

# 2022 - 2023

# Course Guide



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## **NORTHWOOD HIGH SCHOOL MISSION AND PHILOSOPHY**

Education is the means by which we are prepared to fulfill our roles as individuals and responsible members of society. It is through our educational experiences that we acquire the skills, knowledge, personal qualities, and personal values that allow us to become productive, satisfied people. In other words, it is through education that we gain the tools to achieve success.

It is the hope of all Northwood High School faculty and staff that all students graduate from Northwood High School equipped with the necessary skills and knowledge to continue to grow and become successful. We recognize that this is a joint effort on the part of students, parents, teachers and the community at large. Our students' achievements are a reflection of the extent of this joint commitment.

It is the mission of Northwood High School to provide students a quality program that gives them the tools necessary to be productive in society and life-long learners. We do this in an atmosphere that works to foster individual creativity and knowledge while promoting social cooperation and teamwork. We strive to help students develop self-esteem, self-discipline, and self-motivation. It is within this framework that we present the following objectives of our program.

## **NORTHWOOD HIGH SCHOOL OBJECTIVES**

The student will:

- Acquire mastery of communication, computational, and scientific skills.
- Demonstrate a range of thinking skills: comprehension, application, synthesis and evaluation.
- Develop technological literacy.
- Develop an understanding of the global interdependence of all peoples and societies.
- Form an appreciation of the arts and humanities.
- Acquire knowledge of our political and economic systems.
- Develop habits and skills that promote physical health, mental health, and independent living.
- Develop a positive attitude toward themselves and others.
- Establish personal learning goals and work toward their achievement.
- Attain the knowledge of how to learn, as a lifelong skill.

## **TO ALL STUDENTS AT NORTHWOOD HIGH SCHOOL:**

The purpose of this Course Guide is to provide assistance to students in the planning of a meaningful program of studies. This guide will also explain some of the unique aspects of the program, including the grading system and requirements for graduation.

The administration and faculty will assume the responsibility for providing students with opportunities for a meaningful experience. It is your responsibility as a student to take advantage of these opportunities by using the program and the facility to the best advantage and by becoming all you are capable of being.

## **PLAN NOW**

This guide has been prepared to assist students and parents in selecting a program of study for their years at Northwood High School, and to acquaint them with the variety of available programs.

A properly selected course of study will help students gain both knowledge and satisfaction in their high school careers. The time to plan for any important endeavor is before it begins. The following will help you to select an appropriate program of study:

- Consider the things that interest you and try to take courses that will help you increase your knowledge in your interest areas.
- Consider how hard you are prepared to work before you decide upon the type of course to take.
- Be realistic about your ability and aptitude to do various types of work in high school.
- Review thoroughly the courses available. Be sure that you have the prerequisites and/or background for the courses you select.
- The grades you have earned in the past need to be considered. For example, students who do not have a "B" average or better in English may have a difficult time in a foreign language.
- Discuss with your counselor the results of various achievement and aptitude tests to find out what your strengths and weaknesses are in relation to the courses you have taken.
- Discuss with your teachers the courses they suggest you take next year.
- Consider the courses required by the college of your choice.
- Consider the basic courses that must be taken to meet the minimum high school graduation requirements.
- Discuss your schedule with your counselor & teachers.

Remember, now is the time to plan for your high school program. The more planning and thought you give to registration, the more successful and happy your high school experience will be.

## **REQUIREMENTS FOR GRADUATION**

A student is considered a graduate when he/she has fulfilled all local and state requirements necessary for granting of a diploma as verified by the student's official high school transcript. After this time the student is no longer entitled to receive academic services unless those services are required by the student's Individual Educational Plan (I.E.P.) or the student is attempting to complete a vocational program at the Penta Career Center. Northwood High School students who wish to graduate prior to their class graduation may apply for early graduation if they have fulfilled the graduation requirements set forth by the Board of Education.

Valedictorian and Salutatorian for each graduating class will be determined according to class rank at the end of seven semesters.

No student will be allowed to participate in the graduation ceremony or receive a diploma who has not met all state and local requirements for a diploma.

**Students who do not attend graduation practices will not be allowed to participate in the graduation ceremonies unless special permission is granted by the principal prior to the practices.**

If a student is completing graduation requirements through correspondence school, online school, college classes, or any other course taken off-site for academic credit, the written transcripts must be received in the school office prior to the first graduation practice, or the student will not be allowed to participate in the graduation ceremony.

No student shall participate in graduation practices, the graduation ceremony, or receive a diploma if he/she has not paid all fees, fines, and returned all school-owned equipment.

## **EARLY/DEFERRED GRADUATION**

### **Procedure and Requirements**

- The principal will grant early/deferred graduation only if all graduation requirements have been met.
- Whenever a student graduates at mid-year, one year early, or sometime after the completion of the fourth year, he/she will have the opportunity to participate in the next scheduled graduation ceremony. He/she must, however, attend all required graduation practices unless excused in advance by the building principal.
- Whenever a student graduates at mid-year, one year early, or sometime after the completion of the fourth year, the student becomes an alumnus and forfeits all local honors/activities /privileges designed for seniors from that date forward (with the exception of the graduation ceremony).
- Full authority for granting early/deferred graduation rests with the building principal. Applications must be submitted by September 15th of the proposed academic year. Extenuating circumstances may be considered on a case-by-case basis.

### **ALL STUDENTS MUST SATISFY THE GRADUATION CREDIT REQUIREMENTS LISTED BELOW\*:**

English	4 credits
Math	4 credits ( <i>must include Algebra II</i> )
Social Studies	3 credits ( <i>must include 1 credit of World History, 1 credit of American History, 1 credit of American Government</i> )
Science	3 credits ( <i>must include 1 credit of Life Science and 1 credit Physical Science</i> )
Health	1/2 credit
Physical Education	1/2 credit ( <i>or completed PE waiver – see page 32</i> )
Computer Tech/Fine Arts	1 credit or two ½ credits
Electives	<u>5 credits</u>
	21 credits

\* All course credit requirements must also meet specific course guidelines established by the Ohio Department of Education.

## **State Testing Requirements**

State testing and graduation pathways are outlined in the links below. Northwood students will be offered all testing options required by the Ohio Dept of Education. Most tests will be administered in the spring of each year, with makeup tests given in the fall. Options for alternate pathways will also be available to students during their Junior and Senior years.

### [Class of 2023 and beyond](#)

Students will only be allowed one study hall period each semester (exceptions can be made on an individual basis when approved by the principal).

Recommended schedule for students in the college preparatory program:

#### 9th Grade

CP English 9 / Honors English 9  
CP Algebra I / Honors Algebra I or  
CP Geometry / Honors Geometry  
Physical Science/ Biology  
Health/ P.E.  
World Language/Elective  
Modern World History

#### 10th Grade

CP English 10 or Honors English 10  
CP Geometry / Honors Geometry or  
CP Algebra II/ Honors Algebra II  
Biology/Chemistry/Envi. Sci.  
American History  
World Language/Elective  
Elective

#### 11th Grade

CP English 11 / Honors English 11  
CP Algebra II / Honors Algebra II or  
Honors Pre-Calculus  
Chemistry or Anatomy & Physiology/  
Envi. Sci./Physics  
World Language (optional)  
American Government  
Elective

#### 12th Grade

CP English 12 / Honors English 12  
Social Studies elective  
Trig; Prob / Stats/Consumer Math;  
Honors Pre-Calculus or Honors Calculus  
Physics, Adv. Chem, or Anatomy & Physiology  
World Language (optional)  
Elective  
Elective

Recommended schedule for students planning to attend Penta Career Center:

#### 9th Grade

CP English 9/ Honors English 9  
CP Algebra I / Honors Algebra  
CP Geometry / Honors Geometry  
Physical Science  
Health / P.E.  
Modern World History  
Elective  
Elective

#### 10th Grade

CP English 10/ Honors English 10  
CP Geometry / Honors Geometry or  
CP Algebra II / Honors Algebra II  
Biology/Chemistry/Envi. Sci.  
American History  
Elective  
Elective  
Elective

## **ACADEMIC/COLLEGE PREPARATORY**

The academic or college preparatory program is designed for those students who plan to continue their education at a college or university upon graduation from high school.

