Piqualiligh Schoo
Program of Studies

## TABLE OF CONTENTS

GRADES AND CREDITS ..... 3
Junior High Credit, Course Retake Option, Grading System, Grade Point Average, Home Schooled Students, Valedictorian and Salutatorian, Odysseyware Online Learning
EDUCATIONAL OPTIONS. ..... 4
Scheduling, Summer School, Flex Credit, Physical Education Waiver, Upper Valley Career Center, Special Education, ELL, Advanced Placement Courses, College Credit Plus, Discrimination Policy
ATHLETICS AND ACTIVITIES .....  7
Extracurricular Eligibility, Athletics, Extracurricular Activities
GRADUATION REQUIREMENTS. ..... 10
PHS Graduation Requirements, Testing, Class of 2021 and 2022 Graduation Requirements, Class of 2023 and Beyond Graduation Requirements, UVCC Graduation Requirements, Academic Honors Diploma, Career Technical Honors Diploma, STEM Honors Diploma, Arts Honors Diploma, Social Science and Civic Honors Diploma
COLLEGE PREPARATION ..... 15
College Bound Students, How Colleges Select Students, College Athletes, NAIA, NCAA
CAREER EXPLORATION ..... 17
Naviance, SuccessBound, College Week, College Fair, College Visits, Job Shadowing, Career Clusters
CAREER CLUSTERS ..... 18
Agricultural and Environmental, Arts and Communication, Business and Administrative, Construction, Education, Engineering and Science, Finance, Government and Public Administration, Health Science, Hospitality and Tourism, Human Services, Information Technology, Law and Public Safety, Manufacturing, Marketing, Transportation
FOUR-YEAR SCHEDULE ..... 37
Planning Sheet
COURSE DESCRIPTIONS ..... 39

| 39 English | 51 Social Studies | 61 Health \& PE | 66 Technical |
| :--- | :--- | :--- | :--- |
| 43 Math | 54 Art \& Design | 62 Music | 73 World Languages |
| 47 Science | 59 Family \& Consumer Science | 65 Pre-Engineering |  |

## GRADES AND CREDITS

## JUNIOR HIGH CREDIT

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

## COURSE RETAKE OPTION

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

## GRADING SYSTEM

Piqua High School staff adheres to the following grading scale:

- $A=90-100$
- $B=80-89$
- $\mathrm{C}=70-79$
- $D=60-69$
- $\mathrm{F}=$ Below 60


## GRADE POINT AVERAGE

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

## HOME SCHOOLED STUDENTS

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

## VALEDICTORIAN AND SALUTATORIAN

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

1. Must qualify for an Honors Diploma.
2. 4.0 GPA will be multiplied by 9 .
3. The GPA and ACT will then be added together.
4. The top point earner will be the valedictorian. The second point earner will be the salutatorian.
*The honor will be based on GPA and test scores at the end of the first semester of the senior year.

## ODYSSEYWARE ONLINE LEARNING

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

## EDUCATIONAL OPTIONS

## SCHEDULING

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

## SUMMER SCHOOL

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

## FLEX CREDIT

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

## PHYSICAL EDUCATION WAIVER

The PE Waiver is available to athletes, members of after school Marching Band, Color Guard, Show Choir, 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 UVCC. Applications are available online on the UVCC website and are accepted until the $10^{\text {th }}$ 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.

## 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/guardians. The student/parent must provide the counselor with a non-binding notification of intent by April 1. Students must submit the college application, an official transcript to the university, mature content permission slip and the student questionnaire for the college.

Wright State University: Satisfaction of the Ohio remediation free standards, recommendation of the high school principal/counselor, college-level placements scores as established by the University, and satisfaction of all prerequisites for any selected course(s). Students going into grades 10, 11, and 12 who have obtained an unweighted 3.0 or better cumulative GPA, will be admitted to Wright State without test scores.

- Students who are signing up for an English composition course through Wright State will be placed based on the following:
- HS GPA of 3.2 or higher is a measure that can be used for placement into 1100 or ACT English 21+
- HS GPA of at least 2.9 and up to $3.1^{*}$ is a measure that can be used for placement into 1140 or ACT English 18-20
- Students signing up for any math course, or any course requiring a math prerequisite through Wright State, are required to submit ACT or SAT scores, complete the math placement assessment, or earn certain grades in high school math class. See the WSU website for more details www.wright.edu/student-success/student-development/math-placement-level-policy

Students going into grades 7, 8, and 9 are required to submit ACT or SAT scores or complete our writing and math placement assessments.

Any student who has below an unweighted 3.0 cumulative GPA, is required to submit ACT or SAT scores or complete the writing and math placement assessments. These changes are in accordance with the Ohio Department of Higher Education CCP Guidance and Flexibility Document.

All placement tests must be taken at the WSU campus or online.
Edison Community College: To participate in the CCP program, students must meet statewide program eligibility standards. The academic records submitted at the time of application will be evaluated to determine program and course eligibility. Edison State provides free Accuplacer testing for students needing additional assessment to establish program eligibility or improve course eligibility.

## Edison State Community College offers three options for establishing CCP program eligibility:

 Option 1: 3.0 GPA - Students with a cumulative, unweighted high school GPA of 3.0 or higher. Option 2: 2.75 GPA and Relevant High School Coursework - Students with a cumulative, unweighted high school GPA of 2.75-2.99 with a grade of " A " or " B " in at least ONE of thefollowing high school courses: English 10 or higher, Algebra II or higher, Any AP course, Junior-level career technical course.
Option 3: College-Ready Assessment Scores - Students that meet college-ready assessment scores in at least ONE area: Accuplacer 250 Reading or 263 Math (QRAS or AAF portions) OR ACT: 18 English, 22 Reading, or 22 Math

Cleveland State University: Students must have a 3.0 cumulative, unweighted GPA, OR a cumulative 2.3 GPA and 16+ ACT score, OR cumulative 2.75 GPA and "A" or "B" grades in relevant high school coursework.

## College Credit Plus Course Offerings at PHS

| Math | WSU Pre-Calculus <br> 4 credits MATH 1280 College Algebra <br> 3 credits MATH 1350 Analytical Geometry and Trigonometry <br> WSU Calculus <br> 4 credits MATH 2300 Calculus I <br> 4 credits MATH 2310 Calculus II |
| :---: | :---: |
| Science | ECC Anatomy \& Physiology <br> 4 credits BIO 125s Anatomy and Physiology I <br> 4 credits BIO 126s Anatomy and Physiology II |
| English | ECC English Composition <br> 3 credits ENG 121S English Composition 1 <br> 3 credits ENG 122S English Composition II |

## 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.

## ATHLETICS AND EXTRACURRICULAR ACTIVITIES

## 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/fail 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 and weights do not count as one of the five classes needed for eligibility.

## ATHLETICS

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

| Boys' Sports |  | Girls' Sports |
| :--- | :--- | :--- |
| Football |  | Volleyball |
| Basketball |  | Basketball |
| Baseball |  | Softball |
| Cross country |  | Cross country |
| Tennis |  | Tennis |
| Track |  | Track |
| Soccer |  | Soccer |
| Wrestling |  | Golf |
| Golf | Swimming |  |
| Swimming |  | Cheerleading |
| Bowling |  | Bowling |

## EXTRACURRICULAR ACTIVITIES

The following extracurricular activities are available to Piqua High School Students:
National Honor Society: a group of juniors and seniors having a GPA of 3.6 or higher, and at least 10 hours of community service logged within the last year. The purpose is to uphold the standards of scholarship, leadership, character, and service.

Student Council: 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 of the Student Council.

Key Club: an international student led organization that provides its members with opportunities to provide service, build character, and develop leadership.

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

SkillsUSA: is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA empowers its members to become world-class workers, leaders and responsible American citizens. SkillsUSA improves the quality of our nation's future skilled workforce through the development of Framework skills that include personal, workplace and technical skills grounded in academics.

Color Guard: an auxiliary unit mainly concerned with the visual aspect of marching band using flags and movement.

Musical: 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 in January, February, and March.

Academic Challenge: a winter MVL sport that competes in quiz bowl competitions.
Spanish Club: students will meet once-a-month to learn to appreciate and celebrate cultures from around the globe that are different from their own. They will also get hands-on gardening experience as they plant, nurture, and replant milkweed and other flowers that help to attract, feed, and support the flight of the south-bound North American Monarch butterfly as they fly from Canada, over Miami County, and on to south-central Mexico. Spanish Club students will also experience at least one field trip that could take them on a scavenger hunt in a Mexican grocery store, to enjoy a 3-course meal prepared by a Spanish Chef in a Hispanic restaurant, or to witness a traveling flamenco ballet that features dancers, singers, and performers from Cuba, Argentina, Mexico, Spain, Costa Rica, and Puerto Rico.

Art Club: 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.

Family, Career and Community Leaders of America (FCCLA): 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.

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

Science Olympiad: an academic competition team that competes in events consisting of building, identifying, modeling, and studying different scientific phenomena.

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

Dungeons and Dragons: Learn how to play the world's most famous role-playing game and make new friends in the process. Create a character and join a party of adventures, leveling up in power as you face various monsters and obstacles while telling a story collaboratively.

French Honor Society: 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.

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.

SAGA Club: A student-led organization that unites LGBTQ and allied youth to build a safe, welcoming, and accepting school community and organize around issues impacting them.

Model UN: Students have the opportunity to play a part in solving world problems.

Esports Club: A video game based club that competes against other schools through online gaming. Games include Rocket League and Super Smash Brothers Ultimate, both played on PC and Nintendo Switch.

