

Northmont High School Program of Studies 2017-2018

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General Information

Dear Students and Parents:

The Northmont Senior High School Program of Studies is developed to give students and parents a written description of the various course offerings in each department. Hopefully, the information contained in this Program of Studies will enable all students to select the subject areas that will provide an academic challenge and fulfill their future goals.

The course selection process should be given your utmost consideration to assure the courses that are to be taken meet your needs. From this basic course selection, a master schedule will be prepared to provide students with the educational classes they require. Therefore, your cooperation is required to make the next school year a successful one. Schedule changes requested after your initial selection may not be honored. Please make every attempt during course selection to register for exactly the courses you want. Should further information be required, feel free to contact your counselor.

George Caras
Principal

Requirements for Graduation

To earn a Northmont diploma you must complete the courses shown below and meet one of the pathways on the right.

A student must satisfactorily complete a minimum of 21 credits in the following subjects:

English language arts	4 credits
Mathematics (including Algebra II or its equivalent)	4 credits
Social studies (including one credit each in World History, American History, and American Government)	3 credits
Science (including one credit each of life and physical science)	3 credits
Health	1/2 credit
Physical education	1/2 credit
Fine arts (art, music, theatre arts, photography)	1 credit
ACT preparation	1/2 credit

and

Pathway One:

Ohio's State Tests

Earn at least 18 points on seven end-of-course state tests. End-of-course tests are:

**Algebra I or Integrated Math I
Geometry or Integrated Math II
American Government
American History
English I
English II
Biology**

Each test score earns you up to five graduation points. You must have a minimum total of four points in math, four points in English and six points across science and social studies. See the following page for more information.

OR

Pathway Two:

Industry credential and workforce readiness

Earn a minimum of 12 points by receiving a State Board of Education-approved, industry-recognized credential or group of credentials in a single career field and earn a 13 on WorkKeys, a work-readiness test. The state of Ohio will pay one time for you to take the WorkKeys test. Please visit the industry credential link at: <http://education.ohio.gov/Topics/Career-Tech/CTE-Performance-Data-and-Accountability>

OR

Pathway Three:

College and career readiness tests

Earn the "remediation-free" scores on either:

ACT

English	18 or higher
Mathematics	22 or higher
Reading	22 or higher

SAT

Writing	430 or higher
Mathematics	520 or higher
Reading	450 or higher

Northmont has chosen the ACT for all students to take for free during a one-time statewide spring test in grade 11.

Students must be enrolled in a minimum of 5-1/2 units of credit per year for freshmen, sophomores, juniors, and 5 units of credit per year for seniors.

Each student is personally responsible for periodically evaluating course selections to ensure all minimum standards are met prior to graduation.

Students are reminded that graduation requirements are set by the Board of Education and are subject to change.

While current state law and the creation of College Credit Plus makes it possible for some students to earn core class credit in an accelerated time frame, it is recommended that college bound students take additional core classes after they have met graduation requirements.

Class Placement: The basic requirements for grade level placement are:

Sophomore	5	credits
Junior	10	credits
Senior	15	credits

State Mandated Testing Requirements

End of Course Tests	Graduation Requirement**
English Language Arts I English Language Arts II	Must earn a minimum of 4 graduation points between the two tests
Algebra I Geometry	Must earn a minimum of 4 graduation points between the two tests
American History American Government Physical Science (if class is taken in 2014-15)* or Biology I (if class is taken in 2015-16 or beyond)*	Must earn a minimum of 6 graduation points between the three tests
<i>*Note: Higher science score will count if both tests are taken.</i>	**Students must earn a minimum of 18 points to graduate.

Graduation Points

As one of the three pathways to a diploma, students can accumulate their scores from seven state mandated end-of-course exams. The higher a student scores on any end-of-course exam, the more graduation points he or she earns:

- Advanced Level = 5 points
- Accelerated Level = 4 points
- Proficient Level = 3 points
- Basic Level = 2 points
- Limited Level = 1 point

If a student reaches 18 graduation points overall, he or she becomes eligible for a diploma. Of these overall points, a student must earn at least four points between the math exams, four points between the English language arts exams, and six points between the science and social studies exams.