Admission to a college or university is based upon the following criteria:

- High school curriculum followed
- Rank in high school graduating class
- Scores on ACT and/or SAT
- High school cumulative GPA

The following subjects are strongly recommended for admission to four-year colleges and universities and may, in some cases, be required:

English -- Including composition	4 units
Foreign Language	2-3 units of the same language
Mathematics	4 units
Science	4 units
Social Studies	3-4 units
Fine Arts	1 unit

These requirements vary somewhat depending upon the college major the student plans to pursue. Individual requirements may be identified in the guidance office.

Students planning to enter nurses training or medical-related majors should take chemistry and anatomy and physiology. Some schools require additional science. The school should be checked for its individual requirements.

Admission to many of the higher institutions of learning is becoming more and more restrictive, selective, and difficult. Students should realize that serious endeavor and determined attitudes are essential to the successful completion of this course of study. Classroom achievement over the four years is stressed as an indicator of acceptability, in addition to recommendations from teachers, counselors, and principal. Colleges/universities do examine the strength of an applicant's senior schedule when determining admission status; therefore, it is imperative that college-bound seniors continue to take a challenging curriculum their senior year.

## **HONORS DIPLOMA**

What are Honors Diplomas?

High school students can gain state recognition for exceeding Ohio's graduation requirements through an honors diploma. Students challenge themselves by taking and succeeding at high-level coursework and in real-world experiences.

Ohio students have the opportunity to choose to pursue one of six honors diplomas:

1. Academic Honors Diploma
2. International Baccalaureate Honors Diploma
3. Career Tech Honors Diploma
4. STEM Honors Diploma
5. Arts Honors Diploma\*
6. Social Science and Civic Engagement Honors Diploma

\*includes dance, drama/theatre, music and visual art

Northwood High School will follow the Ohio Department of Education requirements for an Honors Diploma. Criteria is subject to change. Please see the ODE website for the most current state requirements.

<https://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements/Honors-Diplomas>

## **ACADEMIC POLICY**

### **DROPPING OR ADDING A CLASS**

By the time a student reaches high school age, he/she should be mature enough to begin making decisions regarding class requests. The school counselor is always available to aid when necessary, and students are also urged to communicate with their parents regarding their schedules. During the scheduling process, students are continually urged to take the time necessary to make good decisions so that changes will not be necessary the following year. Staffing decisions and class assignments are made in the spring according to the numbers of students who are signed up for specific classes, so it is imperative that these numbers do not vary greatly when school opens in the fall. Therefore, the following policy has been adopted regarding schedule changes:

Once a student turns in his/her scheduling requests for the following year, no changes in either the requests or the final schedule will be allowed except for those initiated by either the school counselor or a faculty member. In a yearlong course, a student cannot drop a class at the end of the semester without special permission from the principal.

Situations that would necessitate a change by one of these parties, include, but are not limited to:

- Issues related to College Credit Plus Program
- Movement within the subject area (in or out of Honors)
- Completion of summer school/credit recovery classes
- Need to make up classes failed the previous year
- Obvious scheduling errors (i.e. duplication of classes, etc.)

### **CLASS FEES**

Fees for workbooks and classroom supplies are set up annually by the Board of Education. Fees will be listed on the student schedule when it is received and will be due by the first day of school. Fees may be paid online using payforit.net prior to the first day of school.

Fines and /or damages may be issued for missing or damaged iPads, books and other school property.

For information on fee waivers, please see “Fees” in the district-wide section of the Student Handbook.

### **GRADING**

Grades are posted on Schoology after each Quarter Marking Period. Parents are encouraged to access their Schoology accounts regularly to monitor their student’s progress.

Letter Grades have the following numerical equivalents:

A+	Excellent	98.5 - 100
A	Excellent	94.5 - 98.4
A-	Excellent	92.5 - 94.4
B+	Good	90.5 - 92.4
B	Good	84.5 - 90.4
B-	Good	82.5 - 84.4
C+	Average	80.5 - 82.4
C	Average	71.5 - 80.4
C-	Average	69.5 - 71.4
D+	Poor	67.5 - 69.4
D	Poor	61.5 - 67.4
D-	Poor	59.5 - 61.4
F	Failing	0 .00 - 59.4

Grade point averages in non-Honors classes will be computed according to the following scale:

A+	4.33
A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.33
C	2.00
C-	1.67
D+	1.33
D	1.00
D-	0.67
F	0.00

The following classes have been designated as Honors classes at Northwood High School:

- Honors Calculus
- Honors Pre-Calculus
- Honors Algebra II
- Honors Geometry
- Honors Algebra I
- Honors Advanced Chemistry
- Honors Senior English
- Honors Junior English
- Honors Sophomore English
- Honors Freshman English

Grades in these classes will be weighted as follows:

A+	5.33
A	5.00
A-	4.67
B+	4.33
B	4.00
B-	3.67
C+	3.33
C	3.00
C-	2.67
D+	2.33
D	2.00
D-	1.67
F	.00

Northwood High School will only accept honors credits from other high schools equivalent to Northwood honors classes listed above.

In any given nine-week period in which a student has not completed assigned work for the course, the teacher may issue the grade of incomplete (I). A student may make up an incomplete within two weeks of the last day of the grading period or by the appropriate deadline set by the teacher. A student who receives an incomplete for a nine-week grading period is ineligible for all extra-curricular activities until the incomplete is made up and a true GPA can be determined.

### **AUDITING CLASSES**

Students will only be able to audit classes with special permission from the Principal.

### **CLASS RANK**

The Board of Education acknowledges the usefulness of a system of computing grade point averages and class ranking for high school students, both to inform students of their relative academic placement among their peers and to provide students, prospective employers, and institutions of higher learning with a predictive device so that each student is more likely to be placed in an environment conducive to success.

The Board authorizes a system of class ranking, by grade point average, for students in grade(s) 9 – 12.

The grades of students transferring to the high school from a chartered school will be recognized; however, such students shall have no established class rank for purposes of graduation honors, such as Valedictorian, etc, until such time as they have completed four (4) semesters.

Students entering the high school from non-chartered or home-based schooling shall have no established grade point average (GPA) or class rank for purposes of graduation honors, such as Valedictorian, etc, until such time as they have completed four (4) semesters.

Transcripts for students transferring to Northwood High School will be evaluated under the same standards in place for that student's graduating class at Northwood High School. Accordingly, incoming students whose transcripts include honor's credit will be awarded such credit only in those instances where Northwood High School offers an equivalent honor's course.

Students with Individual Education Plans (IEP) that include a curriculum substantially modified from the rigors of the regular Board-adopted course of study shall have no established grade point average (GPA) or class rank for the purpose of local graduation honors.

The following procedures will be used for the computation of grade point averages and the assignment of class rank to implement this policy:

- The standing or rank in the Senior Class, local and state honors, and the top scholastic honors of Valedictorian and Salutatorian are determined by averaging the first seven semesters for all subjects listed on the high school transcript.
- The grade point average (GPA) will be computed to three decimal places.
- Foreign exchange students will not be included in class ranking.

### **NORTHWOOD HIGH SCHOOL FLEX CREDIT PROGRAM**

The high school offers a special “*flexible*” plan for students to earn credits for graduation. All credits earned through the ***Flex Credit*** program will receive a letter grade, will be calculated as part of the accumulated grade point average, and will appear on the final transcript. There are three possible uses of the ***Flex Credit*** program:

***Flex Recovery*** – Students may use the program to make-up classes they have not passed in order to recover credits needed for graduation. ***Flex Recovery*** plans could include correspondence classes, online course work, or classes offered by other school districts’ credit recovery programs.

***Flex Out*** – Students may use the program to “test out” of a class or classes in the Northwood curriculum if the student feels prepared to move on to a higher level. ***Flex Out*** plans will require the student to demonstrate at least a proficient level of achievement on all course standards, outcomes and objectives, as demonstrated by the student’s results on all course assessments and projects.

***Flex Advance*** – Students may work with high school staff and other educators to plan advanced course work that is not available in the regular Northwood High School curriculum. ***Flex Advance*** plans will require student work of challenging nature, including reading, study, projects, demonstrations, and assessments.