## GRADUATION REQUIREMENTS

## 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 (excluding UVCC \& off-campus CCP students).

- 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
- physical Education: . 5 credit--2 semesters (or PE waiver)
- Health: . 5 credit
- Electives: 6 credits including 2 semesters in Fine Arts (grades 7-12).
- Financial Literacy: Students must study financial literacy to graduate. This requirement can be met by completing one of the following courses: Economics, Finance and Banking, Personal Finance, Government S2 or Success Bound. The class of 2027 and beyond are required to take the Successbound class to earn their Financial Literacy credit.


## CLASS OF 2024

Earn a passing score on Ohio's high school Algebra I and English II tests. Students who do not pass these tests will be offered additional support and must retake the test at least once. After taking the tests, there are three additional options to show competency:

Option 1: Demonstrate Two Career-Focused Activities:
Proficient scores on WebXams (Foundational)
A 12-point industry credential (Foundational)
A pre-apprenticeship or acceptance into an approved apprenticeship program (Foundational)
Work-based learning (Supporting)
Earn the required score on WorkKeys (Supporting)
Earn the OhioMeansJobs Readiness Seal (Supporting)
*At least one must be a Foundational skill

## Option 2: Enlist in the Military:

Show evidence that you have signed a contract to enter a branch of the U.S. armed services upon graduation.

Option 3: Complete College Coursework:
Earn credit for one college-level math and/or college-level English course through Ohio's free College Credit Plus program.

Additionally, students must earn two of the following diploma seals (at least one must be Ohio-designed):
$\left.\begin{array}{|l|l|}\hline \text { State-Defined Diploma Seal } & \text { Requirements } \\ \hline \text { Military Enlistment Seal } & \begin{array}{l}\text { Provide evidence (a signed copy of the DD Form } \\ \text { 4) that a student has enlisted in a branch of the } \\ \text { U.S. Armed Forces; or Participate in an approved } \\ \text { JROTC program. }\end{array} \\ \hline \text { Technology Seal } & \begin{array}{l}\text { A student can: } \\ \text { 1. Earn a score that is at least equivalent to } \\ \text { proficient on an appropriate Advanced } \\ \text { Placement or International Baccalaureate } \\ \text { exam; or } \\ \text { Earn a final course grade that is } \\ \text { equivant to a "B" or higher in an } \\ \text { appropriate class taken through the } \\ \text { College Credit Plus program; or }\end{array} \\ \hline \text { 3. Earn 1 credit in a qualifying course offered } \\ \text { through the district or school that meets } \\ \text { guidelines developed by the Department. } \\ \text { (A district or school is not required to offer } \\ \text { a course that meets those guidelines.) }\end{array}\right\}$

|  | biology end-of-course exam; or <br> 2. Earn a score that is at least equivalent to proficient on appropriate Advanced Placement or International Baccalaureate exams; or <br> 3. Earn a final course grade that is equivalent to a " $B$ " or higher in an appropriate class taken through the College Credit Plus program; or <br> 4. Earn a grade of " B " or higher in an advanced Science class. |
| :---: | :---: |
| Honors Diploma Seal | Earn one of six Honors Diplomas outlined below: <br> 1. Academic Honors Diploma; or <br> 2. International Baccalaureate Honors Diploma; or <br> 3. Career-Tech Honors Diploma; or <br> 4. STEM Honors Diploma; or <br> 5. Arts Honors Diploma; or <br> 6. Social Science and Civic Engagement Honors Diploma. |
| Locally Defined Diploma Seals** | Requirements |
| Community Service Seal (locally defined) | A student can: <br> 1. Receive credit for the Service Learning class; or <br> 2. Complete a community service project for an approved 12 hour project with a local nonprofit organization, upon completion of a Community Service Agreement Form; or <br> 3. Complete 12 hours of peer tutoring; or <br> 4. Donate blood three or more times. |
| Student Engagement Seal (locally defined) | A student can: <br> 1. Complete two or more years of extracurricular and/or co-curricular activities; or <br> 2. Attend the UVCC for two years; or <br> 3. Complete three or more years in a school recognized club or organization. Students may receive credit for multiple clubs within the same time period. $70 \%$ attendance rate is required. |
| Fine and Performing Arts Seal (locally defined) | A student can: <br> 1. Complete two or more years in a performing arts program; or <br> 2. Complete two or more years in advanced art, media, or graphic design classes. |

## UPPER VALLEY CAREER CENTER GRADUATION REQUIREMENTS

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

- English: 4 credits
- Math: 4 credits including 1 credit of Algebra II or equivalent. Three math credits must be earned at the high school. Those who are pursuing a career-technical education pathway may be able to replace the Algebra 2/Math 3 requirement with a career-based mathematics course.
- Science: 3 credits including 1 Physical, 1 Life, and 1 Advanced
- Social Studies: 3 credits including . 5 American History, .5 Government, and .5 World History (Class of 2021 and beyond)
- Physical Education: . 5 credit (2 semesters)
- Health: 5 credit
- Electives: 6 credits
- Financial Literacy: Students can meet this requirement by completing requirements at PHS or by taking government at the Upper Valley Career Center. The class of 2027 and beyond are required to take Successbound at PHS to earn their Financial Literacy credit.


## 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 different languages
- Fine Arts: 1 credit (grades 7-12)
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1280


## CAREER TECHNICAL HONORS

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 2 units of advanced sciences
- Social Studies: 4 credits
- World Language: 2 credits in one language
- Electives: 4 credits of career-technical courses
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1210 or Workkeys: 6 on Reading and 6 on Applied Mathematics
- Field experience
- Portfolio
- Earn an industry-recognized credential or achieve proficiency benchmark for appropriate Ohio Career-technical Competency Assessment or equivalent.


## STEM HONORS DIPLOMA

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

- English: 4 credits
- Math: 5 credits including Algebra I, Geometry, Algebra II
- Science: 5 credits including 2 advanced sciences
- Social Studies: 3 credits
- World Language: 3 credits in one language or 2 credits each in two languages
- Fine Arts: 1 credit (grades 7-12)
- Electives: 2 credits with a focus on STEM
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1280
- Field Experience
- Portfolio


## ARTS HONORS DIPLOMA

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

- English: 4 credits
- Math: 4 credits including Algebra I, Geometry, Algebra II
- Science: 3 credits including 1 advanced sciences
- Social Studies: 3 credits
- World Language: 3 credits in one language or 2 credits each in two languages
- Fine Arts: 4 credits (grades 7-12)
- Elective: 2 units with a focus on fine arts
- GPA: 3.5 on a 4.0 scale
- ACT: 27 or SAT: 1280
- Field Experience
- Portfolio


## SOCIAL SCIENCE AND CIVIC ENGAGEMENT HONORS DIPLOMA

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

- English: 4 credits
- Math: 4 credits including Algebra I, Geometry, Algebra II
- Science: 3 credits including 1 advanced sciences
- Social Studies: 5 credits
- World Language: 3 credits in one language or 2 credits each in two languages
- Fine Arts: 1 credit (grades 7-12)
- 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.

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

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

Students should be prepared to apply to college by Thanksgiving but no later than Christmas of their senior year. The student will request transcripts from their counselor through Naviance.

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

## NCAA

If you are playing at a Division I or II institution, you must register at www.eligibilitycenter.org. 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. Students 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, non doctrinal religion, or philosophy). For Division I, 10 core courses must be completed prior to the $7^{\text {th }}$ semester of high school (January of your senior year). These courses 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 .


## CAREER EXPLORATION

## 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.

## SUCCESSBOUND

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 a 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.

| OCCUPATIONS | Agricultural and Environmental Systems |
| :---: | :---: |
| - Agricultural Engineers <br> - Agricultural Inspector <br> - Agricultural Scientist <br> - Animal Breeders <br> - Animal Scientists <br> - Animal Trainers <br> - Commercial Fishers <br> - Conservation Scientists <br> - Farm and Ranch Workers <br> - Farm Equipment Mechanics  <br> - Fish and Game Wardens  <br> - Food Processing Workers  <br> - Foresters <br> - Loggers <br> - Meat Cutters  <br> - Nursery Workers <br> - Park Naturalists  <br> - Recycling Workers <br> - Rock Splitters  <br> - Trash Collectors  <br> - Veterinarians <br> - Veterinary Assistants <br> - Water Treatment Plant  <br> - Operators  <br> -  <br> -  | Do you enjoy working with animals? <br> Do you have a green thumb? <br> Do you collect rocks? <br> Are you interested in protecting the environment? <br> Do you enjoy working outdoors? <br> Are Science classes your favorite? <br> 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. <br> 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. <br> Helpful Piqua High School Electives: <br> AP Biology <br> AP Chemistry <br> Higher level math classes <br> Upper Valley Career Technology Center Offerings: <br> Ag and Power Technologies <br> Environmental Occupations <br> Landscape Management <br> Veterinary Science <br> Edison Community College Offerings: <br> Agriculture, A.S. <br> Earth Science, A.S. |