Substitute Exams

Students in certain courses can take a substitute exam, such as an Advanced Placement (AP) exam, instead of the state's end-of-course exam. The State Board-approved AP exams may be substitute tests for the following courses:

Ohio Test	Substitute Exam
Biology	AP Biology
	College Credit Plus Biological Science Course
American History	AP United States History
	College Credit Plus American History Course
American Government	AP United States Government and Policy
	College Credit Plus US Government Course

Advanced Placement (AP)	International Baccalaureate (IB)	College Credit Plus (Social Studies and Science only)	Graduation Points
4 or 5	6 or 7	A or B	5
3	4 or 5	C	4
2	2 or 3	D	3
1	1	N/A	1

Retaking Exams

Students who score below proficient on an exam may retake it after receiving extra help on the course content. Students who score proficient or higher on an end-of-course exam may retake the exam only if, once they take all exams, they have not met the minimum number of graduation points needed to graduate. In such a case, a student may retake any exam after receiving help on the course content. These same provisions shall apply to substitute exams, which may be used interchangeably with approved tests.

Transfer Students

Students who transfer into a district with no previous test scores will have their graduation point requirement prorated. The table below shows how the points change based on the number of tests remaining:

Tests Remaining	Points Required for Graduation
7	18
6	15
5	13
4	10
3	8
2	5

Note: Students must earn a minimum of five points across the English II and either the Integrated Mathematics II or Geometry end-of-course tests.

Students must also test in any course that they have not yet completed if the course has a corresponding end-of-course test. Therefore, if a student transfers in with only Biology and American Government left to take, the student would be required to take the Biology, American Government, English II, and Geometry (or Integrated Math II) tests, and earn a total of 10 points, five of which must come from the English and mathematics tests.

If a student transfers in with only one test or no tests remaining, the student may take the college and career readiness tests. If the student meets the remediation-free scores on the ACT or SAT, they will have satisfied the assessment component of the graduation requirements. If the student does not earn a remediation-free score, then the student must take the English II and either the Geometry or Integrated Math II end-of-course tests plus any tests associated with courses that they have not yet taken and earn the required prorated points to satisfy the graduation requirements.

High School Credits Earned Prior to End-Of Course Exams

If a student earned transcribed high school credit in any tested courses before July 1, 2015, and a test was not available, that student will receive graduation points based on his or her grade in the course.

Final HS Course Transcribed Grade Earned	Ohio Graduation Points
A	5
B	4
C	3
D and passed course	2

Requirements for Earning an Honors Diploma

A student may earn an honors diploma by meeting the following:

1. Completion of all Northmont High School graduation requirements as set by the Northmont Board of Education.
2. Meet the criteria as set forth below in (A) or (B) for the curriculum taken by the student.
 - A. In addition, a student who completes the college preparatory curriculum in high school must meet any seven of the following eight criteria:
 - Four credits in English language arts
 - Four credits in mathematics including Algebra I, Geometry, Algebra II, & one additional credit of higher-level math or a four year sequence of courses that contain equivalent content
 - Four credits in science that include instructional emphasis on the physical, life, Earth and space sciences. The total of four science classes must include Physics and Chemistry
 - Four credits in social studies
 - Either three credits of one foreign language or two credits each of two foreign languages
 - One credit in fine arts
 - Maintain an overall high school grade point average of at least 3.5 on a four-point scale up to the last grading period of the senior year
 - Obtain a composite score of 27 on the American College Test (ACT) or a total score of 1210 on the Scholastic Assessment Test (SAT)
 - B. In addition, a student who completes an intensive career-technical education curriculum in high school must meet any seven of the following eight criteria:
 - Four credits in English language arts
 - Four credits in mathematics including Algebra I, Geometry, Algebra II, & one additional credit of higher-level math or a four year sequence of courses that contain equivalent content
 - Four credits in science that develop concepts for physical, life, Earth, and space sciences. The total of four science classes must include Physics and Chemistry.
 - Four credits in social studies
 - Four credits in the student's career-technical education curriculum
 - Maintain an overall high school grade point average of at least a 3.5 on a 4.0 scale up to the last grading period of the senior year
 - Obtain a composite score of 27 on the American College Test (ACT) or a total score of 1210 on the Scholastic Assessment Test (SAT)
 - Achieve the proficiency benchmark established for the appropriate Ohio Career-Technical Competency Assessment or the equivalent.