### ***Flex Credit Program – General Regulations and Guidelines***

- All flex credit courses will be planned for one-half credit or one full credit. The student must initiate the request for a Flex Out or Flex Advance plan in the months of May or December. Flex Recovery plans may be initiated at any time.
- The student will, in conjunction with school staff, develop a written plan that will clearly state the requirements that must be met for credit to be earned. This may include, but is not limited to, written reports, log books, resources, special projects, demonstrations, workbooks, and summative assessments. The plan must be approved and signed by all parties, including student, parent, teacher or faculty committee, and guidance counselor or principal.

- For this program, faculty members can serve as guides, but not as private instructors. Students who choose to do flex credit cannot expect classroom teachers to teach or tutor them separately from the teacher's regular classes. The student may consult with the teacher on procedural matters such as due dates, proper formats, etc., but the teacher will not re-teach material already being presented in the classroom, nor teach additional material not in the school curriculum.
- All flex credit work will be graded and entered on the student transcript as part of the accumulated grade point average and official record. Flex credit grades will not be weighted unless this is clearly stated in the written plan approved by all parties.
- All costs for flex credit classes will be borne by the student, including any special tutoring that may be required. Students will be able to use school materials at no cost if the materials are already available.
- There will be no limit to the number or type of credits earned through the Flex Credit Program.
- Students will be required to continue to attend Northwood High School for the full day unless release time is part of the approved written plan.
- Students working on flex credits are still required to meet Northwood and OHSAA eligibility standards in order to participate in interscholastic athletics.
- Unless otherwise stated above, all regulations, criteria and guidelines listed in the Northwood High School Curriculum Guide, the Northwood High School Student Handbook, and the Northwood Local Schools Board Policy Book apply to flex credit classes and the Flex Credit Program.

### **COLLEGE CREDIT PLUS**

Beginning in the 2015-2016 school year, College Credit Plus replaced the Post Secondary Education Option Program, also known as PSEOP, and all alternative dual enrollment programs.

Eligible students will have the opportunity to take coursework and earn high school and college credit that applies to both their high school and college transcripts. The coursework must apply to a degree or professional certificate.

Students will have the option throughout high school to earn college credits offered by Ohio public and private colleges and universities in a setting arranged by the college, including taking courses on campus or online courses.

- Equivalent college courses will be weighted the same as the High School Honors Courses.
- High school credit for college courses taken through the College Credit Plus program will be awarded according to the following formula:

Three or more semester hours	1.00 credit
Two semester hours	.66 credit
One semester hours	.33 credit

(all courses must apply to a degree or professional certificate)

To be eligible:

- Students and parents attend mandatory CCP meeting
- Meet the admission standards of the participating college or university to which they apply for enrollment, either through ACT test scores or placement testing and by meeting the college or university GPA requirements
- **Intent to Participate Form** must be returned to the High School Office by **March 31st** with signatures indicating that the student and parents have received the required counseling and that they understand their responsibilities

Participating colleges and universities will provide an advisor for each student enrolled, who will help the student navigate the college requirements.

There is no cost for the student to participate in College Credit Plus when the student is enrolled in a *public college or university*. Students choosing to enroll in a participating *private college or university* may incur costs.

If students perform poorly, they may be placed on academic probation or dismissal by the college.

## POTENTIAL PATHWAYS

### 15 Credit Hour Pathway

1st Semester COURSE	CREDITS	2nd Semester COURSE	CREDITS
English Composition I	3	English Composition II	3
Psychology	3	Sociology	3
		Statistics	3
6 Semester Credits		9 Semester Credits	
15 Total Credits			

### 30 Credit Hour Pathway

1st Semester COURSE	CREDITS	2nd Semester COURSE	CREDITS
English Composition I	3	English Composition II	3
Psychology	3	Sociology	3
Astronomy	3	Trigonometry	3
Intro to Stats	3	Economics	3
Art	3	Intro to Art	3
15 Semester Credits			
30 Total Credits			

**Penta Career Center**  
**2022-2023 Career-Technical Program Guide**

Penta Career Center  
9301 Buck Road  
Perrysburg, OH 43551  
419.666.1120  
[pentacareercenter.org](http://pentacareercenter.org)

**About Penta & Career-Technical Education (CTE)**

Since 1965, Penta Career Center has shaped the careers of more than 30,000 professionals. You, too, can benefit from Penta's career-technical training. Penta prepares students for college, a career, the military, or wherever their paths may lead. In addition, students learn what is expected in the world of work.

**Member Schools**

Penta serves the following school districts: Anthony Wayne, Benton-Carroll-Salem, Bowling Green, Eastwood, Elmwood, Genoa, Lake, Maumee, North Baltimore, Northwood, Otsego, Perrysburg, Rossford, Springfield, Swanton, and Woodmore

**Academics**

Penta prepares students for careers and post-secondary education by offering challenging academic courses in both a traditional 45-minute period for select courses and in a 90-minute block format. The courses are aligned with Ohio's K-12 academic content standards. Through their academic courses, students participate in a variety of project-based learning experiences. Some of the academic courses offered include: American History; World Issues; Anatomy & Physiology I & II; Environmental Science; Forensic Science; Physics; Chemistry; Psychology; Algebra I & II; Geometry; and Pre-Calculus.

**College Credits**

Penta offers FREE College Credit Plus (CCP) options through Owens Community College. FREE Career-Technical Credit Transfer (CT2)/Career-Technical Assurance Guide (CTAG) college credit is also available. Check with Penta for more information on all college credit options, which can lead to time and/or money-saving post-secondary opportunities.

**Advanced Career and Simultaneous Credits**

Penta prepares students for a wide array of post-secondary and career options through our Advanced Career curriculum. By fusing a rigorous academic core with challenging project work and advanced technology in a career pathway program of study, Advanced Career courses give students a greater depth of knowledge and skills to prepare them for more options after high school.

Current Advanced Career courses offered at Penta include: Automated Materials Joining Technology through the Sophomore Manufacturing Academy; Energy and Power through the Construction Electricity program; and Clean Energy Technology. Students also earn simultaneous academic credit through Clean Energy Technology (Math and Science credit).

Penta also offers simultaneous credits in three other career-technical programs. Exercise Science & Sports Medicine juniors earn Anatomy & Physiology credit. Seniors in the Medical Technologies Academy, Dental Assistant and Exercise Science & Sports Medicine programs receive credit in English.

### **Business & Industry Certifications**

Students have the opportunity to earn important business and industry credentials while in high school. After successfully completing an exam, students may qualify for program-specific certifications or state licenses. These credentials indicate to employers that students have the skills necessary for immediate employment.

### **Scholarships**

All students are eligible to apply for post-secondary scholarships. Each year, Penta students earn scholarships through colleges and universities, service organizations, foundations, schools, Career-Technical Student Organizations, and through many other sources. Scholarship opportunities are posted regularly at [pentacareercenter.org](http://pentacareercenter.org) and through the Student Services & Admissions Office.

### **Student Activities**

Students are encouraged to continue to participate in extracurricular activities at their member schools. While attending Penta, students become members of Career-Technical Student Organizations (CTSOs) including: Business Professionals of America (BPA); DECA; Family, Career, and Community Leaders of America (FCCLA); FFA; HOSA: Future Health Professionals; and SkillsUSA.

Just like clubs at the member schools, Penta students can get involved in: Drug Free Club; National Technical Honor Society; Stand United; Student Ambassadors; and ONE Student Leadership.

### **How to Apply**

Applying to Penta Career Center is easy for high school students enrolled in one of Penta's 16 member school districts. Students interested in career-technical programs can apply online at [pentacareercenter.org](http://pentacareercenter.org) by clicking on "Explore Penta." Further information is available by contacting Tricia Hornyak, admissions representative, at **419-661-6498**.

### **Attend Penta as a Sophomore**

Penta offers the Sophomore Exploratory program and the Advanced Manufacturing Academy for students who are interested in exploring career-technical fields on Penta's campus. Freshmen interested in applying to these programs can apply online. Sophomores will explore many career options, earn academic credits, and receive small group and one-on-one career and life skills mentoring. As part of the admissions process for this program, students will participate in a career assessment during their freshman year. To begin the application process, visit [pentacareercenter.org](http://pentacareercenter.org) and click on "Explore Penta."