| OCCUPATIONS | Arts and Communication |
| :---: | :---: |
| - Actor | Do you like to perform in front of an audience? <br> Are you interested in working in movies or television? <br> Do you like to work with technology? <br> Is artistic expression important to you? <br> Are you active with the school or community theater? <br> Does computer animation interest you? <br> Are you visually oriented? <br> 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 a 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 of a 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. <br> Helpful High School Electives: <br> Women's, Men's, Concert, and Show Choir <br> Show Choir Combo, Marching Band and Symphonic Band <br> Music Appreciation and Theory <br> Art I: Introduction to Art <br> Art II: Drawing and Painting <br> Art III: Studio Art <br> AP Studio Art: 2D Design/Drawing <br> Introduction to Design <br> Visual Design: Foundations of Design and Print Production <br> Media I <br> Interactive Design: Foundations of Animation and Interactive Design <br> Photoshop <br> Video and Effects <br> Piqua Digital Weekly <br> Ceramics Independent Study <br> Speech Communications <br> World Languages <br> Yearbook <br> Drama <br> Fashion Design Construction <br> Jewelry, Metals, and Object Design <br> Upper Valley Career Center: <br> Design and Digital Print Technologies <br> Interactive Media <br> Edison Community College Offerings: <br> Fine Arts, A.A. <br> Photography Short-Term <br> English, A.A. <br> Communications, A.A. |
| - Agent \& Business Manager |  |
| - Animator |  |
| - Announcer |  |
| - Art Director |  |
| - Broadcast Technician |  |
| - Camera Operator |  |
| - Cartoonist |  |
| - Choreographer |  |
| - Costume \& Wardrobe Specialist |  |
| - Dancer |  |
| - Editor |  |
| - Fashion Designer |  |
| - Film \& Video Editor |  |
| - Fine Artist |  |
| - Graphic Designer |  |
| - Music Composers, Directors, and Arrangers |  |
| - Musicians |  |
| - News Reporters |  |
| - Photographers |  |
| - Producer and Director |  |
| - Proofreaders |  |
| - Set Designer |  |
| - Singer |  |
| - Technical Writer |  |
| - Video Game Designer |  |
|  |  |


| OCCUPATIONS | Business and Administrative Services |
| :--- | :--- |
| - Administrative Services | Do you enjoy working with other people? <br> Are you good at working with numbers? <br> Do you like to plan and organize activities? <br> Have you started your own business? <br> Do you keep your checkbook balanced? |
| Are you an officer of an organization? |  |


| OCCUPATIONS | Construction Technologies |
| :---: | :---: |
| - Architect | Do you often observe and note the buildings around you? <br> Do you like to work with your hands? <br> Can you visualize objects and projects in your mind? <br> Do you like to create models or make designs? <br> Do you like to work with tools, objects, and numbers? Do you like to use both mental and manual skills to solve problems? |
| - Cabinetmaker |  |
| - Carpenter |  |
| - Cement Mason |  |
| - Construction Manager | If you answered yes to two or more of the questions above, you might be interested in considering a career in architecture and construction. |
| - Drafters |  |
| - Drywall Installers | 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. |
| - Electrician |  |
| - Floor and Carpet Installer |  |
| - General Construction Worker | Helpful Piqua High School Electives: <br> Exploring Technology <br> Engineering Principles |
| - Heating and Cooling System Mechanics |  |
| - Highway Maintenance Worker | Construction Technology <br> Fashion Design and Construction <br> Interior Design, Furnishings, and Management |
| - Interior Designer | Art I: Introduction to Art <br> Art II: Drawing/Painting <br> Art III: Studio Art <br> AP Studio Art: 2D Design/Drawing |
| - Janitor |  |
| - Landscape Architect | Upper Valley Career Technology Center Offerings: Construction Technologies |
| - Painter | Electrical Trades <br> HVAC/R <br> Landscape Management <br> Masonry, Plumbing, And Mechanical Systems <br> Pre-Engineering and Design Technologies <br> Welding Technologies |
| - Plumber |  |
| - Roofer |  |
| - Sheet Metal Worker | Edison Community College Offerings: <br> Equipment Maintenance Technology, A.A.S. HVAC/R, certificate |
| - Surveyor |  |


| OCCUPATIONS | $\quad$ Education and Training |
| :--- | :--- |


| OCCUPATIONS | Engineering and Science Technologie |
| :---: | :---: |
| - Aerospace Engineers | Is Science one of your favorite subjects? <br> Do you prepare projects for science fairs? <br> Do you enjoy reading science magazines? <br> Are you detail-oriented? <br> Do you want to know how things work? <br> If you answered yes to two or more of the questions above, you might be interested in considering a career in science, technology, engineering, or mathematics. <br> If you choose to work in the Science, Technology, Engineering, and MAthematics cluster, you have several avenues. One option is to do scientific research in laboratories or the field. You could also be involved in the planning and design of products and systems. The last route is to provide support to the scientists, mathematicians, and engineers so they can do their work. <br> Helpful Piqua High School Electives: <br> AP Biology <br> AP Chemistry <br> Physics <br> AP Physics <br> Exploring Technology <br> Robotics <br> Astronomy <br> Sociology <br> WSU Pre-Calculus <br> WSU Calculus <br> Introduction to Data Science <br> Engineering Principles <br> Aviation I, II, III <br> Upper Valley Career Technology Center Offerings: <br> Electronics and Automation <br> Pre-Engineering and Design Technologies <br> Edison Community College Offerings: <br> Mechanical EngineeringTechnology, A.A.S. <br> Advanced Manufacturing, certificate and fast track <br> CAD, certificate and fast track <br> CNC Programming, fast track <br> Electronics Engineering Technology, A.A.S. <br> Automation and Robotics A.A.S. and certificate <br> Electro-Mechanical Engineering A.A.S. and certificate <br> Electronics Transfer A.A.S. <br> Electronics Networking Certificate and short-term certificate <br> Basic Electricity short-term certificate <br> Factory Automation short-term certificate <br> Industrial Electrical Controls short-term certificate <br> Print Reading and Controls short-term certificate |
| - Anthropologists |  |
| - Archeologists |  |
| - Astronauts |  |
| - Bioengineers |  |
| - Biologists |  |
| - Biomedical Engineers |  |
| - Cartographers |  |
| - Chemists |  |
| - Civil Engineers |  |
| - Electrical \& Electronics Engineers |  |
| - Energy Engineers |  |
| - Environmental Engineers |  |
| - Environmental Scientists |  |
| - Geographers |  |
| - Geologists and Geophysicists |  |
| - Historians |  |
| - Industrial Engineers |  |
| - Manufacturing Engineers |  |
| - Marine Biologist |  |
| - Mathematicians |  |
| - Mechanical Engineers |  |
| - Meteorologists |  |
| - Nuclear Engineers |  |
| - Physicists |  |
| - Political Scientists |  |
| - Sociologists |  |

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 <br> 4 yrs. CP English/AP English <br> WSU Pre-Calc <br> Statistics \& Probability <br> WSU Calculus Physics <br> AP Physics <br> Engineering Design Economics <br> Exploring Technology <br> Chemistry/PreAP Chemistry AP Chemistry Robotics | Piqua HS <br> 4 yrs. CP English/AP English <br> WSU Pre-Calc <br> Statistics \& Probability <br> Exploring Technology Sociology <br> Chemistry/PreAP Chemistry <br> AP Chemistry Physics <br> AP Physics <br> Economics <br> WSU Calculus <br> Engineering Design Robotics | Piqua HS <br> 4 yrs. CP English/AP English <br> Exploring Technology <br> Psychology <br> Statistics \& Probability Sociology <br> Chemistry/PreAP Chemistry AP Chemistry Physics <br> AP Physics <br> WSU Calculus <br> Engineering Design Robotics |
| 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 Machining Technologies Welding |
| 2-Year College Mechanical Engineering Technology <br> 4-Year University Mechanical Engineering <br> Graduate School Mechanical Engineering | 2-Year College Electronics Engineering Technology <br> 4-Year University Electrical Engineering <br> Graduate School Electrical Engineering | UV Career Center Adult <br> Precision Tooling and Manufacturing <br> 2-Year College <br> MET, Advanced Manufacturing Systems Option <br> 4-Year University Manufacturing Engineering <br> Graduate School Industrial Engineering |
| Ohio Job Outlook Growth rate: <br> MET (2-yr): 2\% <br> ME (4-yr): 5\% <br> Annual Openings: <br> MET (2-yr): 250 <br> ME (4-yr): 1,170 | Ohio Job Outlook Growth rate: <br> EET (2-yr): -3\% <br> EE (4-yr): 5\% <br> Annual Openings: <br> EET (2-yr): 270 <br> EE (4-yr): 500 | Ohio Job Outlook <br> Growth rate: <br> Machinist: 2\% <br> MET (2-yr): 2\% <br> ME (4-yr): 4\% <br> Annual Openings: <br> Machinist: 2,880 <br> MET (2-yr): 250 <br> ME (4-yr): 570 |
| Median Ohio Salary <br> MET (2-yr): \$59,330 <br> ME (4-yr): \$78,950 | Median Ohio Salary <br> EET (2-yr): \$62,310 <br> EE (4-yr): \$95,440 | Median Ohio Salary <br> Machinist: \$43,410 <br> MET (2-yr): \$59,330 <br> ME (4-yr): \$79,550 |


| OCCUPATIONS | $\quad$ Finance |
| :--- | :--- |
| - Accountants and Auditors | Are you the treasurer of a club or organization? <br> Do you enjoy working with numbers? <br> Do you balance your checkbook? <br> Are you interested in the stock market? <br> Do you like to operate calculators? <br> Are you comfortable following detailed plans for work? |
| - Actuaries | If you answered yes to two or more of the questions above, you <br> might be interested in considering a career in finance. In the <br> occupations in the Finance cluster, you would keep track of money. <br> You might provide financial services to a business or individual. Your <br> work could include maintaining records or giving advice to business <br> executives on how to operate their business. You could work in <br> financial planning, baking, or insurance. |
| - Appraisers | Helpful Piqua High School Electives |
| - Bank Tellers | Speech <br> Finance and Banking <br> Economics <br> WSU Calculus |
| - Bill Collectors | Introduction to Data Science |
| Quantitative Reasoning |  |


| OCCUPATIONS | Government and Public Administration |
| :--- | :--- |
| -Compliance Officers and <br> Inspectors | Have you served as an officer of a club or organization? <br> Do you like to plan and organize activities? <br> Are you interested in politics? <br> Would you like to work in another country? <br> Are rules and laws important to you? <br> - |
| Inspectors |  | | 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. |


