
Athletic Training
Sociology
AP Statistics
Psychology
Higher level math classes

# **Upper Valley Career Center Offerings**

Medical Careers Academy Medical Information Management Exercise Science

# **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

# Menlo Park: Health Sciences

I want to be a Nurse

I want to be a Medical Lab **Technician** 

I want to be a Physical Therapist or Physical Therapist
Assistant

**Piqua HS** 4 years CP English/AP English 4 years CP Math WŚU Pre-Calculus **AP Statistics** Psychology Chemistry ECC Organic Chemistry

**Piqua HS** 4 years CP English/AP English 4 years CP Math WŚU Pre-Calculus **AP Statistics** Sociology Psychology Chemistry **ECC Organic Chemistry** 

Piqua HS 4 years CP Eng/AP Eng 4 years CP Math WŚU Pre-Calculus Chemistry AP Physics Sociology Psychology Athletic Training

**Upper Valley Career Center** Medical Careers Academy

**Upper Valley Career Center** Medical Careers Academy

**Upper Valley Career Center Exercise Science** 

Upper Valley CC Adult Ed

2-Year University Registered Nursing

LPN to RN Program 4-Year University

Bachelor of Science in Nursing

**Graduate School** 

Nurse Practitioner

2-Year University

Medical Laboratory Technician

4-Year University

Medical Laboratory Science

**Graduate School** 

Medical Laboratory Science

2-Year University

Physical Therapy Assistant

4-Year University

Pre-Physical Therapy

**Graduate School Physical Therapy** 

Ohio Job Outlook

Growth Rate: LPN: 20% RN: 14% NP: 28%

Annual Openings: LPN: 1,930 RN: 4,830 NP: 230

**Ohio Job Outlook** 

Growth Rate: MLT: 14%, MLS: 12%

Annual Openings: MLT: 230

MLS: 230

Ohio Job Outlook

Growth Rate: PTA: 39%, PT: 30%

Annual Openings: PTA: 340 PT: 420

Median Ohio Salary

LPN: \$40,000 RN/BSN: \$62,000 NP: \$97,000

Median Ohio Salary

MLT: \$42,000 MLS: \$59,000 Median Ohio Salary

PTA: \$57,000 PT: \$85,000

# 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 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 Media I & II Advanced Media Production Digital Media Marketing

# **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

# Menlo Park: Information Technology

I want to work as a Computer **Programmer, Information** Systems Manager, or Computer Security Specialist

#### Piqua HS

4 years CP English/AP English WSU Pre-Calculus AP Statistics Sociology Psychology WSÚ Calculus **Physics** AP Physics Engineering Design Media I & II Digital Media Marketing AP/CSU Computer Science Principles Advanced Media Production

# **Upper Valley Career Center**

Interactive Media Computer Information Tech

# 2-Year University

Computer Information Technology

# 4-Year University

Computer Science

#### **Graduate School**

Masters of Business Admin Management Information Systems

#### Ohio Job Outlook

Growth Rate: CP: **-**9% ISM: 17% CSS: 16%

Annual Openings: CP: 180 ISM: 360 CSS: 60

#### Median Ohio Salary

CP: \$70,000 ISM: \$121,000 CSS: \$82,000

# 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

# **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 Operators
- Geothermal 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

# **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
Media I & II
Digital Media Marketing
Advanced Media Production

# **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**

Aerospace Occupations 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 <sup>th</sup>	Semester I: Course and Number	Semester II: Course and Number	Credits
1			
2			
3			
4			
5			
6			
7			

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

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

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

### 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. Materials Needed: Three-ring binder, tab dividers, loose leaf paper, blue or black pens/pencil, and highlighter.

### 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. Materials Needed: Three-ring binder, tab dividers, filler paper, blue or black pens/pencil, and highlighter.

### 113 PRE-AP ENGLISH 9

PREREQUISITE: B English 8. Accelerated or Advanced on AIR

GRADES: 9 1 CREDIT

Students 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. Materials Needed: Three-ring binder, tab dividers (5), loose leaf paper, blue or black pens/pencil, and highlighter.