### **Career Assessment Services**

Career Assessment Services at Penta assists students in realistic planning for the future by helping them discover their interests, abilities, career preferences, and learning styles. Certified Career Assessment staff work with individual students to support them in determining options

for their high school education and beyond. Students interested in enrolling at Penta as a sophomore will complete a career assessment during their freshman year. High school students at other grade levels can request a career assessment by contacting their school counselor.

### **Additional Career-Technical Programs & Services**

Career-technical programs are also offered as early as tenth grade for students who would benefit from specialized instruction and support services. Admission to these programs requires a referral from the student's high school counselor along with a career assessment at Penta.

These programs include:

- Automotive Technology
- Construction & Building Maintenance
- Culinary & Hospitality Services
- Horticulture – Floral & Greenhouse Services
- Horticulture – Landscaping & Outdoor Systems
- Inventory & Warehouse Operations
- Medical Technologies
- Welding

Each of these programs may include participation in the Transition-to-Work program.

Additionally, Penta offers Job Training and TIES (Transition to Independence, Employment and Success) programs for students who may require assistance in preparing for their future. All of these programs provide specialized personnel to meet students' individual needs.

For more information on these programs and services, see your high school counselor.

### **Other Options**

#### **Career Based Intervention (CBI)**

Penta offers CBI programs in satellite locations for those students who are behind in credits and are at-risk for dropping out of school. Through a cooperative effort between employers, parents/guardians, and the school, students learn to become productive workers and earn credits toward graduation. Applications for this program are available on the Penta website, [pentacareercenter.org](http://pentacareercenter.org) under "Explore Penta."

### **Satellite Programs**

Penta offers career-technical options at 14 of our member school districts. These classes can be a pathway towards a program at Penta's main campus. Options include: Agriculture Education; Business; Business & Financial Services; Construction Foundations; Family & Consumer Sciences; Interactive Media; Marketing Education; and Teaching Professions.

### **High School Career-Technical Programs**

Penta career-technical programs focus on preparing students for immediate employment and further education/training. Students can benefit from a variety of opportunities which may include:

- Early job placement
- Internships
- College Credit

- Industry Credentials
- Scholarships
- Memberships in Career-Technical Student Organizations

Visit pentacareercenter.org and click on “Explore Penta” to learn more.

### **Automotive Collision Repair**

- Repair and refinish vehicle surfaces using modern welding, sanding, masking, and custom painting techniques
- Assess damage and estimate repair costs to restore damaged vehicles to factory specifications
- Utilize the same advanced equipment as master technicians

### **Automotive Technology**

- Work on any car in a rapidly changing industry using a full systems approach
- Analyze, diagnose, maintain, and repair basic and advanced automotive systems
- Use the same advanced diagnostic and repair equipment as master technicians

### **Computer-Aided Design**

- Visualize and construct 3D models and prototypes for mechanical designs
- Find creative solutions to complex engineering challenges
- Use the same advanced software and modern equipment as professional engineers

### **Construction Carpentry**

- Work in all aspects of construction including estimating, framing, roofing, and interior finishing
- Plan, manage, and complete commercial, residential and community projects
- Operate a wide range of power tools and professional equipment

### **Construction Concepts (For Seniors Only)**

- Learn introductory construction safety, skills and concepts
- Operate a wide range of power tools and professional equipment
- Plan and manage projects from concept to completion

### **Construction Electricity**

- Design and install commercial and residential power systems from “rough in” to “finish”
- Power advanced motor controls while utilizing specialized tools and equipment
- Work with professional electricians on commercial, residential and community projects

### **Construction Masonry**

- Construct a variety of brick, block, stone, and concrete projects in the community
- Design and create long-lasting residential and commercial structures
- Use the same techniques and equipment as professional masons

### **Construction Remodeling**

- Work in carpentry, masonry, plumbing, electricity, and interior finishing
- Plan and manage projects from concept to completion
- Utilize professional hand and power tools including specialized cabinet making equipment

**Cosmetology**

- Operate and experience a full-service interactive salon and spa environment
- Use individual creativity along with art, science and business skills to provide a wide range of artistic hair, nail and skin care services
- Deliver a full range of professional salon treatments to exceed client expectations

**Criminal Justice**

- Explore a wide range of experiences in criminal investigations, forensics, emergency response to terrorism, corrections, Ohio Revised Code, ODRC Provisional Correctional Officer training, and self defense
- Engage in the rigorous OPOTA curriculum to earn a private security license and other industry credentials
- Experience high energy physical training and role play the day-to-day duties of a police officer

**Culinary Arts**

- Work with professional chefs to create gourmet foods with artistic presentation while earning industry-recognized credentials
- Become a key part of the team that develops entire meals and unique dining experiences in a full-service restaurant
- Plan, prepare and serve catered meals for upscale community events and casual dining

**Dental Assistant**

- Deliver quality patient care alongside dentists, dental specialists, hygienists, and office personnel
- Prepare patients, instruments, materials, and treatment areas for a wide range of dental procedures
- Use the same specialized equipment as practicing professionals within the dental laboratory, sterilization and radiology labs

**Digital Arts & Design**

- Create high-impact web pages, and print/graphic designs using advanced Adobe programs and software applications
- Develop, design and produce promotional materials using traditional and digital art to exceed client expectations
- Edit and manipulate photos and video using professional digital equipment

**Digital Video Production**

- Develop, produce and deliver unique video and audio projects for TV and commercial broadcast from concept to completion
- Work individually and in teams to create dynamic films, documentaries, music videos, sportscasts, and newscasts
- Utilize creative and artistic talents using professional equipment and media to exceed client expectations

**Early Childhood Education**

- Experience the excitement of working with preschoolers and infants in an onsite, state licensed early learning center while earning CDA certification

- Influence the future of children by shaping their intellectual, social, emotional, and physical development through dynamic teaching strategies
- Create, research and provide developmentally appropriate learning materials and activities for children from birth to 5-year-olds

### **Exercise Science & Sports Medicine**

- Explore a wide range of career options related to personal/group fitness, athletic training, and physical and occupational therapy
- Assess an individual's overall fitness, endurance, and nutritional status to develop a personal improvement plan
- Use professional equipment and techniques to assist with injury prevention and rehabilitation

### **Firefighter**

- Work with firefighters, emergency medical and public safety professionals in the community
- Experience ways to combat different types of structure fires and the necessary protocols involved
- Operate a wide range of firefighting, security and life-saving equipment while training to earn firefighter certifications

### **Heating & Air Conditioning Technology**

- Design, fabricate and install heating, ventilation, air conditioning, and refrigeration systems
- Plan, manage and complete residential and commercial projects in the community
- Utilize professional tools and equipment to diagnose and repair advanced systems

### **Information Technologies Academy**

- Assemble, operate, install, upgrade, troubleshoot, and repair a wide variety of computers, information systems, software applications and network systems; and become a certified technician
- Use high-tech tools and industry techniques to explore specializations in the fields of cybersecurity, advanced networking, programming, computer game design, robotics, electronics, and more
- Gain real-world experience through public service and community involvement

### **Marketing Education**

- Experience a wide range of dynamic business strategies for creating, communicating, and delivering products and services to customers
- Design and implement powerful marketing and management plans to solve real-world business challenges
- Work with marketing professionals in a competitive business management setting

### **Medical Office Management**

- Provide high quality customer service, as part of a professional team, in a wide range of environments such as financial institutions, hospitals, doctor offices and health insurance facilities
- Integrate ethical standards, confidentiality and professionalism when interacting with patients, clients and employers
- Experience software applications, computer technology and simulations from initial consultation to final billing

### **Medical Technologies Academy**

- Work with health care experts to provide quality patient care
- Explore a wide range of career options in nursing, nursing assistant, phlebotomy, pharmacy technician, home health aide, dietary aide, and other health care professions
- Practice a variety of health care processes, techniques and diagnostic procedures in a professional environment

### **Powersports & Engine Systems**

- Service snowmobiles, motorcycles, personal watercraft, tractors, lawn and agricultural equipment
- Troubleshoot, weld, maintain and repair small engines, recreational equipment and compact diesel equipment
- Use the same tools and techniques as professionals

### **Precision Machining**

- Work with Computer-Aided Manufacturing (CAM) software and machines to automate manufacturing processes
- Operate industrial lathes and mills that are used everyday in the manufacturing industry
- Design, create and build high-tech parts using precision measuring instruments