| OCCUPATIONS |  | Health Science |
| :---: | :---: | :---: |
| - Anesthesiologists | - Nuclear Medicine Technologies | Are science classes your favorite? <br> Do you enjoy helping people? <br> Have you served as a volunteer in a hospital? <br> Do you follow instructions exactly? <br> Can you work fast in an emergency? <br> Do you take good notes in class? <br> If you answered yes to two or more of the questions above, you might be interested in considering a career in health science. <br> In the Health Science cluster you would promote health and wellness or diagnose and treat injuries and disease. You could work directly with people. 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. <br> Helpful Piqua High School Electives <br> Child Development <br> AP Chemistry <br> AP Biology <br> Medical Terminology <br> Introduction to Human Body Systems <br> Anatomy and Physiology <br> Introduction to Healthcare <br> Health Careers Lab <br> Speech <br> Athletic Training <br> Sociology <br> Introduction to Data Science <br> Psychology <br> Higher level math classes <br> Upper Valley Career Technology Center <br> Offerings <br> Medical Careers Academy <br> Exercise Science <br> First Responders Academy <br> Edison Community College Offerings <br> Emergency Medical Technician short-term certificate <br> Medical Assistant certificate <br> Medical Lab Technician, A.A.S. <br> Clinical Laboratory Assistant certificate <br> Registered Nursing, A.A.S. <br> LPN/ADN Transition, A.A.S. <br> Phlebotomy short-term certificate <br> Physical Therapy Assistant, A.A.S. |
| - Athletic Trainer | - Nurse Anesthetists |  |
| - Chiropractor | - Nurse Practitioners |  |
| - Dental Hygienists | - Gynecologists |  |
| - Dental lab Techs | - Pediatrician |  |
| - Dentist | - Pharmacists |  |
| - Dermatologists | - Phlebotomists |  |
| - Dietitians | - Physical Therapist |  |
| - Emergency Medical Technicians | - Physicians Assistant |  |
| - Exercise Physiologist | - Podiatrists |  |
| - General Practitioner | - Psychiatrist |  |
| - Health Services Administrators | - Radiologists |  |
| - Home Health Aides | - Registered Nurse |  |
| - Licensed Practical Nurses | - Surgeons |  |
| - Massage Therapists |  |  |
| - Medical Assistants |  |  |
| - Medical Lab Techs |  |  |
| - Medial Scientists |  |  |
| - Medical Secretaries |  |  |
| - MRI Technologist |  |  |

## 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 <br> 4 years CP English/AP English 4 years CP Math WSU Pre-Calculus <br> Statistics \& Probability Psychology Chemistry <br> Intro to Human Body Systems Medical Terminology Anatomy and Physiology Intro to Healthcare Health Careers Lab | Piqua HS <br> 4 years CP English/AP English 4 years CP Math WSU Pre-Calculus <br> Statistics \& Probability Sociology Psychology Chemistry <br> Intro to Human Body Systems Medical Terminology Anatomy and Physiology Intro to Healthcare Health Careers Lab | Piqua HS <br> 4 years CP English/AP English <br> 4 years CP Math <br> WSU Pre-Calculus Chemistry <br> AP Physics <br> Sociology <br> Psychology <br> Athletic Training <br> Intro to Human Body Systems <br> Medical Terminology <br> Anatomy and Physiology Intro to Healthcare Health Careers Lab |
| 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 LPN <br> 2-Year College Registered Nursing LPN to RN Program <br> 4-Year University Bachelor of Science in Nursing <br> Graduate School Nurse Practitioner | 2-Year College Medical Laboratory Technician <br> 4-Year University Medical Laboratory Science <br> Graduate School Medical Laboratory Science | 2-Year College Physical Therapy Assistant <br> 4-Year University Pre-Physical Therapy <br> Graduate School Physical Therapy |
| Ohio Job Outlook Growth Rate: LPN: 7\% <br> RN: 10\% <br> NP: 25\% <br> Annual Openings: <br> LPN: 3,510 <br> RN: 8,360 <br> NP: 650 | Ohio Job Outlook Growth Rate: MLT: 5\% <br> MLS: 6\% <br> Annual Openings: <br> MLT: 750 <br> MLS: 340 | Ohio Job Outlook Growth Rate: PTA: 21\% PT: 16\% <br> Annual Openings: PTA: 970 PT: 480 |
| Median Ohio Salary <br> LPN: \$47,270 <br> RN/BSN: \$74,080 <br> NP: \$103,310 | Median Ohio Salary <br> MLT: \$53,870 <br> MLS: $\$ 82,680$ | Median Ohio Salary <br> PTA: $\$ 61,560$ <br> PT: \$95,620 |




| OCCUPATIONS | n Techno |
| :---: | :---: |
| - Computer and Information Systems Managers | Do you enjoy working with computers and learning new programs quickly? <br> Have you created your own webpage? <br> Is mathematics a favorite subject? <br> Are you organized and able to focus on details? <br> If you answered yes to two or more of the equations above, you might be interested in a career in information technology. <br> 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. <br> 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. <br> Helpful Piqua High School Electives: <br> WSU Pre-Calculus <br> WSU Calculus <br> Introduction to Data Science <br> Piqua Digital Weekly <br> Introduction to Design <br> Visual Design <br> Media I <br> Interactive Design <br> Photoshop <br> Video and Effects <br> Upper Valley Career Technology Center Offerings: <br> Computer Information Technologies <br> Interactive Media <br> Edison Community College Offerings: <br> Business Systems, A.A.B. and certificate <br> Cybersecruity, A.A.B. <br> Network Administration, A.A.B. <br> Systems Administration, A.A.B. and certificate <br> Web Development, A.A.B. <br> Computer Engineering, A.S. <br> CIS certificate <br> Database Specialist certificate <br> Networking certificate <br> Programming certificate and short-term certificate <br> Basic Computer Skills short-term certificate <br> Help Desk short-term certificate <br> Software Testing short-term certificate |
| - Computer Engineers |  |
| - Computer Security Specialists |  |
| - Computer Support Specialists |  |
| - Computer Systems Administrators |  |
| - Computer Systems Analysts |  |
| - Database Administrators |  |
| - Web Developers |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Information Technology

| I want to work as a Computer Programmer, <br> Systems Manager, or Computer Security <br> Specialist |
| :---: |
| Piqua HS |
| 4 years CP English/AP English |
| WSU Pre-Calculus |
| Statistics \& Probability |
| Sociology |
| Psychology |
| WSU Calculus |
| Physics |
| AP Physics |
| Engineering Design |
| Intro to Design |
| Visual Design |
| Digital Video |
| Premiere Pro |
| Piqua Digital Weekly |
| Upper Valley Career Center |
| Interactive Media |
| Computer Information Tech |
| 2-Year College |
| Computer Information Technology |
| 4-Year University |
| Computer Science |
| Graduate School |
| Gaster of Business Administration |
| Management Information Systems |
| Ohio Job Outlook |
| Growth Rate: |
| CP: -11\% |
| ISN: 7\% |
| CSS: $29 \%$ |
| Annual Openings: |
| CP: 300 |
| ISN: 1,200 |
| CSS: 390 |
| Median Ohio Salary |
| CP: $\$ 76,070$ |
| ISN: $\$ 129,850$ |
| CSS: $\$ 99,040$ |


| OCCUPATIONS |  | Law and Public Safety |  |
| :--- | :--- | :--- | :--- |
| -Ambulance <br> Drivers | $\bullet$ | Judges | Are you able to work under pressure? <br> Can you work with various kinds of people? <br> Do you like to help people? <br> Can you work in the face of danger? <br> Are you good at winning arguments? <br> Do you instruct friends and family members on laws <br> and regulations? |
| -Animal Control <br> Workers | $\bullet$ | Law Clerks |  |
| If you answered yes to two or more of the questions |  |  |  |
| about, you might be interested in considering a career |  |  |  |
| in law, public safety, or security. |  |  |  |
| - Mediators | $\bullet$ | Lawyers |  |


| OCCUPATIONS | Manufacturing Technologies |
| :---: | :---: |
| - Chemical Engineers | Are you good with working with your hands? <br> Can you explain to others how a machine works? <br> Do you set up and repair stereo equipment for yourself or friends? <br> Do you enjoy reading the latest developments in electronics? <br> Can you visualize how a machine works? <br> 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. |
| - Chemical Plant Operators |  |
| - Coin and Vending Machine Repairs |  |
| - Forklift Operators |  |
| - Geothermal Technicians |  |
| - Home Electronic Repairs |  |
| - Hydroelectric Production Managers | 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 once it has been purchased. |
| - Jewelers |  |
| - Locksmiths | Helpful Piqua High School Electives: Exploring Technology |
| - Machinists | Engineering Principles Robotics |
| - Packers and Packagers | Mechatronics I and II |
| - Power Plant Operators | Upper Valley Career Technology Center Offerings: <br> Electronics <br> Manufacturing and Machining Technologies Welding |
| - Precision Assemblers |  |
| - Quality Control Inspectors | Edison Community College Offerings: <br> Industrial Operations, A.A.S. <br> Operations Technology, A.A.S and certificate <br> Supply Chain Management certificate and short-term certificate <br> Basic Human Relations short-term certificate Lean Manufacturing short-term certificate Manufacturing Management short-term certificate Quality Management short-term certificate Six Sigma short-term certificate |
| - 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 |  |