Class Rankings, Valedictorian, and Salutatorian

For the purposes of establishing class rank and determining valedictorian and salutatorian honors, the following definitions shall apply:

Grade Point Average (GPA): The numerically calculated average of all grades earned based on a 4-point scale (A=4, B=3, C=2, D=1, F=0) and the credit value of the course.

Quality Point: A multiplier used to recognize the more rigorous academic standards demanded by courses designed as Advanced Placement (AP), Advanced, or Honors (H). College Credit Plus courses in core subject areas may have AP or honors weighting.

Quality Point Average (QPA): The numerically calculated average of all grades earned based upon the grade point achieved on a 4-point scale, the use of any quality point multipliers, and the credit value.

For purposes of establishing class rank, the following procedures shall apply:

1. Grade point average and quality point average will be computed for all students using final grades for all courses on an ongoing basis.
2. Grades for honors, advanced, and/or AP courses shall be calculated to reflect the more rigorous academic standards demanded by such courses. Assigning quality points to the grades earned in the aforementioned courses as follows shall create the calculated factor:
 - A. The value of the grade in an honors/advanced course shall be multiplied by 1.1
 - B. The value of the grade in an AP course shall be multiplied by 1.2
 - C. The value of the grade for an honors/advanced course or an AP course, after being enhanced by the quality points calculation, shall be computed into a quality point average (QPA) for purposes of determining class rank. QPA is not used to determine Honor Roll.
3. To compute the grade point average, only courses for which credit counts toward graduation are to be considered.
4. Foreign exchange students shall not be considered in computing class rank and, therefore, will not be eligible for academic honors.

For purposes of determining valedictorian and salutatorian honors, the following procedures shall apply:

1. To be eligible for valedictorian or salutatorian honors, a student must be enrolled at NHS prior to, and continuously following, the tenth school day of the student's senior year.
2. To compute the grade point average, only courses for which credit counts toward graduation are to be considered.
3. The valedictorian shall be the student with the highest grade point average as computed at the end of the eighth semester of the senior year. QPA will not affect this determination.
4. The salutatorian shall be the student with the second highest grade point average as computed at the end of the eighth semester of the senior year. QPA will not affect this determination.
5. For the purpose of identifying prospective valedictorians and salutatorians for the newspapers, television stations, valedictorian speeches at graduation, etc., we will be using the following procedure:
 - A. Final grades for all courses taken during the first seven semesters
 - B. All final third quarter grades of the senior year
 - C. The first semester and third quarter average of yearlong classes of the senior year
6. Foreign exchange students shall not be considered in computing class rank and, therefore, will not be eligible for these particular academic honors.

College Credit Plus

Northmont High School is partnering with Sinclair Community College and Wright State University to offer several College Credit Plus courses. This program allows students to earn both high school and college credit concurrently. All college credit plus courses taken at Northmont High School will transfer to any Ohio public college or university. College Credit Plus courses are listed in the Northmont High School Program of Studies, along with grade levels, prerequisites, and corresponding college courses. Students taking these courses will receive the weighting of the highest weighted course in that content area. These classes will be taught at Northmont High School during regular school hours, at no additional cost to students. The classes will be taught by Northmont staff, or in some cases, taught by Northmont and college staff. Any student wishing to pursue a College Credit Plus option for next year must see their Northmont counselor and turn in all appropriate applications and forms by April 1, 2017.

Planned College Credit Plus Courses for 2017-18 school year:

College English Composition	College Western Civilization	College Spanish II
College Communications	College Psychology	College Spanish III
College Algebra III	College Sociology	College Art/Drawing
College Pre-Calculus	College Biology	College Health

Due to negotiations with area colleges and universities, legislature changes, and enrollment, the College Credit Plus courses are subject to change at any point prior to the first day of school.