### **Robotics & Automation**

- Learn the fundamentals of electricity and electronics while exploring how industrial control systems and automation systems are designed and operated
- Program, operate and troubleshoot common industrial control devices used in today's manufacturing industry
- Work with industrial robots and integrate robots with other programmable devices and systems

### **Small Animal Care**

- Provide daily care to a variety of animals while working closely with veterinarians, biologists, technicians, and specialists
- Explore veterinary science, surgical procedures, disease prevention, grooming, and training
- Deliver quality customer service in a retail store environment

### **Welding**

- Use advanced welding techniques and fabrication equipment to design, engineer and assemble metal components
- Design and fabricate products to solve manufacturing challenges for clients
- Interpret blueprints to meet critical design specifications

## NORTHWOOD HIGH SCHOOL COURSE OFFERINGS

### ART

COURSE NO	COURSE	GRADE
901/902	Art I A/B	9-12
903/904	Art II A/B	10-12
905/906	Art III A/B	11-12
907/908	Art IV A/B	12

#### #901/902 Art I

This course introduces the elements and principles of art, with emphasis on creative visual problem-solving. Students will design, develop and create original art by working in the areas of drawing, painting, sculpture, art appreciation and critique. Students will create a digital portfolio of their work.

Prerequisite: None

Grade 9-12

#### #903/904 Art II

This course focuses on **two-dimensional** wet and dry media, including pencil, charcoal, pastels, ink, watercolor, acrylic paint and printmaking. Students in this course will express their thoughts and ideas creatively by creating two-dimensional artwork from life, imagination and based on historical periods in art. Students will also develop skills in disciplined effort, problem-solving and art criticism.

Prerequisite: Art I

Grade 10-12

#### #905/906 Art III

This course will explore and develop skills in the creation of **three-dimensional** forms. Students will learn ceramic hand building techniques and create three-dimensional sculpture with cardboard, plaster, wire and mixed media. Students will express their thoughts working from life, imagination and based on historical periods in art. With an emphasis on studio production, this course is designed to develop skills in disciplined effort, problem-solving, art criticism, art history and aesthetics.

Grade 11-12

Prerequisite: Art I & Art II

#### #907/908 Art IV

This course is designed for senior students who would like to advance their skills in a variety of art media and develop their art portfolio which will be useful for college art programs. Students will also create an exhibit of their work for the NHS art show. Students taking this course should be highly motivated and expect to work independently. Disciplined effort and wise use of studio production time is a must.

Grade 12

Prerequisite: Art I, II & III and teacher approved application

## **COMPUTER TECHNOLOGY**

COURSE NO	COURSE	GRADE
701/702	Digital Communications	9-12
703/704	Video Broadcast	11-12
720/721	Computer Science/Programming	11-12
729/730	Web Design	10-12

### **#701/702 Digital Communications**

This class serves as an introduction to the ideas and practice behind many of today's methods of communications including social media, graphic design, flash animations and digital movie making. In this class you will learn how to use several software programs to creatively and effectively communicate a message. Students will also learn about and work with social networks like Facebook and Twitter to analyze the ways they have changed the way individuals and corporations network. Students will develop social media plans for sample organizations so they can gain experience in connecting customers and consumers with products and information.

### **#703/704 Video Broadcast**

This course explores and develops professional level workflows that focus on the production and distribution of live audio and video broadcasts. Participants in this class may be responsible for the development of a program that communicates school information and events. This class emphasizes hands-on production experience, using digital video. Students will engage in a multitude of video production projects that will be used to share information to the Northwood community as well as students.

### **#720/721 Computer Science/Programming**

This course introduces students to the central ideas of Computer Science. Students will learn about computer architecture, software creation and the importance of algorithms, computer networks and computer networking. Students will learn to write sets of instructions in a logical format using input statements, graphics and fundamental control statements. Simple computer programming animation will also be covered. This is an ideal introductory course in Computer Science and programming, it will give students an opportunity to sample areas within Computer Science and to strengthen problem-solving skills.

### **#729 Web Design**

Through this course students become familiar with many Web development software programs. Students will begin with Web basics and quickly move to more advanced skills needed to create and maintain a 21st century website. Topics to be explored include: web graphic format, audio for the web including MP#, streaming video techniques and the aesthetics of a good web design. Students will explore layouts and styles for Web pages and examine options such as maps and other applications.

## ENGLISH

COURSE NO.	COURSE	GRADE
121/122	CP English 9A/B	9
123/124	Honors English 9A/B	9
131/132	CP English 10A/B	10
133/134	Honors English 10A/B	10
141/142	CP English 11A/B	11
143/144	Honors English 11A/B	11
151/152	CP English 12A/B	12
153/154	Honors English 12A/B	12
171/172	Writing for Publication A/B	9-12
175/176	Creative Writing 9/10 A/B	9-10
177/178	Creative Writing 11/12 A/B	11-12
179/180	Speech/Debate A/B	9-10
457	Introduction to Film	9-10
459/460	Advanced Film Study A/B	10-12

### #121/122 CP English 9A/B

In this course of college prep English, students will study literature, composition, vocabulary, language mechanics and usage, and develop listening and speaking skills. Students will study at least two major works, including one novel and a drama. Students will build upon their prior knowledge and skills of the close-reading and writing process. The course will meet the Ohio Learning Standards required for freshmen English and is recommended for those students planning on entering a four-year college.

### #123/124 Honors English 9A/B

This is an advanced English class for high-achieving freshmen. Criteria, which will be used to determine eligibility to participate in this class, will include previous English grades (at least a B average in 7th and 8th grade English), instructor approval, and demonstrated writing skills. Emphasis will be placed on literature study, the mechanics of the English language, composition skills, vocabulary study, speaking, and listening skills. A major aspect of this course will be writing and independent work, including the development of a personal beliefs project. Students taking this course are expected to be self-motivated and self-directed. Students will focus on close-reading and analytical writing skills, including his/her ability to evaluate and synthesize information and ideas.

### #131/132 CP English 10A/B

This course continues the study of literature, composition, vocabulary and language mechanics begun in CP English 9 with added emphasis on listening and speaking skills. Students will be required to read three or more major works. Emphasis will be placed on informative and argumentative writing. The course meets the Ohio Learning Standards required for sophomore English.

### #133/134 Honors English 10A/B

This is an advanced English class for sophomores who have earned at least an A average in CP English 9 or a B average in Honors English 9. Teacher approval is also necessary. Students will explore various genres of literature throughout the school year. The works read in class will serve as a source for many of the writing assignments throughout the year. During this school year, students will build on prior knowledge of the research process. Students will continue to improve on their grammar and spelling usage along with improving their vocabulary and public speaking skills. All coursework is designed to fulfill the Ohio Learning Standards along with helping to prepare students for standardized tests that they will take in the spring. Students who earn the honors distinction are expected to meet and exceed the expectations for the standard curriculum in the course and must show evidence of extended learning in the subject matter. To this end, honors-level students in English 10 should be able to demonstrate capabilities through more thoughtful literature responses, extended literary analysis, deeper textual connections, self-motivated learning habits, and regular reflective pieces. Students taking this course are expected to be self-motivated and self-directed.

### #141/142 CP English 11A/B

This college-preparatory course will challenge students with intensive writing instruction as well as study of American literature. Students will be expected to write a number of papers including a research paper, which is required to pass the class. Vocabulary development and ACT test preparation will be included. This course meets the Common Core requirements for junior English.

### #143/144 Honors English 11A/B

This advanced class is open to motivated and self-directed juniors with at least an A average in CP English 9 and 10 or a B in Honors English 9 and 10 along with teacher approval. Students will be expected to read a wide variety of American literature at an accelerated rate. Vocabulary development, ACT test preparation and college essay help will be included. In conjunction with this literature study, students will complete frequent writing assignments, including a formal research paper. Completion of the research paper is required to pass the course.

### #151/152 CP English 12A/B

This course will challenge students to more advanced reading, grammar, and composition. The course is designed to prepare students for college level work, stressing areas not previously covered in other English classes such as British and World Literature, APA format and Independent novel study. A final, comprehensive and reflective writing portfolio will be required to pass this course. This course meets the Common Core requirements for senior English.