| OCCUPATIONS | Marketing |
| :---: | :---: |
| - Advertising Salespeople | Do you sell advertising space for the school yearbook or newspaper? <br> Do you like to do public speaking or debating? <br> Are you good at organizing your own time? <br> Have you helped convince people to participate in an activity? <br> Are you friendly and outgoing? <br> 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. <br> 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. You might sell products and services directly to customers. You might use the |
| - Buyers and Purchasing Agents |  |
| - Cashiers |  |
| - Counter and Rental Clerks |  |
| - Customer Service Manager |  |
| - Demonstrators and Promoters |  |
| - Floral Designers | Internet to reach customers. |
| - Market Research Analysts | Helpful Piqua High School Electives: |
| - Marketing Managers | Yearbook |
| - Merchandise Displayers | WSU Pre-Calculus |
| - Models | Economics |
| - Opticians | Visual Design |
| - Parts Salespeople | Video and Effects |
| - Public Relations Managers | Interactive Design |
| - Purchasing Managers | Edison Community College Offerings: Marketing, A.A.B. and certificate |
| - Real Estate Agents | Real Estate certificate and short-term certificate |
| - Retail Salespeople |  |
| - Route Salespeople |  |
| - Sales Managers |  |
| - Sales Representatives |  |
| - Sales Worker Supervisors |  |
| - Telemarketers |  |


| OCCUPATIONS | Transportation Systems |
| :---: | :---: |
| - Air Traffic Controllers | Would you enjoy working outdoors in all kinds of weather? <br> Do you have good eyesight and quick reflexes? <br> Can you estimate distances accurately? <br> Do you drive trucks or tractors to do work on a farm? <br> Would you like to learn to fly an airplane? <br> Do you repair your or your family and friends' vehicles? <br> Do you like to read automotive or mechanical magazines? <br> 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. <br> If you are interested in working in this cluster, you have three avenues. One is to move people and products by road, air, rail, water. YOu would drive or pilot different means of transportation The second is to repair and maintain the vehicles, trains, plains, ships to keep people and products moving. The third option is to work behind the scenes to make sure the products and people get the right place on time. <br> Helpful Piqua High School Electives: <br> Exploring Technology <br> Engineering Principles <br> Robotics <br> Aviation I, II, III <br> Upper Valley Career Technology Center Offerings: <br> Auto Collision Repair Technologies <br> Auto Services <br> Automotive Technologies <br> Edison Community College Offerings: <br> Professional Pilot, A.A.S. <br> Single-Engine Commercial Pilot certificate |
| - 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 |  |

## Four-Year Schedule

Check one box for your intended career plans:
$\qquad$ College
___ Employment
Military Undecided

Do you want to attend the Upper Valley Career Center? $\qquad$
What do you want to study after high school? $\qquad$

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


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


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


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

## English

| 112 ENGLISH 9 COLLEGE PREP | GRADE: 9 |
| :--- | :---: |
| PREREQUISITE: none | 1 CREDIT |

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

| 113 PRE-AP ENGLISH 9 | GRADE: 9 |
| :--- | :---: |
| PREREQUISITE: B English 8, Accelerated or Advanced on AIR | 1 CREDIT |

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.

| 122 ENGLISH 10 COLLEGE PREP | GRADE: 10 |
| :--- | ---: |
| PREREQUISITE: English 9 CP or teacher approval | 1 CREDIT |

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

| 123 PRE-AP ENGLISH 10 | GRADE:10 |
| :--- | ---: |
| PREREQUISITE: C or better in Pre-AP Eng 9 or Eng 9CP with teacher approval | 1 CREDIT |

This course is designed for students who are planning to take Advanced Placement (AP) English in their junior and/or senior year. Extensive reading and writing will be the focus. Oral participation, organization 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.

## English

| 132 ENGLISH 11 COLLEGE PREP | GRADE: 11 |
| :--- | ---: |
| PREREQUISITE: English 10 CP or teacher approval | 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.

| 133 AP ENGLISH LANGUAGE AND COMPOSITION | GRADE: 11 |
| :--- | ---: |
| PREREQUISITE: Pre-AP Eng 10 or Eng 10 with teacher approval | 1 CREDIT |

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

| 155 SPEECH COMMUNICATIONS | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: None | 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. Speech is a suggested course for those planning on attending college since it will prepare students for the presentations that are required for most majors. This course is for elective credit only.

## English

| 142 ENGLISH 12 COLLEGE PREP | GRADE: 12 |
| :--- | ---: |
| PREREQUISITE: English 11 CP | 1 CREDIT |

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

| 143 AP ENGLISH LITERATURE AND COMPOSITION | GRADE: 12 |
| :--- | ---: |
| PREREQUISITE: AP Eng Lang \& Comp or Eng 11CP 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 work. 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.

| 151 YEARBOOK | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Application and teacher approval | 1 CREDIT |

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

## English

| 144 ECC ENGLISH COMPOSITION I | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Meet Edison CCP requirements | 1 CREDIT |

Study and practice of essay writing by reading published authors and producing college-level writing for a variety of audiences and purposes. Employs critical thinking and analytical skills in both formal and informal writing. Formal writing is based on reporting information, narration, analysis, and research. All writing will stress Standard English, organization and style. Students will receive 3 credits for ENG 121s English Composition I from Edison State Community College. *This course may reflect a typical college course schedule offered for two periods, two days per week.

| 145 ECC ENGLISH COMPOSITION II | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Meet Edison CCP requirements | 1 CREDIT |

Study and practice of essay writing, including formal essays, reviews, and research papers, based on the study of logic and library research. Writings will stress organization, argument, referencing techniques, and the use of standard English. Students will receive 3 credits for ENG 122s English Composition II from Edison State Community College. *This course may reflect a typical college course schedule offered for two periods, two days per week.

## Math

| 310/311 ALGEBRA I \& MATH RTI SUPPORT I | GRADE: 9 |
| :--- | ---: |
| PREREQUISITE: Teacher Approval | 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 for two consecutive periods per day, and it requires the ability to learn both independently and in small groups. The Math RTI Support class counts as elective credit. To qualify for this course, students must be recommended by their math teacher.

| 312 ALGEBRA I | GRADE: 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.

| 322 GEOMETRY | GRADES: 9-10 |
| :--- | ---: |
| 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.

| 323 ADVANCED GEOMETRY | GRADES: 9-10 |
| :--- | ---: |
| PREREQUISITE: Adv. Algebra 1 or A/B in Algebra 1 | 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. Advanced Geometry will include a more in-depth study of geometric proofs and theorems in preparation for STEM careers. Materials Needed: A TI-84 Plus calculator.

## Math

| 347 QUANTITATIVE REASONING | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Geometry | 1 CREDIT |

Critical thinking and reasoning are the primary objectives and outcomes of this advanced quantitative reasoning course. It includes the application of mathematical skills including algebraic methods to the analysis and interpretation of quantitative information (numbers in context) in real-world situations to make decisions that are relevant to daily life. Additionally, the course emphasizes interpretation, precision, representation, calculation, analysis/synthesis, use of assumptions and communication through student presentations and writing. Students combine problem solving with modeling to analyze real-life situations and devise solution strategies. These habits and skills cut across disciplines, promote perseverance, and provide a gateway into successful postsecondary education and a variety of careers. *This course is equivalent to Algebra II and will fulfill the graduation requirement for Algebra II.

| 333 ADVANCED ALGEBRA II | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: A/B in Algebra or teacher approval | 1 CREDIT |

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

| 343 PRE-CALCULUS | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: A/B in Algebra II and Geometry | 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. Trigonometric functions and their graphs, trigonometric identities, trigonometric description of complex numbers and roots and powers of real and complex numbers. Material needed: TI-84 Plus calculator

## Math

| 344 WSU PRE-CALCULUS | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Algebra I, Geometry, Algebra II and WSU CCP <br> requirements | 2 CREDITS |

This is a college level class. Students will receive 4 credits in MTH 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 power of real and complex numbers. Materials needed: TI-84 Plus calculator
*This course may reflect a typical college course schedule offered for two periods, two days per week.

| 356 INTRODUCTION TO DATA SCIENCE | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Geometry | 1 CREDIT |

Introduction to Data Science (IDS) is a course designed to introduce students to the exciting opportunities available at the intersection of data analysis, computing, and mathematics through hands-on activities. Data is everywhere, and this curriculum will help prepare students to live in a world of data. The curriculum focuses on practical applications of data analysis to give students concrete and applicable skills. Instead of using small, tailored, curated data sets as in a traditional statistics curriculum, this curriculum engages students with a wider world of data that fall into the "Big Data" paradigm and are relevant to students' lives. In contrast to the traditional formula-based approach, in IDS, statistical inference is taught algorithmically, using modern randomization and simulation techniques. Students will learn to find and communicate meaning in data, and to think critically about arguments based on data. The purpose of IDS is to introduce students to dynamic data analysis. Through project-based learning, collaborative groups, and dynamic discussions and presentations, students will learn the four major components of the IDS curriculum, which are based on the conceptual categories called upon by the Common Core State Standards High School - Statistics and Probability. Students will use a chromebook or laptop to learn the computer programming language of RStudio in order to analyze and interpret data. *This course is equivalent to Algebra II and will fulfill the graduation requirement for Algebra II.

## Math

| 351 WSU CALCULUS | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Pre-Calculus, Meet WSU CCP requirements | 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. *This course may reflect a typical college course schedule offered for two periods, two days per week

| 352 AP CALCULUS AB | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Pre-Calculus | 1 CREDIT |

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

| 353 FINANCE \& BANKING | GRADE: 12 |
| :--- | ---: |
| PREREQUISITE: None | 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 savings accounts, budgeting, credit cards, insurance, and transportation. This class does not meet the NCAA's standards for core Math. Materials needed: scientific calculator.