Service for Gifted Students at Northmont High School

Gifted students have many opportunities to have their unique learning needs met at NHS through honors, AP, and College Credit Plus courses. Below is a table that explains which classes provide gifted service:

Gifted Identification Area	Honors Courses	AP Courses	College Credit Plus Courses at NHS*
Math	Geometry Advanced Algebra II Advanced Pre-Calculus Calculus	AP Statistics AP Calculus AB AP Calculus BC	College Algebra III College Pre-Calculus
Reading	English Language Arts 9 Advanced English Language Arts 10 Pre-AP English Language Arts 11 Advanced English Language Arts 12 Advanced	AP English 11: Language and Composition AP English 12: Literature and Composition	College English Composition College Communications
Science	Biology I Advanced Chemistry I Advanced Chemistry II Human Anatomy and Physiology	AP Biology AP Chemistry AP Physics I AP Physics II	College Biology
World Language	German IV Spanish IV		College Spanish II College Spanish III
Social Studies	American Government Constitution II	AP American History AP American Government AP Human Geography AP Economics	College Psychology College Sociology College Western Civilization
Visual Performing Arts	Grade 12 Wind Ensemble Grade 12 Chamber Orchestra Grade 12 Show Choir	AP Studio Art/Drawing	College Drawing I

Gifted students who are interested in coursework that is not provided at NHS can also take classes through the College Credit Plus option. These courses, if they match a student's area of identification, are also considered gifted service.

A student who is identified as superior cognitive ability or gifted in creative thinking can be challenged through any of the above courses.

*Due to negotiations with area colleges and universities, legislature changes, and enrollment, the College Credit Plus courses are subject to change at any point prior to the first day of school.

Flexible Credit

Northmont City Schools recognizes that a superior educational program is one that allows each student the opportunity to individualize learning around needs and interests. Flexible credit is one method to motivate and increase student learning as it shifts from seat time to performance. The intent of flexible credit is to meet increased expectations for high school graduation in response to globalization, technology, and the demand for 21st century skills. If a student wishes to participate in a flexible credit opportunity, that student must complete individual flexible credit plan paperwork in which the student will identify the flex credit intent, total credit requested, the learning objectives that will be mastered once the plan is completed, and a timeline for plan completion. This paperwork will be available in the Northmont High School Counseling Center. Earning of flexible credit may take on a variety of experiences; therefore, there is no single method of final evaluation. Students have the responsibility to state how credit is to be earned. This may include a panel presentation by the student, a research paper, a demonstration, a final project, a portfolio, a performance, and/or an acceptable score on an end of course assessment. However, earning credit is not limited to any one or combination of these ideas.

Deadlines for submitting plan paperwork will be May 1 for summer and first semester and November 1 for second semester. Once submitted, a review panel consisting of the principal or his designee, a representative from the content area of the learning opportunity, a counselor, and other staff as appropriate, will review the flexible credit plan proposal to determine if it meets the rigorous, measurable expectations for high school credit. Students are responsible for any cost incurred by participation in a flexible credit plan.

All flex credit classes must be added and dropped within the same timeline of adding and dropping courses as other standard classes at Northmont High School. The student is responsible for completing all assignments or projects agreed upon in the flexible credit plan, and completing demonstration or mastery assessments by specified times to receive grades and resulting credits. The review panel will determine if the student has met the requirements of the plan and award credit when earned. It is the student's responsibility to complete the approved credit plan, and the student's responsibility to meet any checkpoint dates. Failure to finish the approved plan will result in a grade of F for the flexible credit course.

Planning for the High School Years

The Northmont High School day is composed of seven 50-minute periods. While some students select courses that utilize all 7 periods, a "full schedule" is not necessarily recommended for all students. Care should be taken in selecting courses, as schedule changes are not always feasible or possible. The bullets indicate courses that are required for graduation. Some options are available in that all required courses do not need to be taken during the prescribed year. Attendance in summer school or postponing a course may open up a schedule for additional electives. If other options are desired, it is suggested that the student and parent remain in contact with the counselor to ensure the correct sequence is followed.

The following is the suggested freshman course of study:

- English language arts - year course
- Math - year course
- Science - year course
- World history - year course
- PE I - semester course
- Fine arts - semester course
- Additional electives

The following is the suggested sophomore course of study:

- English language arts - year course
- Math - year course
- Science - year course
- PE II - semester course
- Health - semester course
- American history - year course
- Fine arts - semester course
- Additional electives

The following is the suggested junior course of study:

- English language arts - year course
- Math - year course
- American government - year course
- Science - year course
- ACT Preparation - semester course
- Additional electives

The following is the suggested senior course of study:

- English language arts - year course
- Math - year course
- Electives or core courses that meet student's college or career plans

Vocational Training

Sophomores have the option of applying to the MVCTC program for their junior and senior year. The required courses for the freshman and sophomore year should be met prior to attending the MVCTC. Please see Requirement Criteria chart at the end of the Program of Studies.