### #153/154 Honors English 12/B

This is an advanced Honors British Literature and World Literature course. Students must have passed three credits of English including CP or Honors English 9, 10 and 11 with a minimum of an A average in CP English 11 or a B average in Honors English 11. Instructor approval is also needed for this course. This is a course recommended for high achieving college-bound seniors. Emphasis will be placed on independent study of British Literature, including the author's style, literary techniques and historical data applied to the literature. Course work includes enrichment activities designed to lead to self-directed study of all facets of British and World Literature. Several critical analysis papers requiring outside research will also be required. Additionally, emphasis will be placed on learning various types of essay writing

including APA format. This course is designed to prepare students for advanced college writing courses stressing areas not covered in English 151.

**#171/172 Writing for Publication IA/B**

This course is designed to introduce students to the elements of writing and publishing, with primary focus on producing the Northwood High School yearbook. Attention will be given to all aspects of publishing including photography, writing, layout and design. Participation in fundraisers, yearbook sales and concession stand work may also be required. Students wishing to take this class should have at least a 3.0 average in English classes, instructor approval, and excellent interpersonal skills. Open to freshman, sophomores, juniors and seniors. Students interested in taking this course may be required to complete an application process and submit a mock page layout. These submissions will contribute to determining instructor approval. This course can only be used as an elective credit and does not satisfy any of the four credits required for graduation or for placement in Honors English. Students who wish to take this course more than once must reapply annually.

**#175/176 Creative Writing 9/10 A/B**

Students will explore the world of creative writing by learning various writing techniques as well as implementing these techniques in the creation of original prose and poetry. As part of the writing process, students will read and analyze various types of writing and writers. This course will serve as an introduction to the many different types of creative writing. Students will be required to produce and share their writing in a variety of formats with authentic audiences. Students will also be required to participate in writing workshops that will include peer review sessions. In addition most work will be completed independently as students learn to apply and modify various writing techniques.

**#177/178 Creative Writing 11/12 A/B**

Students will continue to explore the world of creative writing while utilizing various writing techniques to create original prose, poetry, and dramatic writings. Students will continue to improve their writing skills and will work on various independent projects. Students will read various types of writings throughout the course. Students will also be required to participate in writing workshops that will include peer review sessions. Students may participate in National Novel Writing Month. Students may submit various works for publication and production. Students taking this course should be self-motivated learners.

**#179/180 Speech and Debate A/B**

Speech and Debate aims to develop students' skills and confidence in the areas of public speaking, research, debate, and creative performance through exposure to the competitive elements of Ohio Speech and Debate. The course will cover both logic and argumentation as well as the fundamentals of effective public speaking: preparation, pace, tone, facial and vocal expressiveness, and anxiety management. Students will participate in in-class debates, performances and presentations. After completing this course, students will have a set of portable argumentation and advocacy skills necessary for high school and college curriculum.

### # Introduction to Film

This is a semester-long film class with the purpose of introducing students into the technical terminology used to create and analyze film. Students will develop writing techniques to discuss and review key aspects of film. The class will focus on overarching theme topics that films cover. Students/Parents are required to sign a permission slip that will allow the viewing of "PG13" rated films appropriate to the content of the course.

### #457/458 Advanced Film Study A/B

Students will learn to analyze film not only in terms of visual techniques but also according to the elements of literature and to write reviews of movies based upon this knowledge. The class will also consider the development of different genres of film, including documentaries. Students may be expected to explain how themes of film reflect societal values in a number of themes and conduct research on concepts related to film. Students/Parents are required to sign a permission slip that will allow the viewing of "R" rated films appropriate to the content of the course. Students must be enrolled in Advanced Film Study A before taking Advanced Film Study B.

## **WORLD LANGUAGE**

COURSE NO.	COURSE	GRADE
010/011	Spanish I A/B	9-12
020/021	Spanish II A/B	10-12
030/031	Spanish III A/B	11-12
040/041	Spanish IV A/B	12

### #010/011 Spanish I A/B

Students who take this course will be introduced to the Spanish language with an emphasis on reading, writing, and basic conversation skills. Considerable time will be spent in learning essential vocabulary and grammatical forms. Audio and video recordings, guided practice, workbooks, worksheets, and project-based learning are the major components of instruction in this course. Additional emphasis will be placed on Spanish and Latin American culture, both past and present. Students must have a C or better in 8<sup>th</sup> grade Language Arts or Spanish teacher approval in order to take this course.

### #020/021 Spanish II A/B

Students who take this course will continue to develop the fundamental skills of written and oral communication in Spanish, while learning more advanced vocabulary and grammatical structures. Students will also study various cultural and geographical aspects of the Spanish-speaking world. This is a continuation of Spanish I. Pre-requisite: C- or better in Spanish I or Spanish teacher approval on a case by case basis.

### #030/031 Spanish III A/B

Students who take this course will spend considerable time reviewing the fundamental skills of Spanish, with an emphasis on written and oral communication. Students taking this course will

work to develop previously acquired skills, vocabulary, and grammar from Spanish I and Spanish II. Students should anticipate class to be conducted 90% of the time in Spanish. It is also expected that students will rely on the target-language for the majority of class time. Project-based assessments will be more frequently utilized to allow students additional opportunities to provide evidence of their learning. Prerequisite: Only open to students with Spanish I and II credits. Must receive a C or better in Spanish II or Spanish teacher approval.

**#040/041 Spanish IV A/B**

Spanish IV is a transitional course with more emphasis on conversation. This course is conducted in the Spanish language. Students begin with an advanced review of vocabulary and grammatical structures introduced in levels I-III. Students will reinforce their Spanish-language skills throughout the course by completing multiple tasks that elicit reading, writing, speaking, and listening skills. Students will also analyze multiple facets of Spanish and Latin American culture in the context of current events. Prerequisite: Open to students with Spanish I-III credits and B- or better in Spanish III or Spanish teacher approval.

**BUSINESS AND FINANCE**

COURSE NO.	COURSE	GRADE
260/261	Marketing	9-11
262/263	Finance	10-12
252/253	Entrepreneurship A/B	11-12
258/259	Management Principles A/B	11-12

**Marketing (144000) A/B**

Students will obtain fundamental business knowledge and skills in marketing communications, management, research, merchandising and professional selling. They will acquire knowledge of marketing strategies, market identification techniques, business ethics and law, economic principles and international business. They will conduct marketing research, identify target markets, conduct market and competitive analyses, forecast sales, set marketing goals, establish a marketing budget and develop a marketing plan. Employability skills, technology, leadership and communications will be incorporated in classroom activities. Students enrolled in this class will be involved in the co-curricular organization, Business Professionals of America. Recommended for students 9-11 grades.

**Finance (Corporate and Personal) (141015) A/B**

Students will obtain fundamental knowledge and skills in accounting, banking services, corporate finance, insurance, and personal investments. Students will develop knowledge and skills in financial analysis and application, financial reporting and corporate investments, business law and ethics, economics, international business and business relationships. They will predict corporate performance and profitable investments using financial statements, ratio analysis and other financial analysis techniques. They will calculate cash needs using the time value of money and track, record and summarize a business's financial transactions. Compliance, internal controls, business governance will be addressed. Technology, employability skills, leadership/communication, and personal financial management will be

emphasized. Students enrolled in this class will be involved in the co-curricular organization, Business Professionals of America. Prerequisite: Completion of Business Foundations or Marketing with a C or better. Completion of CP Algebra I and CP Geometry with a B or better is preferred. Students MUST be able to analyze investments and financial reports. Recommended for students 10-12 grades.

**#252/253 Entrepreneurship A/B**

Students will use innovation skills to generate ideas for new products and services, evaluate the feasibility of ideas, and develop a strategy for commercialization. They will use technology to select target markets, profile target markers, define the venture's mission, and create business plans. Students will take initial steps to establish a business. Students will calculate and forecast costs, break-even analysis, and sales. Establishing brand, setting prices, promoting products, and managing customer relationships will be emphasized. Students enrolled in this class will be involved in the co-curricular organization, Business Professionals of America. Prerequisite: Completion of Business Foundations or Marketing and Finance or Accounting with a C or better. Students may be eligible to earn college credit through the CTAG program granted by ODE. Recommended for students 11-12 grades.