## 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, and AP Chemistry.

| 411 PHYSICAL SCIENCE | GRADES: 9 |
| :--- | ---: |
| PREREQUISITE: None | 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: calculator. School fee: \$20

| 412 BIOLOGY | GRADES: 9-10 |
| :--- | ---: |
| PREREQUISITE: None | 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 pre-college level and will include the following topics: evolution, genetics and heredity, cell structure and function, ecology classification systems, and life processes. School fee: \$20

| 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. Course Fee: \$30

## Science

| 422 CHEMISTRY | GRADES: 10-12 |
| :--- | ---: |
| PRE/COREQUISITE: Geometry | 1 CREDIT |

Chemistry is a college prep level course designed to teach the fundamental concepts of matter, its properties and interactions. Basic science concepts such as measuring, graphing, and analyzing data will be reinforced. The bulk of the topics covered will include atomic theory and structure, the mole concept, states of matter, nomenclature, reactions stoichiometry bonding, acids and bases, and organic chemistry. Materials Needed: scientific calculator. School fee: \$20.

| 423 PRE-AP CHEMISTRY | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Biology and Geometry | 1 CREDIT |

Pre-AP Chemistry is an advanced college prep level course and is designed to prepare the student for AP Chemistry. 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. Course Fee: \$30

| 432 PHYSICS I | GRADES: 10-12 |
| :--- | ---: |
| PRE/COREQUISITE: None | 1 CREDIT |

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. School fee: $\$ 20$.

| 442 PHYSICS II | GRADES: 10-12 |
| :--- | ---: |
| PRE/COREQUISITE: Biology or Chemistry, Physics | 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. School fee: \$20.

## Science

| 453 AP PHYSICS I | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Physics 1 | 1 CREDIT |

Advanced Placement Physics 1 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 non-major freshman physics. More emphasis is placed on mathematical problem solving and critical thinking. Topics include: kinematics, dynamics, work, power, energy, linear momentum, circular motion and rotation, gravitation, oscillation, waves, electrostatics, and current electricity. School fee: \$30

| 460 ANATOMY AND PHYSIOLOGY | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Biology | 1 CREDIT |

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

| 459 ECC ANATOMY AND PHYSIOLOGY | GRADES: 10-12 |
| :--- | ---: |
| PRE/COREQUISITE: Meet Edison CCP requirements | 2 CREDITS |

Anatomy and Physiology is a course that will enable students to develop an understanding of the relationships between the structures and functions of the human body. Students will study the major body systems and understand how the body systems work together to provide homeostasis along with how the body functions in the healthy and diseased states. The class is designed for students interested in biological, medical, and health-oriented programs, such as nursing, medicine, and lab technology. Students will earn 4 credits for BIO 125S Anatomy and Physiology I and 4 credits for BIO 126S Anatomy and Physiology II from Edison State Community College.

## Science

| 450 ASTRONOMY | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Physical Science \& 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 algebra-level math. Activities will include several major, long-term projects, as well as daily activities, notes and labs.

| 451 AP BIOLOGY | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Pre-AP Bio, Pre-AP Chem, \& Alg II or teacher approval | 1 CREDIT |

Chemistry of Life, Cell Structure and Function, Cellular Energetics, Cell Communication and Cell Cycle, Heredity, Gene Expression and Regulation, Natural Selection and Ecology are required units studied at a college level. The objective of this course is to prepare students for the AP exam in May, which can qualify the student to receive college credit. Several hours of homework each week should be expected. School fee: $\$ 40$

| 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 is an extended class period. School fee: $\$ 40$

## Social Studies

| 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.

| 222 U.S. STUDIES CP | 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.

| 231 GOVERNMENT | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: US Studies | 1 CREDIT |

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

| 233 AP GOVERNMENT AND POLITICS | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: US Studies and teacher approval | 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 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.

## Social Studies

| 253 ECONOMICS | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ 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.

| 254 SERVICE LEARNING | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

Service Learning allows students to choose topics to demonstrate skills necessary for active and effective citizenship. Students use knowledge of the rights and responsibilities of citizenship in order to examine and evaluate civic ideals and to participate in community life and the American democratic system. Students collect, organize, evaluate and synthesize information from multiple sources to draw logical conclusions. Service activities meet genuine community needs, provide meaningful tasks for students, and promote communication and collaboration with community members. Students communicate this information using appropriate social studies terminology in oral, written or multimedia form and apply what they have learned to societal issues in simulated and real-world settings. The course includes a community service project. *Completion of this course will earn students the Community Service Seal towards their diploma.

| 255 PSYCHOLOGY | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ 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.

| 256 CURRENT EVENTS | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ 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.

## Social Studies

| 257 SOCIOLOGY | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ 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.

## Art and Design

| 750 ART I: INTRODUCTION TO ART | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

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

| 500 INTRODUCTION TO DESIGN | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

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

| 501 VISUAL DESIGN: FOUNDATIONS OF DESIGN AND PRINT <br> PRODUCTION | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Introduction to Design | $1 / 2$ CREDIT |

Visual Design is a project-based curriculum that develops key digital communication skills such as design, project management, research and communication, and photography, graphic design and illustration, and page layout technical skills using Adobe tools. Projects in this course include: Collages and photography, logos, business cards, advertisements, and portfolios. The course is aligned to the objectives required for students to be successful in their future digital career and to satisfy the objective for the Adobe Certified Associate Exams. Counts as elective credit only. Course Fee: \$10

## Art and Design

| 512 Video and Effects | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

The concepts of design, color and texture, as they pertain to special effects and video will be explored. Students will learn to edit video using Adobe Premiere Pro and will learn 2D editing and animation, using Adobe After Effects. Students will also learn to organize media, add audio, create transitions, produce titles and add effects to their videos. The course is aligned to the skills required for students to be successful in digital careers and to satisfy the objectives for the Adobe certification exams. Counts as elective credit only. Course fee: $\$ 10$

| 505 INTERACTIVE DESIGN: FOUNDATIONS OF ANIMATION AND <br> INTERACTION DESIGN | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Introduction to Design | $1 / 2$ CREDIT |

Interactive Design is a project-based curriculum that teaches digital communication skills in the context of professional animation and interaction design process, using Adobe Animate tools. Interactive Design develops four key skill areas: project management and collaboration, design, research and communication, and professional interactive media authoring tools. Projects in the course include: game design and planning, building a flash game, and constructing a portfolio. The course is aligned to the objectives required for students to be successful in their future digital career and to satisfy the objectives for the Adobe Certified Associate Exams. Course Fee: \$10

| 754 PHOTOSHOP | GRADES:10-12 |
| :--- | ---: |
| PREREQUISITE: Introduction to Design, Visual Design | $1 / 2$ CREDIT |

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

## Art and Design

| 502 PIQUA DIGITAL WEEKLY | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Instructor Approval (Media I and Video and Effects <br> are recommended before taking this course) | 1 CREDIT |

Piqua Digital Weekly produces a weekly show for PHS that is aired on Fridays. Students are also required to aid in the broadcast of various school and community events. Students will produce, capture, and edit digital video and use broadcast equipment while creating products for The Indian Nation Station and Piqua Digital Media (Our YouTube Channel). Counts as elective credit only. Course Fee: $\$ 20$

| 513 Media I | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

Media I is a project-based curriculum that develops key digital communication skills such as design, project management, research and communication, and video and audio design and production technical skills using Adobe tools. Projects in this course include: News stories, Public service announcements, portfolios, commercials, and mini-documentaries. The course is aligned to the objectives required for students to be successful in their future digital career and to satisfy the objectives for the Adobe Certified Associate Exams. Counts as elective credit only. Course Fee: \$10

| 751 ART II: DRAWING/PAINTING | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Art I | 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 be an opportunity for students to explore all 2D mediums, material and techniques. This class will focus on realism and drawing from observation, while improving the overall quality of the artwork. Students will also be given creative freedom, creating unique expressive projects, such as a graphic novel. They will learn how to better express their ideas and technical knowledge behind their projects both verbally and in written form. At the conclusion of this class, students will make an easy transition into Art III: Studio Art class.
Course Fee: $\$ 15$ per semester

## Art and Design

| 752 ART III: STUDIO ART | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Art I and Art II | 1 CREDIT |

This class will help students transition into a future AP Art student. This is the course where students will begin to build a portfolio for college. Expectations are always set high for the encouragement of outstanding quality work. Students will work with a diverse amount of art mediums available. They must meet all the deadlines and requirements given per project. Each student will strengthen his/her ability to express ideas and technical knowledge behind the projects both verbally and in written form. Studio Art students will work alongside the AP Art students as they learn how to develop a personal style with top quality design and technique. Most of the junior year artwork created in this class will become portfolio pieces added to their senior year AP Art work. Course fee: $\$ 15$ per semester

| 753 AP STUDIO ART: 2D DESIGN/DRAWING | GRADE: 12 |
| :--- | ---: |
| PREREQUISITE: Art I and Art II/III or teacher recommendation | 1 CREDIT |

This is a top level art course geared towards the serious art student. Expectations are set high to ensure superior quality work. Students are required to complete various art projects in class, meet deadlines, and exceed the basic requirements given per project. Each student will continue to strengthen his/her ability to express ideas and technical knowledge behind the projects both verbally and in written form. The main goal of this course is to prepare and provide each and every student with an obtainable opportunity to go to college through the completion of their portfolio. This portfolio may be used for admission into college as well as various scholarship competitions into his/her college or art school of choice. In addition to regular class work, all AP Art students are expected to do research and develop their own projects outside the art room in the form of a "concentration". These projects will also be included within the final portfolio due at the end of his/her senior year. Any senior planning to go into art or design, whether it be digital art or fine art, should take this class, to help build their portfolio. Through AP testing, this course also provides a fantastic opportunity to receive college credit. Course Fee: $\$ 20$ per semester

| 755 CERAMICS | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Art I | $1 / 2$ CREDIT |

This course will be largely an independent exploration of Ceramics. Students will complete a progressive series of projects that will promote exploration of the traditional building techniques in ceramic work. Firing, glazing, and surface decoration techniques will be taught. Students must meet deadlines to reach performance goals that will culminate in a series of finished ceramic pieces including both functional and non-functional work. Course Fee: \$20

| 757 JEWELRY, METALS, AND OBJECT DESIGN | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Art I | $1 / 2$ CREDIT |