Special Considerations When Scheduling

The issuance of credits: Partial credits will not be issued. Students must complete the course as stated in the Program of Studies to earn credit. For example, a student cannot enroll in a class that is listed as a one-credit course and leave that class at the end of the first semester and receive 1/2 credit. Credits will only be issued upon completion of the course.

Attention MVCTC students: MVCTC students will not be permitted to schedule classes at Northmont High School. Due to the conflict with this building's time schedule and the time schedule at the MVCTC, course requirements are not being completely met. Therefore, all potential MVCTC students are advised to complete all requirements by the completion of their sophomore year, or during summer school.

Preparation for College

Students who plan to attend a four-year college should prepare themselves by meeting the highest criteria they are capable of achieving. Requirements vary from college to college and from one major to another major within the same university. Colleges are not attempting to limit the admission of students; rather, they are trying to ensure the success of their students by having them well prepared. Most state-assisted universities have approved specific requirements for unconditional admissions. The safest high school curriculum recommended for unconditional admission specifies:

- Four years of English language arts
- Four years of college preparatory math (Algebra I and above)
- Three years of science
- Three years of social studies
- Two years of a foreign language
- One year of a visual or performing art

In order to understand the possible consequences of curriculum choices, students and parents should keep in close contact with their school counselors.

NCAA

Freshman Eligibility Standards

All student athletes must register with the NCAA Eligibility Center. The NCAA Eligibility Center can be accessed at www.ncaaeligibilitycenter.org or by calling 877-262-1492. Approved core courses are noted in the program of studies by NCAA Approved. Please note, it is ultimately the responsibility of the student to make sure they are registered with the NCAA and have met all requirements for eligibility.

Schedule Adjustments and Changes

Students, counselors, and administrators expend considerable time and effort in developing student schedules for each quarter of the school year. Student choices are made on the basis of thorough student orientation, examination of the program of studies, and opportunities for student, counselor, teacher, and parent input. At the time student schedules are finalized, it becomes the responsibility of the student to attend, participate in, and successfully complete all scheduled classes. School personnel recognize that a student may have selected courses that are inappropriate for the student's personal or educational goals. For this reason, guidelines have been established for the process of necessary schedule changes and adjustments.

Dropping Classes

A student may initiate a schedule adjustment by following the procedure indicated below:

1. The student should obtain a "Schedule Change Request Form" from the counseling center. This form should be properly completed with all required statements and signatures and returned to the appropriate counselor.
2. It is the student's responsibility to attend the class in question during the period of time that the allowable request is being reviewed by the counselor.
3. The counselor reviews the request using the following criteria:
 - No more than one credit may be dropped from or added to the schedule
 - Minimum number of credits for that grade level
 - A student should be enrolled in course work totaling a minimum of one and a quarter (1-1/4) credits each quarter. This equates to five (5) classes, not to include PE courses. Students needing to maintain eligibility for extracurricular activities are required to pass 1-1/4 credits each quarter.

***Requests for teacher changes will not be considered.**

A student is permitted to withdraw from a course no later than the tenth (10th) school day of a first semester or yearlong course; or the fifth (5th) school day of a second semester course, and will receive a grade of "W" and no credit on the final grade card.

Students who are permitted to withdraw from a course after the above stated deadlines will receive a final grade of "F", and the grade will be used in the calculation of the cumulative grade point average. This course will become part of the permanent record and will be posted on all transcripts. Partial credit will not be issued. Credit will be issued only upon completion of the course requirements as stated in the Northmont Program of Studies.

Adding Classes

Students may be permitted to add courses to their schedules by contacting their counselor and requesting to add a class. Once school begins, many class changes cannot be accommodated due to the classes being full and course conflicts.

The student may not add a class after the tenth (10th) school day of a first semester or yearlong course, or the fifth (5th) school day of a second semester course.

Course Movement within a Department - Teacher Initiated

1. The procedures for moving from one class to another within the same department are as follows:
2. The classroom teacher and student discuss the possibility of being misplaced in the present course. Consideration will be given to the change providing the student has demonstrated satisfactory effort and behavior and is attaining below average grades.
3. The classroom teacher will initiate and discuss with the student's counselor the need of a course/level change. If necessary, the counselor will have the sending teacher complete the "grade earned" form.
4. The counselor will review the situation with the student and give to the student the "Schedule Change Request Form". This form should be properly completed with all required statements and signatures and returned to his/her counselor.
5. After all forms are completed; the counselor will talk with the "receiving" teacher concerning the class change. If the change is made, the sending teacher provides the student's grade-to-date to the receiving teacher.
6. This necessary movement of a course/level needs to occur by the end of the first nine weeks. Any other course movement needs to follow the above procedure and have administrative approval.