**#258/259 Management Principles A/B**

Students will apply management and motivation theories to plan, organize and direct staff toward goal achievement. They will learn to manage a workforce, lead change, and build relationships with employees and customers. Students will use technology to analyze the internal and external business environment, determine trends impacting business, and examine risks threatening organizational success. Ethical challenges, project management and strategic planning will also be addressed. Students enrolled in this class will be involved in the co-curricular organization, Business Professionals of America. Students may qualify for College Credit Plus opportunities. Students must have passed Business Foundations or BA Marketing, Financial Accounting or Financial Foundations and Strategic Entrepreneurship with a C or better. Recommended for students in 11-12 grades.

**MATHEMATICS**

COURSE NO	COURSE	GRADE
213/214	CP Algebra I A/B	9
215/216	Honors Algebra I A/B	9
223/224	CP Geometry A/B	9-10
225/226	Honors Geometry A/B	9-10
233/234	CP Algebra II A/B	10-11
235/236	Honors Algebra II A/B	10-11
241/242	Trigonometry/Probability & Statistics A/B	11-12
243/244	Honors Pre-Calculus A/B	11-12
245/246	Honors Calculus A/B	11-12
247/248	Consumer Math A/B	11-12

**#213/214 CP Algebra I A/B**

Topics include simplifying expressions, graphing linear and quadratic functions, polynomials, factoring, exponential functions, and systems of equations and inequalities.

### #215/216 Honors Algebra I A/B

Topics include simplifying expressions, graphing linear and quadratic functions, polynomials, factoring, exponential functions, and systems of equations and inequalities. This course is recommended for students with a strong basic understanding of combining like-terms, graphing points, simple substitution, and other 8<sup>th</sup> grade math concepts. Honors Algebra is designed to help students build problem-solving skills through higher-order questioning, exploratory lessons, and increased classroom discussion. Prerequisite: Completion of 8<sup>th</sup> grade math with an “A or B” average and teacher recommendation.

### #223/224 CP Geometry A/B

Topics include lines, triangles, polygons, circles, congruence and similarity. These concepts will be extended to the study of area and volume as it applies to more advanced applications. CP Geometry meets the Ohio Academic Content Standards and is recommended for students planning to enter a four-year college. Students will learn to write geometry proofs and will be required to demonstrate basic Algebra I skills.

### #225/226 Honors Geometry A/B

Topics include lines, triangles, polygons, circles, congruence and similarity. These concepts will be extended to the study of area and volume as it applies to more advanced applications. Honors Geometry is recommended for students planning to enter a four-year college and who want to be challenged with a more rigorous curriculum. Honors Geometry includes an intense examination of geometric proofs and requires students to demonstrate mastery of Algebra I. Prerequisite includes at least a B or better average in CP Algebra I or a C or better average in Honors Algebra I and/or teacher recommendation.

### #233/234 CP Algebra 2 A/B

Topics in this course include functions, equations and inequalities, systems of equations and inequalities, polynomials, quadratic functions, logarithms, conic sections, rational expressions, sequences and series, trigonometry, and data analysis.

### #235/236 Honors Algebra 2 A/B

Topics in this course include functions, equations and inequalities, systems of equations and inequalities, polynomials, quadratic functions, logarithms, conic sections, rational expressions, sequences and series, trigonometry, and data analysis. Honors Algebra 2 is designed to help students build problem-solving skills through higher-order questioning, exploratory lessons, and increased classroom discussion. Prerequisites includes an A average in CP Algebra 1 or a B average in Honors Algebra 1 as well as an A average in CP Geometry or B average in Honors Geometry and/or teacher recommendation.

### #241 Trigonometry A

The fourth-year math class engages students with a basic examination of trigonometry. Students will build a strong conceptual understanding of trigonometry ranging from evaluating trig values of special angles to using law of cosines and sines to solve triangles. Projects help students to make connections between the concepts of trigonometry and their everyday world.

### #242 Probability and Statistics B

The fourth-year math class engages students with a basic examination of probability and statistics. Students will build a strong conceptual understanding of probability and statistics ranging from finding averages and variation measurements to finding the probability of compound events. Projects help students to make connections between concepts of probability and statistics and their everyday world.

**#243/244 Honors Pre-Calculus A/B**

This college level math course has topics including relations, functions and graphs, trigonometry, advanced functions and graphing and introduction to Calculus. Prerequisite includes successful completion of CP Algebra II with an "A" average or better or successful completion of Honors Algebra II with a "B" average or better and/or teacher approval.

**#245/246 Honors Calculus A/B**

This college-level math course includes topics such as limits, derivatives, and integrals. Much time is also spent on applying these topics to the sciences and life. Prerequisite includes at least a B or better average in Honors Pre-Calculus A/B and teacher recommendation.

**#247/248 Consumer Math A/B**

In this course, students study and review math skills they can apply in their personal lives and in their future careers. Students will extensively learn to utilize spreadsheet programs on the computer. Topics include but are not limited to budgeting, banking, methods of savings, handling money, income/salary, taxes, buying/leasing a vehicle, insurance, cash advances/title loans, renting, vacations, home mortgages, home improvements, grocery shopping, credit and credit cards, financial aid for college, making donations, retirement options, and stocks/bonds. This course may be taken as a single semester or as a full year course.

**MUSIC/THEATER**

COURSE NO	COURSE	GRADE
950/951	Band A/B	9-12
954/955	Chorale A/B	9-12
960/961	Drama I A/B	9-12
962/963	Advanced Drama A/B	10-12

**#950 Band A**

Band A consists of marching band, concert band, and the option of pep band. Anyone signing up must satisfactorily complete middle school band, or have passed an instrumental try-out set by the director.

All Band members are required in marching band. In order to prepare for the football season, sectionals, band camp, and rehearsals will begin in July and continue through August according to the band calendar. The marching band will perform for pregame and halftime shows at all home and away games, have some Saturday performances, and play at pep assemblies. We may have some performances, including a parade and a couple football games before the

school year begins. Attendance is required at all performances and rehearsals. We practice during the school day and have an after-school practice once a week.

Concert band begins when the football season is complete. Attendance is required at all performances and rehearsals. There will be possible after-school or evening rehearsals. Students must also attend additional events on the music calendar, which may be added. Proper advance notice of the events will be given to the students.

Band B is a continuation of Band A and consists of Concert Band the entire semester. Only during the last few weeks of the semester will marching fundamentals be reviewed for summer parades. Anyone signing up must have satisfactorily completed middle school band or passed an instrumental try-out set by the director.

#### #954/955 Chorale A/B

Chorale is open to students of all grade levels. No previous choral experience is required but is highly recommended. Students will be exposed to singing a wide variety of music from many different genres and styles of music. Students will also learn basic music theory and sight reading to strengthen their musical skills.

Performances include fall, Holiday/Winter, community tree lighting, solo and ensemble contest, spring, graduation, district chorale contests, and other choral festivals. Attendance is required at all performances and additional rehearsals if necessary. If additional performances are added to the existing schedule, proper advance notice of the events will be given to students. Students are required to perform at each scheduled event.

This course is designed to enhance the joy of singing and experience it as an art form and a way of expression.

#### #260/261 Drama I A/B

Students will learn the basics of drama and theater. They will learn the history behind theater and the different types of acting involved. A focus on the basics of acting will be emphasized. You will be expected to participate in a variety of activities and games leading to the development of acting and portraying different characters. Participation in the fall play or spring musical may also be a requirement. You don't have to be a performer to take this class, just have an interest in how it's done and be willing to participate. Hands-on experience will be a featured requirement for the class. In class acting and participation is required.

#### #262/263 Advanced Drama A/B

Advanced drama focuses more specifically on acting and directing techniques and stage management. Students will have the opportunity to further develop their skills learned in Drama 1 and would engage in more in-depth plays such as One Acts and Murder Mysteries. Participation in the fall play or spring musical may be a requirement. Students must have a passing grade of at least a "C" from Drama 1 in order to take this course. This course is designed to be taken more than one time in grades 10-12 with a passing grade from the previous semester.