# English

# English

### 121 ENGLISH 10 PREREQUISITE: English 9

GRADES: 10 1 CREDIT

English 10 is for students wanting to pursue an education at the UVCC or gain employment after graduating. This class is for students who need to improve their reading comprehension, writing skills, and vocabulary. This class will focus on the integration of literature, writing, and composition skills. Writing assignments will be in collaboration with the textbooks used in class. Instruction will be based on Ohio content standards. The NCAA does not accept this course. Materials Needed: Three-ring binder, tab dividers, loose leaf paper, blue or black pens/pencil, and highlighter.

### 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. Materials Needed: Three-ring binder, tab dividers, loose leaf paper, blue or black pens/pencil, and highlighter.

### 123 PRE-AP ENGLISH 10

**GRADES: 10** 

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

1 CREDIT

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. Materials Needed: Three-ring binder, tab dividers, loose leaf paper, blue or black pens/pencil, and highlighter.

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. Materials Needed: Three-ring binder, tab dividers, loose leaf paper, blue or black pens/pencil, and highlighter.

### 132 ENGLISH 11 COLLEGE PREP

PREREQUISITE: English 10 CP or Teacher Approval

GRADES: 11 1 CREDIT

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. Materials Needed: Three-ring binder, tab dividers, loose leaf paper, blue or black pens/pencil, and highlighter.

### 133 AP ENGLISH LANGUAGE AND COMPOSITION

PREREQUISITE: Pre-AP Eng 10 or Eng 10 CP with teacher approval

GRADES: 11 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. Materials Needed: Three-ring binder, tab dividers, loose leaf paper, blue or black pens/pencil, and highlighter.

# English

# 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 quarterly 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. Materials Needed: Three-ring binder, tab dividers, loose

142 ENGLISH 12 COLLEGE PREP PREREQUISITE: English 11 CP

leaf paper, blue or black pens/pencil, and highlighter.

GRADES: 12 1 CREDIT

**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. Materials Needed: Three-ring binder, tab dividers, loose leaf paper, blue or black pens/pencil, and highlighter.

143 AP ENGLISH LITERATURE AND COMPOSITION GRADE: 12
PREREQUISITE: AP Eng Lang & Comp or English 11 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 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. Materials Needed: 1 - 1 ½ inch Three-ring binder, dividers, post-it notes. highlighters, and folder.

### 151 YEARBOOK

PREREQUISITE: Application and teacher approval

1 CREDIT

**GRADES: 10-12** 

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. Materials Needed: None.

### 150 NEWSPAPER WRITING

PREREQUISITE: C in prior English or teacher approval

**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. Materials Needed: Spiral Notebook.

### 155 SPEECH

**PREREQUISITE**: C in English or teacher approval

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. Materials Needed: 3 x 5 lined note cards, folder, and loose leaf notebook paper.

### 153 ACT/SAT TEST PREP

PREREQUISITE: None

GRADES: 11-12

1/4 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. Materials Needed: None.

# English

# English

152 THE NOVEL GRADES: 10-12
PREREQUISITE: English 9 and C in current English 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. Materials Needed: Folder.

156 FILM AS LITERATURE PREREQUISITE: C in prior English

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. Materials Needed: Folder.

**GRADES: 10-12** 

½ CREDIT

### 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, notebook paper, and pencil.

### 312 ALGEBRA I

**GRADES: 9** 

PREREQUISITE: None

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, paper, and pencil.

### **322 GEOMETRY**

**GRADES: 9-12** 

PREREQUISITE: Algebra I

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, notebook paper, compass, protractor, and pencil.

### 331 PRE-ALGEBRA II

GRADES: 9-12

**PREREQUISITE**: Geometry

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. This course does not meet NCAA clearinghouse requirements. Materials Needed: A TI-84 Plus calculator, notebook paper, and pencil.

### 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, notebook paper, and pencil.

### Math

### 333 ADVANCED ALGEBRA II

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

GRADES: 9-12 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, notebook paper, graph paper, and pencil.