Course Listings

Applied Technology

Pre-Engineering Drawing **6600****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit**

In this course, students will cover the basic methods of preparing mechanical drawings. Experiences such as measurement, lettering, drafting techniques, sketches, orthographic projection, machine drawings, and pictorial projections will be covered. Students will use computer aided drawing programs such as Sketch-Up, AutoCAD, and Fusion 360 to learn fundamentals and advanced techniques of sketching, drawing, modeling, assembling, and simulating. Students will also gain a basic understanding of the principles of computer based drafting (CAD) and modeling and simulation. They will use all of the skills they acquire to complete two designs and build projects.

Graphic Design **6800****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit**

In this course, students will be exposed to programs and processes used in Graphic Design. They will concentrate on basic elements and principles of design and use the design process to solve design challenges. Students will be exposed to hands-on printing techniques when they design their own t-shirt as well as computer software in the Adobe Design Suite during various computer-based design projects.

Graphic Design II **6805****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit**

Students will be engaged in advanced graphic design processes. Students will use multiple computer programs and design techniques to develop enhanced movies, animation, design, and Photoshop projects.

Introduction to Programming & Computer Concepts **6825****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit**

Students will be introduced to programming concepts using the basic language, the JAVA language and HTML code. Students will also learn how the software programs they create run on computers, hardware and software concepts and how to install, operate, and maintain computer systems with computer security measures.

STEM Modeling and Simulation **6850****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit**

Modeling and simulation is a STEM (science, technology, engineering, and mathematics) class that has been developed by the Dayton STEM Center. Goals of the class are to expose students to modeling and simulation skills used by professionals and help them explore opportunities in the modeling and simulation profession. Students will use a wide variety of modeling and simulation computer applications such as Microsoft Excel, Sketch-Up, Fusion 360, Scratch, Python, Unity3D, and Unreal Engine 4. The course contains a capstone project where students must create a school evacuation simulation using knowledge gained throughout the semester.

STEM Introduction to Video Game Development **6855**

Gr: 9-10-11-12 **Length: Sem.**

Credit: 1/2 credit

Prerequisite: Satisfactory completion of Modeling and Simulation

In STEM Introduction to Video Game Development, students will gain an introductory understanding of the video game industry, game development life cycle, and the technology used to make video games. Students will explore 3D modeling and texturing using the professional-grade computer applications 3ds Max. Students will also learn the fundamentals of computer programming through the use of Scratch, Python, and Unreal Engine 4. The course contains a capstone project where students must work together as a team to create a playable video game using knowledge gained throughout the semester.

Technology Manufacturing/Integrated Production Technologies **6860**

Gr: 9-10-11-12 **Length: Sem.**

Credit: 1/2 credit

Using the STEM approach of project-based learning, students will study robotics, sensors, and coding. Applying math and natural science concepts to projects will show students practical uses of math and science concepts learned in previous classes. This college and career ready course will be an introduction to advanced manufacturing processes and will allow for career exploration. Attempts will be made to offer internship possibilities to interested students.

Principles of Engineering **6865**

Gr: 10-11-12 **Length: Yr.**

Credit: 1 credit

Prerequisites: Satisfactory completion of Algebra I

This course is designed for students interested in pursuing Aerospace Engineering or General Engineering. Various technology systems and manufacturing processes will be explored.

Intro To Engineering Design I **6870**

Gr: 9-10-11-12 **Length: Sem.**

Credit: 1/2 credit

Prerequisite: Satisfactory completion of Algebra I

This course teaches problem-solving skills. Models of product solutions are created, analyzed, and communicated using computer design software. Using 3-D computer modeling software, students learn the design process and solve design problems.

Intro To Engineering Design II **6875**

Gr: 9-10-11-12 **Length: Sem.**

Credit: 1/2 credit

Prerequisite: Satisfactory completion of Intro To Engineering Design I

Students will receive advanced training using software to solve design problems as they develop, analyze, and create product models.