Jewelry, Metals, and Object Design will explore the foundational techniques and creative processes necessary for the basic design and fabrication of jewelry and small three-dimensional forms. The class will utilize basic metal construction processes--sawing, filing, and finishing, as well as, piercing, soldering, surface texturing, polishing and forming to complete multiple projects. Course Fee: $\$ 20$

## 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 | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ 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. Course Fee: $\$ 30$

| 554 NUTRITION AND WELLNESS | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

In this course, students will use principles of nutrition to ensure a healthy body throughout the lifecycle. An emphasis will be placed on planning and preparing meals with an understanding of nutrients and their benefits, portion control and dietary needs. Additional information will include steroid and supplemental use, body weight and management and the implementation of physical activity to maintain a healthy lifestyle. Students will also receive CPR and AED training in this class. This class counts as a Health credit. Course Fee: $\$ 30$

| 552 CHILD DEVELOPMENT | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

In this course, students will study the principles of child growth, development and behavior. An emphasis will be placed 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. Course Fee: \$5

# Family Consumer Sciences 

| 551 FASHION DESIGN AND CONSTRUCTION | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

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

| 550 INTERIOR DESIGN, FURNISHINGS, \& MANAGEMENT | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

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

| 555 GLOBAL FOODS | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

In this course, students will compare cuisines, ingredients and preferred cooking methods of various cultures. The influence of traditions and regional and cultural perspectives on food choices and culinary practices will be emphasized. Students will examine the issues and conditions that affect the availability and quality of food in the global market, and apply advanced equipment in the preparation of food dishes. Course Fee: \$30

## Health and Physical Education

| 850 HEALTH | GRADES: $9-10$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ 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.

| 864 WELLNESS PE | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 4$ 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.

| 851 ATHLETIC TRAINING | GRADES: $10-12$ |
| :--- | ---: |
| PREREQUISITE: Biology and Health | $1 / 2$ 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. Course Fee: \$25

## Music

| 800 WOMEN'S CHORUS | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Audition | 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 | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Audition | 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 | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Audition | 1 CREDIT |

Show Choir provides a development of vocal, instrumental, dance, and dramatic presentation skills through public performance of contemporary 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. Show Choir counts towards the PE waiver. Course Fee: \$15

| 802 CONCERT CHOIR | GRADES: $10-12$ |
| :--- | ---: |
| PREREQUISITE: Audition | 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 the school day. Materials needed: correct concert attire and $\$ 15$ robe rental/cleaning fee

## Music

| 805 JAZZ BAND/SHOW CHOIR COMBO | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: Audition | 1 CREDIT |

Jazz Band provides for the 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 must get permission from the jazz band director to participate in a winter sport, as there will be conflicts. All wind and percussion students are REQUIRED to participate in Concert/Symphonic Band or Men/Women's Chorus. If scheduling prohibits this, students must receive permission from the jazz band director.

| 809 CONCERT BAND | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: None | 1 CREDIT |

Concert Band is a yearlong course made up of Freshman through Seniors and is a performance-based class. This class is made up of students who are still developing ensemble skills and performance techniques. Students will be placed in Concert Band based on an individual audition at the end of each second semester. Music literature will range from a grade 2-3 difficulty level. Students will be expected to participate in Pep Band performances as part of this class. This band may participate in the OMEA Large Group Contest based on instrumentation each year.

| 812 SYMPHONIC BAND | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | 1 CREDIT |

Symphonic Band is a yearlong course made up of Freshman through Seniors and is a performance-based class. This class is made up of students who are excelling on their instruments and are ready to be challenged with more advanced literature. Students will be placed in Symphonic Band based on an individual audition at the end of each second semester. Students will be expected to participate in Pep Band performances as part of this class. Music literature will range from a grade 3-4 difficulty level. This band will participate in the OMEA Large Group Contest. Students in this group will also be encouraged to participate in OMEA Solo and Ensemble Festival.

## Music

| 807 DRAMA | GRADES: $10-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

This class will serve as an introduction to all aspects of theater. It will cover memorization skills, performance, evaluation, characterization, and history of theater. This class will use readings, projects, movies, TV shows, and hands-on activities to survey a broad field of theater. Class requirements include participation and performing memorized pieces on stage and reading aloud. Because of the participatory nature of this class, attendance is graded.

| 824 MUSIC APPRECIATION | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: Instructor approval | $1 / 2$ CREDIT |

This class is a semester class. The idea of music appreciation is to give students an overview of all musical styles. This course is designed similarly to a College level Music Appreciation class. You will be required to take extensive notes and keep a notebook that will be graded through-out the quarter. There will also be quizzes, tests, listening examples, and a final project/presentation.

| 804 MUSIC THEORY | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Instructor approval | 1 CREDIT |

This full year course will cover a wide range of music theory topics. These topics will include but are not limited to, Note Reading, Notation, Scales, Chords, Part Writing, Melodic/Rhythmic Dictation, and composition. The students will complete both in-class and out-of-class projects. Students should have an interest in writing, composing, and listening to music prior to this course. It is suggested to have some music background and be able to read music prior to this course.

## Pre-Engineering

| 650 EXPLORING TECHNOLOGY | GRADE: 9 |
| :--- | :---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

Exploring Technology introduces students to a variety of engineering disciplines through classwork and various projects. This class is an extension of STEM classes at PJH. Focus includes applying the Engineering Design Process to various projects. It also includes civil engineering through tower and bridge building. Plan reading and construction scheduling are practiced. Fundamentals of electric theory and electronics are explored, as well as 3D printing and robotics. Course Fee: \$15

| 653 ROBOTICS | GRADE: 10 |
| :--- | ---: |
| PREREQUISITE: B in Algebra and instructor approval | 1 CREDIT |

Students explore the digital world around us and new emerging technologies. This class covers foundational concepts of robotics and includes various quick build projects on a variety of robotic platforms. Basic programming is practiced as part of the engineering challenges. The roles of sensors, loops, and conditional statements are explored. Students will discuss the implications of increased robotics on society, focusing on changes to business and manufacturing. Students will review core theory to better understand how robots and electronics are built successfully. Students are not required to take Exploring Technology prior to enrolling in Robotics. Course Fee: \$10

| 656 ENGINEERING PRINCIPLES | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: B in Algebra II and Instructor approval | 1 CREDIT |

Students will use engineering principles to solve design problems in this course combining theoretical and hands-on skills. A variety of engineering disciplines will be explored through activities, speakers, and field trips. 2D and 3D software skills are developed as more and more complex challenges are tackled. Electrical systems and manufacturing machine components will be studied. Also, developing 3-D prototypes and communicating solutions will be included in this course.

## Technical

| 457 INTRODUCTION TO HUMAN BODY SYSTEMS | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

Students examine the interactions of human body systems at a pre-anatomy and physiology level as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal Manikin; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases. This class will count for elective credit only

| 458 MEDICAL TERMINOLOGY | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: None | 1 CREDIT |

This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. Further, students will interpret and translate medical records and documents. This class will count for elective credit only.

| 914 INTRODUCTION TO HEALTHCARE | GRADES: 10-11 |
| :--- | ---: |
| PREREQUISITE: None | 1 CREDIT |

This first course in the career field provides students an overview of the opportunities available in the healthcare industry. Students will learn fundamental skills in effective and safe patient care that can be applied across a person's lifespan. They will also be introduced to exercise science and sports medicine, the field of biomedical research and the importance of managing health information. This class will count for elective credit only.

## Technical

| 911 HEALTH CAREERS LAB | GRADES: 11-12 |
| :--- | ---: |
| PRE/COREQUISITE: Medical Terminology AND Anatomy and <br> Physiology | 2 CREDITS |

Students will apply psychomotor nursing skills needed to assist individuals in meeting basic human needs. Students will implement interventions following a nursing assistant plan of care. Students will collect the patient's vital signs including temperature, pulse rate, respiration rate, and blood pressure. Students will perform a phlebotomy procedure with emphasis on infection prevention, universal precautions, proper patient identification, specimen acquisition, handling, and processing. Additionally, students will observe patients' physical, mental, and emotional conditions and document any change. Students will apply fundamental principles of communication, leadership, technology and management as it applies to the medical office setting. Students will demonstrate documentation and record keeping procedures set forth by national accrediting organizations. Students will receive their Patient Care Technician (PCT) certification. During senior year, students will have the option to do an internship, take Edison classes for a registered nursing degree, or go to the career center for LPN. Students may be eligible for employment after certification within the school year. Students will meet with their counselor to plan their course of action. Students are required to have a background check for this class.

| 813 AVIATION I | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: None | 1 CREDIT |

This course will introduce students to basic aircraft and UAS structures and their major components, principles of flight, and the fundamental physical laws affecting flight. Students will learn about basic aerodynamics and forces that act on aircraft in flight. This course will also introduce the main systems found on large and small airplanes and UAS. This course will start to provide the foundational information needed for passing the AOPA exams found in the 2rd year course.

## Technical

| 814 AVIATION II | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: AVIATION 1 | 1 CREDIT |

This course is split into two pathways. The student will choose which pathway they want to pursue. The Pilot pathway will include topics such as: pilot and aircraft qualifications, principles of flight, aerodynamics, spin awareness, flight maneuvers, pre- and post-flight procedures, airport operations, regulations, safety, weather, aircraft systems, weight and balance, human factors, cockpit management, emergency procedures, night operations, aeronautical decision-making, cross-country flight planning, airspace, and other topics that help prepare students for the Federal Aviation Administration's Private Pilot written exam. The UAS pathway is an introduction to the fundamental concepts of unmanned aircraft systems. Topics include: small unmanned aircraft systems regulations, airspace classification and operating requirements, flight restrictions affecting small unmanned aircraft operation, safety protocols, weight and balance, operating environments, aviation weather sources and effects of weather (micro-meteorology) on small unmanned aircraft performance, small unmanned aircraft loading and performance, emergency procedures, and crew resource management. This course starts to provide the foundational material needed to pass the AOPA exam found in aviation II. *With instructor approval a student may be dual-enrolled in Aviation 1 and 2.

| 815 AVIATION III | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: AVIATION II | 1 CREDIT |

This course is split into two pathways. The student will choose which pathway they want to pursue.