### 343 PRE-CALCULUS

PREREQUISITE: A/B in Algebra II & Geometry

GRADES: 10-12 1 CREDIT

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 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, notebook paper, and pencil.

### 344 WSU PRE-CALCULUS

PREREQUISITE: Algebra II, Geometry, WSU CCP requirements

GRADES: 10-12 2 CREDITS

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, notebook paper, and pencil.

### 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, notebook paper, graph paper, and pencil.

### Math

### 355 MATHEMATICS THROUGH MODELING

PREREQUISITE: Algebra II

1 CREDIT

**GRADES: 11-12** 

This course is designed to introduce students to the process of creating and using mathematical models with real life applications. In this course, problem based learning of mathematics in real life applications is emphasized. Students will gather and analyze data in order to build, use, and evaluate mathematical models of real situations and phenomena. Activities will involve the application of mathematical concepts and practices, as well as critical thinking, and problem solving skills. This course will prepare you for the math ACT. This class does not meet the NCAA's standards for core Math. Materials Needed: A TI-84 Plus calculator, notebook paper, binder, and pencil.

### 351 WSU CALCULUS

PREREQUISITE: Pre-Calculus, meet WSU CCP requirements

GRADES: 11-12

2 CREDITS

This is a college level class. Students will receive 4 credits in Math 2300 Calculus I and 4 credits in Math 2310 Calculus II from Wright State University. This course is one period long. In the first semester, students will examine limits, the derivative, differentiation, applications of the derivative, antiderivatives, Riemann sums, the definite integral, and the Fundamental Theorem of Calculus. In the second semester, students will investigate integration techniques, applications of the definite integral, first-order differential equations, vectors and vector operations, parametric equations and polar coordinates, and indefinite series. The option will be given to take the AP Calculus BC Exam in May per the student's request. Materials Needed: A TI-84 Plus calculator, notebook paper, and pencil.

### 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: Notebook paper, scientific calculator, and pencil.

### 356 WSU CALCULUS III

PREREQUISITE: WSU Calc with C, meet WSU CCP requirements

GRADES: 12 1 CREDIT

This is a college level class. Students will receive 4 credits in Math 2320 In Calculus III from Wright State University. Vector functions and their derivatives, motion in two and three dimensions, lines, planes, and parametric surfaces, spherical and cylindrical coordinates. Partial derivatives and multiple integrals in two and three dimensions. Vector fields, line and surface integrals. Green's, Divergence, and Stoke's theorems.

# Science

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, AP Physics C, and AP Chemistry.

### 411 PHYSICAL SCIENCE PREREQUISITE: None

GRADES: 9 1 CREDIT

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: 2" Three-ring binder, loose leaf paper, colored pencils, pencils/pens, highlighter, and calculator.

### 412 BIOLOGY PREREQUISITE: None

GRADES: 9-10 1 CREDIT

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. Materials Needed: Paper, pencil, spiral notebook, colored pencils, glue stick, three-ring binder, 5 binder dividers, and highlighter.

### **413 PRE-AP BIOLOGY**

GRADES: 9

**PREREQUISITE**: Current science teacher approval

1 CREDIT

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. Materials needed: Paper, pencil, 3 ring binder, 5 dividers, and paper.

### 422 CHEMISTRY

GRADES: 10-12 1 CREDIT

PRE/COREQUISITE: 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: Notebook, 1" three-ring binder, scientific calculator, pens, pencils, and paper.

# Science

### 423 PRE-AP CHEMISTRY

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. Materials Needed: permanent page notebook, binder, graphing calculator, and pencils

### 432 PHYSICS I

PRE/COREQUISITE: Biology or Chemistry & Algebra II

1 CREDIT

**GRADES: 10-12** 

GRADES: 10

2 CREDITS

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: Notebook and scientific calculator.

### 442 PHYSICS II

PRE/COREQUISITE: Biology or Chemistry & Algebra II

GRADES: 10-12 1 CREDIT

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

### 453 AP PHYSICS I

PRE/COREQUISITE: Pre-AP Bio & Pre-calculus

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 and lab fee.