Aerospace Engineering I **6880**

Gr: 10-11-12 **Length: Yr.**

Credit: 1 credit

This course will explore the physics of flight through hands on learning. Topics include: engineering ballistics, propulsion, flight, and other topics related to the field of aeronautics. The course will engage students through project-based learning and real-life scenarios. Students will learn to analyze data with respect to flight. The class will provide students with a path to become a certified Lab View Associate Developer and prepare the student to earn other relevant industry certification.

Woodworking I **6900**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

This semester course will introduce students to woodworking and project construction. The first quarter will emphasize hand tool use, wood identification, basic joinery, power tool operation, and shop safety. The second quarter will be used to construct a wood project using the tools and techniques learned in the first part of the course. Sanding techniques will be covered and project finishing will be demonstrated when construction of the project is complete. The successful completion of Wood Technology is necessary to advance to Custom Craftsmanship in Woods that is the second year Wood Technology class. There will be an additional project fee to pay for wood used for each selected project. Fees vary depending on project size.

Woodworking II **6920**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit

Prerequisite: Satisfactory completion of Woodworking I

This course is an expansion of the skills students gained in Woodworking I. The course will stress the use of hand and power tools in the safe production of two major projects. Students will develop a good understanding of design and layout, advanced construction techniques, and joinery in the cabinet making process. The course will also include units in refinishing and refurbishing furniture, wood identification, and tool and machine maintenance. There will be an additional project fee to pay for wood used for each selected project. Fees vary depending on project size.

Woodworking III **6940**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit

Prerequisite: Instructor approval

This course is for the student woodworker who has completed the first two woodworking courses and still has a desire to expand his or her knowledge of the craft. The focus of this course will concentrate on allowing students to specialize and utilize their talents to develop artisan skills in cabinet making and furniture building. The goal of the course is to provide an avenue for students who have a strong talent and interest in pursuing advanced techniques in this area. There will be an additional project fee to pay for wood used for each selected project. Fees vary depending on project size.

Art

A lab fee is required for Art classes. Fee rates are approved by the Board of Education and are subject to change.

Arts and Crafts **8300**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

This is a basic crafts class that introduces students to several craft areas. Students will learn basket coiling, soft sculpture, paper mache masks and bowls, jewelry, and other basic crafts.

Fundamentals of Drawing I **8320**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

The course will focus on the basic skills of drawing such as simple perspective, accurate proportions, composition, and tonal values using pencil, charcoal, and other drawing materials. Projects will include still life studies of objects, landscapes, people, personal expression, and creativity.

Fundamentals of Drawing II **8325**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Satisfactory completion of Fundamentals of Drawing I

This course is an extension of the skills developed in Fundamentals of Drawing I. Students will be introduced to more complex drawing techniques such as 2 pt. and 3 pt. perspective as well as more observational/life drawings with an emphasis on total development.

Fundamentals of Drawing III **8330**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Drawing I and Drawing II

This course further develops drawing skills and techniques learned in Fundamentals of Drawing II and I. Students will be challenged with more complex techniques/subject matters. Students will be working more independently than in previous drawing courses, choosing medium and theme of most projects.

College Art **83000**
Gr: 11-12 **Length: Sem.**
Credit: 1 credit HS/3 semester credits Drawing I WSU QPA weighting 1.2

Prerequisite: Completion of prior art courses with a B average is recommended, including Fundamentals of Drawing II

In this course, students will be introduced to materials, techniques, and concepts of drawing.

AP Studio Art /Drawing **8265**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit

This course is designed for the serious art student who wants to pursue a career in art. Students will work independently with teacher supervision to create an AP Drawing portfolio consisting of approximately 30 pieces of artwork. Students should expect college level work and assignments.

Photography **8345**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit

Students will study digital photography as an art form and what goes into good composition. Students will understand the operation of a digital camera and photography editing software. Also, there will be short study of the history of photography. Students must provide a minimum of a 3.5 mega-pixel digital camera. There will be additional fees for photo paper based on individual usage.

Photography II **8350**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Satisfactory completion of Photography I with a grade of "C" or better

In Photography II students will build upon what they learned in Photography I. Students will submit project proposals and spend the semester building a portfolio. As students start to master Photoshop they will be granted new creative freedoms.