## **PHYSICAL EDUCATION & HEALTH**

COURSE NO	COURSE	GRADE	CREDIT
601	Health	8-10	1/2
609	Physical Education	8-10	1/4
611/612	Strength Training A/B	10-12	1/4 each
***	Physical Education Waiver		

### **#601 Health**

Required course for all 8th grade students. This class will meet daily for one semester. Course content includes: Emotional and Mental Health, Nutrition and Physical Activity, Tobacco, Alcohol and other Drug Prevention, Violence, and Injury Prevention, HIV, STD, Pregnancy Prevention, Personal, Sexual Health, suicide and bullying. Students will be required to participate in the baby project as part of their semester grade.

### **#609 Physical Education**

Physical Education primarily focuses on team sports, these sports include but are not limited to: Volleyball, Soccer, Basketball, Fitnessgram Testing, Ultimate Frisbee, Badminton, Strength Training, and Cardio workouts. The focus of these classes will be large group activities and tournaments, with emphasis on developing team skills.

### **#611/612 Strength Training A/B**

This class will focus on individualized/team strength training, cardio, and nutrition. Students may have the opportunity to implement personal sports-related workouts into this class. Strength programs will be designed to accommodate athletes that are in season, thus their participation in class is not optional.

### **\*\*\*Physical Education Waiver**

High school students who have participated in interscholastic athletics, marching band, or cheerleading for at least two full seasons may waive the high school physical education requirement. Students who complete the physical education waiver must still complete the 21 credits required for high school graduation. Those students must complete one-half credit in another course of study in place of the waived PE credit. In order for the Physical Education requirement to be waived, students and parents must sign the required waiver form by the posted deadline each year during scheduling.

Each student has two years to complete the waiver. If the participation was not met for any reason during the two years, it is the responsibility of the student to inform the Athletic Director and Counselor. At that time, Physical Education will be added to the student's high school schedule during their junior or senior year.

## **SCIENCE**

COURSE NO	COURSE	GRADE
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301/302	Physical Science A/B	9
305/306	Biology A/B	10
307/308	Environmental Science A/B	10-12
311/312	Chemistry A/B	11-12
313/314	Honors Advanced Chemistry A/B	12
321/322	Physics A/B	11-12
333/334	Anatomy & Physiology A/B	11-12

#### #301/302 Physical Science A/B

Physical science introduces students to key concepts and theories that provide a foundation for further study in other sciences and advanced science disciplines. Physical science comprises the systematic study of the physical world as it relates to fundamental concepts about matter, energy and motion. A unified understanding of phenomena in physical, living, Earth and space systems is the culmination of all previously learned concepts related to chemistry, physics, and Earth and space science, along with historical perspective and mathematical reasoning.

#### #305/306 Biology A/B

Biology investigates the composition, diversity, complexity and interconnectedness of life on Earth. Fundamental concepts of heredity, evolution, cells, and the diversity and interdependence of life provide a framework through inquiry-based instruction to explore the living world, the physical environment and the interactions within and between them. Students engage in investigations to understand and explain the behavior of living things in a variety of scenarios that incorporate scientific reasoning, analysis, communication skills, and real-world applications.

#### #307/308 Environmental Science A/B

Environmental science is a course that incorporates concepts of biology, chemistry, physics, and physical geology. The class will focus on investigations and projects to understand and explain the behavior of nature while incorporating scientific reasoning, analysis, communication skills, and real-world applications. The three main topics of exploration for the course are the:

- The interconnectedness of Earth's spheres (hydrosphere, lithosphere, atmosphere and biosphere) and the understanding of the complex relationships between each.
- Availability, conservation, protection and sustainability of Earth's resources.
- Prominent local and global environmental issues.

#### #311/312 Chemistry A/B

This course is an introduction to basic principles and theories of chemistry. With a curriculum focused on inquiry based learning, students will explore the composition and properties of matter, atomic structure, trends found in the periodic table, naming ionic and molecular compounds, chemical reactions and stoichiometry, mass-mole relationships, gas laws, acid/base chemistry, solubility, reaction energy and kinetics, electrochemistry, and nuclear chemistry. Students will perform laboratory experiments that will drive and aid in their understanding of the content.

#### #313/314 Honors Advanced Chemistry A/B

This is an advanced course for students desiring to build on their foundation of chemistry. Students can earn honors credit for this course. This is an excellent course for students planning on majoring in a science program in college whose curriculum requires several chemistry courses (e.g. pharmacy, engineering, pre-medicine, veterinary medicine, and the like). This course will cover an accelerated review of the topics in chemistry, an introduction to organic chemistry, and an introduction to college-style labs. Prerequisite: Open to seniors who have earned a B average in chemistry and/or have the permission of the instructor.

#### #321/322 Physics A/B

Physics elaborates on the study of the key concepts of motion, forces, energy, wave properties, electricity, and magnetism as they relate to increasingly complex systems and applications that will provide a foundation for further study in science and scientific literacy. Students engage in investigations to understand and explain those key concepts in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications. Students will be expected to understand, explain, and apply the basic concepts of physics in a qualitative fashion while also being asked to perform mathematical calculations that represent concepts quantitatively.

This course is designed for students planning to study a science or engineering field in college. Students planning to pursue any engineering or medical career, including optometry, veterinary medicine, etc. should have this course. Prerequisite: Open to students who have earned a B average in Geometry and/or have the permission of the instructor.

#### #333/334 Anatomy and Physiology A/B

Anatomy and Physiology will offer the student the opportunity to study the structure of the human body and how it functions. Medical problems associated with each system will also be discussed. Laboratory work will supplement the course work and will possibly include dissections of, but not limited to, pigs and cats as well as individual organs such as hearts, brains, eyes, etc.

Prerequisite: Students must maintain at least a B average in Biology and/or teacher recommendation. Students may take Anatomy prior to or concurrently with Chemistry if they have a B or better average in Biology. Teacher may also approve or recommend students.

### **SOCIAL STUDIES**

COURSE NO	COURSE	GRADE
403/404	Modern World History A/B	9
411	Contemporary World Issues	11-12
412	Sports in American History and Culture	11-12
421/422	American History A/B	10
433/434	American Government A/B	11
451	Psychology	11-12
452	Sociology	11-12

#### #403/404 Modern World History A/B

This course examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

#### #411 Contemporary World Issues

Contemporary issues is the study of controversy that exists in our world today. This class will give students the opportunity to participate in a student-centered learning environment that will challenge them to participate in numerous research activities, debates, and other activities that will enable students to find solutions to controversial issues. Students will be challenged to utilize their critical thinking skills to reach an educated opinion on the issue at hand. The issues covered in this class will be political, social, economic, ethical, and environmental. The issues covered will be student-directed. This is an elective course open to juniors and seniors.

#### #412 Sports in American History and Culture

This course examines the role sports has played in American culture from early America to the present. Topics include the rise of sports like baseball, football, and presently soccer, professional sports, sports and social class, sports and gender, sports and race, including desegregation, changing concepts, and the business of sports.

#### #421/422 American History A/B

This course examines the history of the United States of America from 1877 to the present. The federal republic has withstood challenges to its national security and expanded the rights and roles of its citizens. The episodes of its past have shaped the nature of the country today and prepared it to attend to the challenges of tomorrow. Understanding how these events came to pass and their meaning for today's citizens is the purpose of this course. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions. Class involves a high emphasis focused on incorporating technology with higher-level thinking and simulations. Each student will also prepare a portfolio to highlight specific assignments, lessons, and concepts from the semester.

#### #433/434 American Government A/B

Taught as a graduation requirement, this is an in-depth study of the historic roots of our Constitution, the U.S. political system and how it has changed over time. Areas of study include the principles and structure of the Constitution, the three branches of government, political parties, electoral politics, public opinion, organization of state and local government and civil rights and responsibilities. The important facets of our governmental structure will be discussed and incorporated with current events. Students will complete a year-round service project involving community service requirements, as well as standards related to real-world application assignments. Each student will also prepare a portfolio to highlight specific assignments, lessons, and concepts from the semester and may include 5 to 10hrs of community service.

This course will also include a Financial Literacy component addressing a basic knowledge of the economic system and information necessary for successful personal living.

**#451 Psychology**

This course is a general study of the human mind and its processes. It includes a study of the history of the science of psychology, psychological perspectives, developmental theories, basic mental disorders, and present concerns in the world of mental illness.

**#452 Sociology**

This course is designed to study the origin, development and functioning of human society. Various sociologists and their perspectives will be discussed along with individual and group responses to the environment in which they live.