## Science

455 AP PHYSICS II **GRADES: 10-12** PRE/COREQUISITE: Pre-AP Chemistry & Pre-Calculus 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 non-major 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 and lab fee.

**450 ASTRONOMY** 

**GRADES: 11-12** PREREQUISITE: Physical Science and Biology 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, historical astronomy, astronomical instruments, the celestial sphere, the solar system, the earth as a system in space, the earth/moon system, the sun as a star, and stars. The class involves some algebralevel math. Activities will include several major, long-term projects, as well as daily activities, notes, and labs. Materials required: notebook, and glue stick.

**451 AP BIOLOGY** 

**GRADES: 11-12** 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. Materials Needed: Paper, pencil, spiral notebook, colored pencils, glue stick, and highlighter.

**452 AP CHEMISTRY** 

**GRADES: 11-12 PREREQUISITE**: Pre-AP Chemistry 2 CREDITS

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 two periods long. Materials Needed: 1" threering binder, scientific calculator, pens, pencils, and paper.

454 ECC ORGANIC CHEMISTRY

**GRADES: 12** PREREQUISITE: Chemistry, meet Edison's CCP requirements 1 CREDIT

ECC Organic Chemistry is a college level chemistry course designed for students who are interested in the sciences. The topics to be covered will be chemistry within living organisms including: solutions, acids, bases, and bonding; organic chemistry and biochemistry; and the structure of organic molecules and selected reactions. Materials Needed: 1" three-ring binder, scientific calculator, pens, pencils, and paper.

### 211 WORLD STUDIES **GRADES: 9 PREREQUISITE**: None 1 CREDIT 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. Materials Needed: Three-ring binder, loose leaf paper, tabs, pencils, and pens.

### **221 U. S. STUDIES GRADES: 10 PREREQUISITE**: None 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. Materials Needed: None.

### 222 U. S. STUDIES COLLEGE PREP **GRADES: 10 PREREQUISITE**: None 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. Materials Needed: Three-ring binder, loose leaf paper, tab binder dividers, and pencils/pens.

### 223 ECC US HISTORY **GRADES: 10-12** PREREQUISITE: World Studies CP, Meet Edison CCP requirements 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. Materials Needed: Three-ring binder, loose leaf paper, binder dividers, and pencils/pens.

### 230 GOVERNMENT UVCC STUDENTS **GRADES: 10 COREQUISITE**: US Studies ½ CREDIT

This course is for students that want to attend the UVCC during their junior and senior year. The 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. Materials Needed: None

# Social Studies

# Social Studies

### 263 HISTORY OF ROCK AND ROLL

PREREQUISITE: None

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. Materials Needed: 3 ring binder with loose leaf paper, a notebook with a folder, pencil.

### 256 CURRENT EVENTS

PREREQUISITE: World Studies and US Studies

½ CREDIT

**GRADES: 11-12** 

**GRADES: 10-12** 

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. Materials Needed: Pencil and notebook.

### 257 SOCIOLOGY

PREREQUISITE: None

GRADES: 11-12
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. Materials Needed: None.

### **261 AP WORLD HISTORY**

PREREQUISITE: World Studies CP and teacher approval

GRADES: 11-12 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. Materials Needed: Pencil, notebook, and three-ring binder.

### 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. Materials Needed: None.

### 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. Materials Needed: None.

### 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. Materials Needed: None.

### 233 AP GOVERNMENT AND POLITICS

**PREREQUISITE**: US Studies and teacher approval

GRADES: 11-12 1 CREDIT

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 concents used to interpret politics and

and involves the study of general concepts used to interpret politics and the analysis of specific case studies. Topics covered in this discussion-oriented 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.

Materials Needed: None.