## Pilot pathway

After having prepared for the Private Pilot Knowledge Test and Part 107 Remote Pilot Test in the previous year, students will examine advanced aviation topics and aviation career options. Instrument flight, commercial aviation, and advanced aircraft systems begin the semester. Looking into the future, students then explore new horizons in the aerospace industry. What might aviation look like five, ten, or twenty years into the future? The focus then turns to business development opportunities in aviation. Finally, students learn about and conduct different types of research in preparation for their capstone project in the second semester.

## UAS Pathway

Practical applications of UAS operations including agriculture, public safety, photography, ethics, preventative maintenance, commerce, environmental studies, and other contemporary uses will be explored. Students will work as individuals or in small groups to study and report on an approved aviation topic of their choosing. The goal of this capstone course is to allow students to demonstrate an understanding of a contemporary topic in aviation related to unmanned aircraft operations.

## Technical

| 900A MENTORING S1 | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: Instructor approval | $1 / 2$ CREDIT |

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

| 900B MENTORING S2 | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: Instructor approval | $1 / 2$ CREDIT |

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

| 904 EMPLOYABILITY SKILLS | GRADES: 9-10 |
| :--- | ---: |
| PREREQUISITE: Must be on an IEP | 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.

## Technical

| 905 CONSTRUCTION TECHNOLOGY | GRADES: 10 |
| :--- | ---: |
| PREREQUISITE: None | 1 CREDIT |

In this yearlong course, students will learn principles in safety, construction math, hand and power tool operation, blueprint reading, material handling, communication, and employability skills. Students will select materials, assemble, and test basic electrical circuits. Students will select materials and assemble simple copper and plastic plumbing applications. Students will be able to select materials in basic ductwork, components, and learn basic operation and maintenance of heating and cooling equipment.

| 907 SUCCESSBOUND | GRADES: $9-12$ |
| :--- | ---: |
| PREREQUISITE: None | $1 / 2$ CREDIT |

In this course, students will begin exploring career interests through job shadowing, guest speakers, field trips, 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 including public speaking. 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.

| 908 WORK BASED LEARNING | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Staff Recommendation and Application | 1 CREDIT* |

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

## Technical

| 912 MECHATRONICS I | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: None | 2 CREDITS |

Mechatronics is a yearlong program that is specifically designed to teach real world skills that can be used in an ever-changing global market. Skills taught include forklift safety and operation, hand and power tool operation, electrical wiring, brazing and soldering, machine rigging, and much more. Students will have the opportunity to earn Forklift and ManLift Certifications, OSHA 10 Certification. Successful completion of this course could lead to job placement as an Industrial Maintenance Technician. Further training is available at the Upper Valley Career Center Adult Division and Edison State Community College. This class will meet for two consecutive periods per day.

| 913 MECHATRONICS II | GRADE: 12 |
| :--- | :--- |
| PREREQUISITE: Mechatronics I | 2 CREDITS |

Mechatronics II is a yearlong class that will continue to develop the skills learned in Mechatronics I. Once students demonstrate a mastery in the four core areas of Safety, Quality Practices and Measurement, Manufacturing Processes and Production, and Maintenance Awareness, they may be eligible for job placement as an Industrial Maintenance Technician. Further training is available at the Upper Valley Career Center Adult Division and Edison State Community College. This class will meet for two consecutive periods per day.

| 915 SUCCESSBOUND CAPSTONE | GRADE: 12 |
| :--- | ---: |
| PREREQUISITE: Counselor Approval | 1 CREDIT |

SuccessBound Capstone is a course for Seniors who need to complete alternate graduation pathways. In this course, students may work towards a qualifying score on WorkKeys testing, the Ohio Means Jobs Career Readiness Seal, complete a work study through the Work-Based Learning Program, or another pathway as agreed upon by the student and his/her counselor and the course instructor. In addition to work toward graduation pathways, students will utilize the WorkKeys career readiness curriculum to prepare for success in the workforce.

## Technical

| 916 LAW ENFORCEMENT PRE-APPRENTICESHIP | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: pass 9TH \& 10TH grade classes, application and <br> interview | 1 CREDIT |

PHS will be offering a pre-apprenticeship opportunity in conjunction with the Piqua Police Department. This pre-apprenticeship program will run concurrent with the Edison State Community College Police Training Program. Students are required to have a background check for this class.

| 919 BUILDING AND GROUNDS PRE-APPRENTICESHIP | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: pass 9TH \& 10TH grade classes, must be on an IEP | 1 CREDIT |

Students in this program will learn the basic skills needed for building and grounds maintenance. Skills include building operations, mechanical operations, daily maintenance, safety equipment use and minor repairs. Students are required to work with the maintenance staff for a minimum of 2 periods per day. Students entering this program may be eligible to enter an apprenticeship program at Piqua City Schools. Students must also take Successbound Capstone, Employability Skills or Life Skills in conjunction with this program.

## World Languages

| 721 AMERICAN SIGN LANGUAGE | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: None | 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.

| 722 AMERICAN SIGN LANGUAGE II | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: ASL I | 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.

| 723 AMERICAN SIGN LANGUAGE III | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: ASL II | 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.

## World Languages

| 711 FRENCH I | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: None | 1 CREDIT |

Students in French will be able to speak, listen, read, and write about topics that are relevant to them. This will be done while discovering ways to interact with others, whose perspectives may be different from their own by exploring the lives of people throughout the French speaking world. As students continue their study of French, they will expand their skills in speaking, listening, reading, writing and cultural awareness. Students will learn to talk about themselves-their identity, their likes and dislikes, what they do for fun, what they do at school and the people in their lives-their friends and family.

| 712 FRENCH II | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: French I | 1 CREDIT |

In French II, students will learn to talk about what they eat, what they do with their free time, and what influences their decisions for free time. They will be able to talk about where they live and what they do at different places in the city.

| 713 FRENCH III | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: French II | 1 CREDIT |

In French III students will learn to talk about what they are going to do in their future, how education influences their future, what food choices they make, what responsibilities they have as a global citizen, and what they did and where they went.

| 714 FRENCH IV | GRADES: 12 |
| :--- | ---: |
| PREREQUISITE: French III | 1 CREDIT |

In French IV, students will be able to discuss what a healthy lifestyle looks like, how to give advice for living a healthy lifestyle, traveling abroad, doing volunteer work while traveling, and understand the difference between being a traveler and not a tourist.

# World Languages 

| 731 SPANISH I | GRADES: 9-12 |
| :--- | ---: |
| PREREQUISITE: None | 1 CREDIT |

This course will introduce the student to the fundamentals of basic Spanish language vocabulary, common phrases (both question and answer), and grammar. Students will develop a beginner's skill level in all four essential areas of 2nd language learning such as reading (*identifying words \& phrases), writing, listening and speaking (by the end of the first year.) We will also focus on cultural phenomena such as holidays, customs \& traditions in real-time as those special dates occur on the regular scholastic calendar ("Feliz Navidad", "Cinco de mayo", etc.) By the end of Spanish I, students will be able to use the present tense to form basic phrases, short sentence structures, and to ask and respond to basic questions. Spanish 1 students will also be able to initiate basic conversations with Native Spanish-speakers using basic vocabulary and common greetings and expressions.

| 732 SPANISH II | GRADES: 10-12 |
| :--- | ---: |
| PREREQUISITE: Spanish I | 1 CREDIT |

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

| 733 SPANISH III | GRADES: 11-12 |
| :--- | ---: |
| PREREQUISITE: Spanish II | 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. Assessments will be based on Integrated Performance Assessments (IPA's) and be completely performance based.

## World Languages

| 735 SPANISH IV | GRADE: 12 |
| :--- | ---: |
| PREREQUISITE: Spanish III | 1 CREDIT |

This course is for students who wish to continue their path of becoming more bilingual in their 2nd language. Students will further develop their Spanish-language skills in reading, writing, speaking and listening. The course will include an intensive overall review of grammar in the present and the past tenses. There will be a substantial increase in their knowledge-base of vocabulary words, phrases, questions, specific vocab-lists (colors, clothing, travel, etc.) as well as synonyms and antonyms. Students will learn about both European culture (Spain) and Latin American culture (Mexico, Central \& South America, and the Caribbean). A few cultural traditions and holidays that we will celebrate are: Mexico's Independence Day, The Day of the Dead, and "El Cinco de mayo" (the 5th of May). The class will also compare and contrast the cultural customs of the target culture (both Hispanic and Latin American) to their own culture in Piqua, Ohio. We will also watch, discuss the main events of, and write about what takes place in several episodes of an authentic Mexican "telenovela" (A.K.A. "Soap Opera".) The goal of the class for the entire year will be to speak and hear Spanish in class $90 \%$ of the time (or more.) You will be exposed to, and will discuss, Spanish and Latin American music, sports, food, holidays, customs, traditions, famous people, art, architecture, history, as well as social issues and current events. In short, this class will help any student to be more successful should they have to (or want to): take Spanish classes in college, work at a job that interacts with the Spanish-speaking community, be stationed in the military anywhere in the Spanish-speaking world, or be able to communicate with a near-by or far away Spanish-speaking family member or loved one.