# Social Studies

750 ART I: INTRODUCTION TO ART A

PREREQUISITE: None

**GRADES: 9-12** ½ CREDIT

A PREREQUISITE FOR ALL OTHER ART CLASSES. This is an introductory class into the study of professional art. Projects will focus upon realism, basic composition, value, color theory, and the overall quality of individual artwork. The purpose of this class is to build skills in design as well as developing a strong work ethic. This is perfect preparation for those wishing to continue the study of art as well as demonstrating the importance visual art has within our lives. Students will learn to find deeper meaning and purpose behind historical works of art as well as within their own creations. This is a serious subject. There will be reading, writing, and tests. This is also an important foundation class for all students who have a common respect and curiosity about the world of professional art and their future place within it. Materials Needed: None

756 ART I: INTRODUCTION TO ART B

PREREQUISITE: ART I A

**GRADES: 9-12** ½ CREDIT

**GRADES: 10-12** 

½ CREDIT

This course is only for students that have been approved by the instructor. This course will be offered during the second semester. The class will be an option for freshmen that plan on taking art for all four years of high school or who plan on going into a creative field after they graduate. The class will also be an option for seniors that have not taken a full year of art. The class will continue building the skills that students developed in Introduction to Art, while beginning to explore the various types of media that students will use in Art II. Materials Needed: None

751 ART II: DRAWING/PAINTING

**GRADES: 10-12** PREREQUISITE: Art I: Introduction to Art A 1 CREDIT

An advanced level art course focused upon the fine art of drawing and painting. Drawing skills will be strengthened and unfamiliar techniques and color theory introduced. This class will focus heavily upon realism, proportion, composition, elements of light, and the overall quality of the artwork. Expectations are set high. Students must work to surpass all basic requirements as well as meet every deadline. They will learn how to better express their ideas and technical knowledge behind their projects both verbally and in written form. Basically, in this class, students will begin to draw and paint and talk and think just like the professionals. At the conclusion of this class, students will make an easy transition into Art III: Studio Art class. Materials Needed: None

**754 PHOTOGRAPHY** PREREQUISITE: Art I: Introduction to Art A

This course will teach students how to document the world visually using digital photography. Fundamentals such as composition, rule of thirds, color, and the principles of design will be implemented in this class. The software program used in this course is Adobe, specifically Illustrator and Photoshop. Everyone will take photographs outside of class in addition to in class. Students will create a website to document their work. Students must provide their own cameras (iPhones will work well).

Art

752 ART III: STUDIO ART GRADES: 11-12
PREREQUISITE: Art II: Drawing/Painting 1 CREDIT

A fast paced art course geared towards the serious art student. This class will help the former Art II: Drawing/Painting student transition into an excellent top-level 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 continue to focus upon realism and precision throughout various art projects in class as well as work with a diverse amount of art mediums available. They must meet all deadlines and exceed the basic 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. Essentially, most of the junior year artwork created in this class will become portfolio pieces added to their senior year AP Art work. Materials Needed: None

753 AP STUDIO ART: 2 D DESIGN/DRAWING GRADES: 12
PREREQUISITE: Art III: Studio Art 1 CREDIT

This is the fast paced, 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 go to college. 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". An AP Art student needs to apply the tools learned in class and create his/her own art projects outside of class. These projects will also be included within the final portfolio due at the end of his/her senior year. Through AP testing, this course also provides a fantastic opportunity to receive college credit. Materials Needed: None

755 CERAMICS GRADES: 11-12
PREREQUISITE: Art I: Introduction to Art A ½ CREDIT

Students will complete a progressive series of projects that will promote exploration of the traditional building techniques in ceramic work. The vast range of ceramic techniques currently available to the contemporary ceramic artist will be presented. Course work will include the history of ceramics. 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 nonfunctional work. It is mandatory that students work outside of class to meet performance, reading, research, and report requirements. Materials Needed: None

# Family Consumer Sciences

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. Materials Needed: None.

### 554 NUTRITION AND WELLNESS

PREREQUISITE: None

GRADES: 9-12 ½ 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. Materials Needed: None.

### **552 CHILD DEVELOPMENT**

**PREREQUISITE**: None

GRADES: 9-12 ½ 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. Materials Needed: None.

### 551 TEXTILE DESIGN CONSTRUCTION &

MAINTENANCE

PREREQUISITE: None

½ CREDIT

**GRADES: 9-12** 

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. Students will supply their own sewing kit which would include: scissors, tape measure, straight pins, seam ripper, needles, and a container for supplies. Materials Needed: None.

### 550 INTERIOR DESIGN, FURNISHINGS, & MANAGEMENT

PREREQUISITE: None ½ CREDIT

**GRADES: 9-12** 

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. Materials Needed: None.

# Family Consumer Sciences

# Health and Physical Education

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 health-promoting products and services; demonstrate the ability to practice health-enhancing 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. Materials Needed: Folder and pencils/pens.

864 WELLNESS PE PREREQUISITE: None GRADES: 9-12 1/4 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. Materials Needed: None

**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. Materials Needed: Notebook, folder, pens, and pencils.

500 MEDIA I PREREQUISITE: None GRADES: 9-12 ½ CREDIT

Develop media literacy and basic knowledge of visual tools and computer software used in public media (television broadcast production and performance). Study principles and elements of basic video shooting, performance, production, and digital art. Plan, write, perform, record, edit, and revise student productions. In addition, work will be required outside of class time. Media I will count as a fine arts credit. Materials Needed: Flash drive.

501 MEDIA II

GRADES: 9-12

PREREQUISITE: B in Media I & teacher approval

½ CREDIT

Media II is the second semester course with the objective of enhancing skills, such as video animation, and production quality, for those associated with Media I. This course is for elective credit only. Materials Needed: Flash drive.

**502 DIGITAL MEDIA MARKETING** 

**GRADES: 10-12** 

PREREQUISITE: C in Media I and II & teacher approval

1 CREDIT

Digital Media Marketing 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.

### 503 ADVANCED MEDIA PRODUCTION

GRADES: 11-12

PREREQUISITE: Digital Media Marketing & teacher

1 CREDIT

approval

Advanced Video Production serves as a continuation of the skills learned in Media I, Media II, and Media Marketing. Projects will focus on community-wide issues. Students will have a voice in determining the types of projects the class works on. Each student is required to do TWO remote shoots per quarter. Remotes include recording concerts, events, meetings, and various sporting events. All projects produced will be uploaded to our YouTube Channel (Youtube.com/piquadigital) and shared with the community. Students are expected to complete an independent project focusing on a group, local business, person of interest, or issue in the community each semester. Materials Needed: Flash drive, notebook, and pencil/pen.

Media

### Music

### 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

Open to qualified 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.

### 803 SHOW CHOIR PREREQUISITE: Audition

GRADES: 9-12 1 CREDIT

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. Materials Needed: None.

### 802 CONCERT CHOIR PREREQUISITE: Audition

GRADES: 10-12 1 CREDIT

Open to qualified 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.

### 805 SHOW CHOIR COMBO PREREQUISITE: Audition

GRADES: 9-12 1 CREDIT

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. Materials Needed: None.

## Music

### 804 MARCHING BAND/SYMPHONIC BAND

PREREQUISITE: Instructor approval

The "Pride of Pigua" Marching Band will rehearse during first semester. Marching band class will transition to Symphonic Band the last few weeks of the semester to prepare for the Winter Holiday Concert. Marching band holds rehearsal during summer months and after school during the months of August - November. Students must attend band camp in July to be a member of the marching band (See director for details). The "Pride of Piqua" is a performance-based group that performs at football games, contest, parades, festivals, and community events. Marching Band is open to any student with prior band experience. New students are encouraged to join band (See band director to get permission). Symphonic Band will perform a variety of band styles including marches and modern symphonic works. This band will participate in district contests in the spring as well as perform winter and spring concerts. Band members will be assigned to a pep band during the second and third guarter as part of their performance requirement. Students who Flex 6th must return for class 7th period. Student must be in Symphonic Band in order to be in marching band. Contact band director if you have a scheduling conflict with Symphonic Band. Anyone wanting to sign up for just Symphonic Band b/c of sports conflict or conflicts with the marching band schedule, please see band director and guidance counselor. Materials Needed: None.

**GRADES: 9-12** 

GRADES: 9-12 ½ CREDIT

**GRADES: 9-12** 

½ CREDIT

1 CREDIT

### 810 MARCHING BAND PREREQUISITE: None

This course credit is for students attending the Upper Valley Career Center or a local college who want to be a part the of the "Pride of Piqua" Marching Band. Marching band holds rehearsal during summer months and after school during the months of August - November. Students must attend band camp in July to be a member of the marching band (See director for details). The "Pride of Piqua" is a performance-based group that performs at football games, contest, parades, festivals, and community events. Marching Band is open to any student with prior band experience. New students are encouraged to join band (See band director to get permission). Students will not perform with the symphonic band when marching band is finished. Materials Needed: None.

### 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. Materials Needed: None.

## Music

### 806 MUSIC APPRECIATION AND THEORY

PREREQUISITE: Instructor approval

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. Materials Needed: Notebook and pencil.

**GRADES: 10-12** 

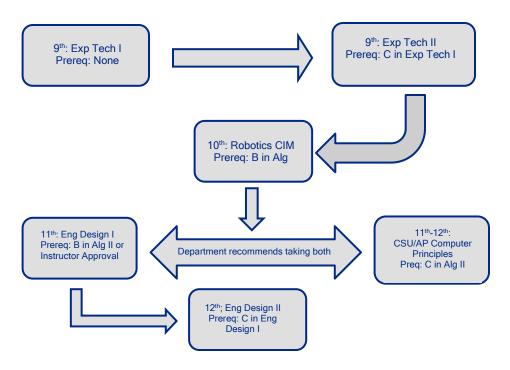
½ CREDIT

**GRADES: 10-12** 

½ CREDIT

### 807 DRAMA PREREQUISITE: None

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 hands-on 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. Materials Needed: Folder.



### 650 EXPLORING TECHNOLOGY I

**GRADES: 9** PREREQUISITE: None 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. Materials Needed: Notebook, folder, and pens/pencils.

### 651 EXPLORING TECHNOLOGY II

**GRADES: 9 PREREQUISITE**: C in Ex Tech I and instructor approval ½ CREDIT

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. Materials Needed: Notebook, folder, and pens/pencils.

### 653 ROBOTICS CIM

PREREQUISITE: B in Algebra and Instructor approval

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. Materials Needed: Notebook, folder, and pens/pencils.

**GRADES: 10** 

1 CREDIT

# Pre-Engineering

### 654 ENGINEERING DESIGN I

PREREQUISITE: B in Algebra II and Instructor approval

GRADES: 11-12 1 CREDIT

The focus of Engineering Design is the application of the engineering design process. Topics include work-processes, optimization methods, design 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. Materials Needed: None.

### 656 CSU COMPUTER SCIENCE PRINCIPLES PREREQ: Algebra II and Meet CSU CCP requirements

GRADES: 11-12 1 CREDIT

Cleveland State University Computer Science Principles follows the ideas and concepts also covered in the AP Computer Science Principles. This course 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. This 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. Successful completion of the course will grant credit for CIS 151: Invitation to Computing from Cleveland State University. Materials Needed: None.

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

GRADES: 11-12 1 CREDIT

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. Materials Needed: None.

### 655 ENGINEERING DESIGN II

GRADES: 12 1 CREDIT

PREREQUISITE: 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. Materials Needed: None.

### 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.

### 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. Materials Needed: None.

### 900B MENTORING S2 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. Materials Needed: None.

### 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. Materials Needed: 3 ring binder

# **Technical**

# **Technical**

### 901 CAREER CONNECTIONS PREREQUISITE:

Career Connections is a class for students who are interested in preparing for future employment opportunities. Students will be introduced to job seeking skills, career exploration, life skills, and work ethics. This program is under the supervision of the Upper Valley Career Center. Materials Needed: (1) 2 inch three-ring binder with pockets, (1 set) 5 tab binder dividers, (1) pack of #2 pencils, and (2) yellow highlighters.

### 905 CONSTRUCTION TECHNOLOGIES

PREREQUISITE: None

GRADES: 10 1 CREDIT

GRADES: 11-12 4 CREDITS

GRADES: 9-10 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 or second semester. Materials Needed: work boots or shoes.

### 902 & 903 CAREER BASED INTERVENTION

PREREQUISITE: Staff recommendation and application

The Career Based Intervention Program (CBIP) helps students reach career and academic success, improve academic performance, graduate from high school, develop employability skills, implement a career plan, and participate in a career pathway in preparation for post-secondary education and/or the workforce. CBI is for students 16-19 years of age, or in the 11th & 12th grade and are interested in gaining employment during high school. Enrolled students will attend school periods 1-5A with academic classes offered online through Odysseyware. 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. Students will be required to participate in extended classroom activities and field trips. This program is under the supervision of the Upper Valley Career Center. Materials Needed: (1) 1 1/2 inch three-ring binder and (1 set) 5 tab binder dividers.

### 721 AMERICAN SIGN LANGUAGE

GRADES: 9-12

**PREREQUISITE**: C in English or letter of recommendation

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 non-authentic 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. Materials Needed: Three-ring binder at least 1-inch or larger, paper, pencils/pens. Highly suggested: USB (the larger space the better).

### 722 AMERICAN SIGN LANGUAGE II

**GRADES: 9-12** 

**PREREQUISITE**: C in ASL S2 or teacher approval

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. Materials Needed: Three-ring binder at least 1-inch or larger, paper, pencils/pens. Highly suggested: USB (the larger space the better).

### 723 AMERICAN SIGN LANGUAGE III

GRADES: 10-12

**PREREQUISITE**: C in ASL II S2 or teacher approval

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. Materials needed: Three-ring binder at least 1-inch or larger, paper, pencils/pens. Highly suggested: USB (the larger space the better).

# World Languages

# World Languages

711 FRENCH I GRADES: 9-12
PREREQUISITE: C in English or letter of recommendation 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 upto-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. Materials Needed: Folder, paper, pencil, and pen.

712 FRENCH II GRADES: 10-12
PREREQUISITE: C in French I S2 or teacher approval 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. Materials Needed: Folder, paper, pencil, and pen.

713 FRENCH III GRADES: 11-12
PREREQUISITE: C in French II S2 or teacher approval 1 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. Materials Needed: Folder, paper, pencil, and pen.

714 FRENCH IV GRADES: 12
PREREQUISITE: C in French III S2 or teacher approval 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. Required materials include: binder, pen/pencil and paper.

### 1 CREDIT **PREREQUISITE**: C in English or letter of recommendation 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. communicate using basic vocabulary and greetings, and will have begun to use basic past tense. Materials Needed: Three-ring binder at least 1 inch or larger. loose leaf paper, and pencils/pen. **GRADES: 10-12** 732 SPANISH II **PREREQUISITE**: C in Spanish I S2 or teacher approval 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. Materials Needed: Three-ring binder at least 1inch or larger or folder, loose leaf paper or notebook, and pencils.

**GRADES: 9-12** 

**GRADES: 11-12** 733 SPANISH III **PREREQUISITE**: C in Spanish II S2 or teacher approval 1 CREDIT

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, command subjunctive, and conditional, tenses. Materials Needed: Three-ring binder at least 1 inch or larger or folder, loose leaf paper or notebook, and pencils.

### 734 AP SPANISH LANGUAGE

731 SPANISH I

**GRADES: 12** PREREQUISITE: C in Spanish III S2 or teacher approval 1 CREDIT

AP Spanish Language is for students who wish to develop proficiency and integrate their language skills, using authentic materials and sources. Students will demonstrate their level of Spanish proficiency across three communicative modes: interpersonal, interpretive, and presentational. The course will include an intensive overall review of grammar, with a substantial increase in vocabulary as is related to the reading and conversation topics of the text. Spanish "humanities" will be studied – art, music and literary greats, as well as current events and social issues. The course prepares students for the AP test in the spring where college credit may be earned. Materials Needed: Threering binder at least 1 inch or larger, loose leaf paper, pencils/pens, and a Spanish/English dictionary.