Graphic Novel/Comic Design **8355**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Satisfactory completion of Fundamentals of Drawing or teacher recommendation

Students will learn techniques and skills needed in drawing graphic illustrations and comics, with the goal of producing a graphic novel.

Art I **8205**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

Art I covers basic art skills. This includes instruction in media, techniques, and the elements and principles of art. Students will explore art criticism, art history, studio production, and aesthetics.

Art II **8210**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Art I or permission of instructor

Art II is the 2nd semester of the art major program. This course is a continuation of the skills offered in Art I.

Beginning Ceramics **8270**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

Beginning Ceramics offers the student an opportunity to work in clay to establish techniques and principles in both hand-built and wheel-thrown ceramic forms. This course also includes preparation of clay, decorative qualities, and glazing.

Ceramics II **8271**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Satisfactory completion of Beginning Ceramics or Instructor Approval

Ceramics II will offer students an opportunity to advance their skills in design and form, and strengthen their skills in hand building and advanced wheel techniques.

Ceramics III **8272**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Instructor approval

This course is designed for students who want to increase their 3-D design skills. A strong emphasis will be placed on quality and craftsmanship in all aspects of ceramics. Students will get more intense training on the Potter's wheel, hand building, glazing, and firing techniques.

Beginning Painting **8280**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

Beginning Painting includes media and techniques in various methods of painting. Students learn watercolor painting, tempera painting, and acrylic painting. History of painting is included in instruction.

Painting II **8281**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Satisfactory completion of Beginning Painting.

Painting II students will learn new techniques and build on skills learned in Beginning Painting. Students will have more freedom of choice in projects and materials. Students will continue to explore new ideas and the history of painting.

Painting III **8282**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Satisfactory completion of Painting II.

Painting III is an advanced option for students who have taken Painting II and I. Students will have more freedom of choice in projects and materials. Students will learn advanced painting techniques.

Business and Marketing

Personal Finance **5100****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit**

Students will learn the skills required to live on their own after high school and college. The personal finance course has students think of themselves as being on their own financially. The course will have students write checks, complete check registers, and create budgets. Students will have experience with opening checking and savings accounts, renting an apartment, buying a car, looking for a job, practicing safety when shopping and banking online, investing in different types of investments, and much more. The course will be unique for each student based on his or her interests and needs.

Entrepreneurship **5520****Gr: 11-12****Length: Yr.****Credit: 1 credit**

Students will learn how to start, finance, and manage their own business. Each student will develop a Business Plan Project for their own business, integrating the entrepreneurial concepts taught throughout the class. Students will study all aspects of starting a business such as the business idea generation process, how to manage their business, how to conduct market research, and learn how marketing and advertising are involved when starting a business.

Business Foundations **5630****Gr: 10-11-12****Length: Sem.****Credit: 1/2 credit**

Students will gain an overall understanding of general business. Students will learn about economic resources used in producing goods and services, marketing, entrepreneurship, ethics, and career planning. Students will complete a number of projects and fun assignments connected to current events. Students will also learn how to use a number of software programs.

International Marketing **5635****Gr: 10-11-12****Length: Yr.****Credit: 1 credit**

Students will gain an understanding of the ever-growing marketplace and how it is affecting business internationally. Students will study the many cultures of the world and how to properly conduct business with different cultures. Students will also learn how foreign exchange, imports and exports, and marketing and advertising techniques can affect the way business is done internationally. It is encouraged that students take a business or marketing course prior to taking this course.

Introduction to Marketing **7025****Gr: 10-11-12****Length: Sem.****Credit: 1/2 credit****Prerequisite: Application/Teacher Approval**

Introduction to Marketing is designed to introduce students to basic marketing concepts and fundamentals. Students will explore careers and opportunities in this expanding field. Activities are designed with local businesses to provide real world experiences in marketing, management, and operations. Along with class work, students will also be members of DECA, a student organization that enhances classroom learning through DECA's Comprehensive learning program.

Marketing Education I**7030****Gr: 11-12****Length: Yr.****Credit: 1 credit****Prerequisite: Approval for admission by the Marketing Education Coordinator**

This course is a program that serves as a springboard to students desiring Marketing as a career. The marketing program will provide an excellent background for students planning to attend college or a trade school. The course content includes marketing research, market planning, marketing strategy, market situation analysis, product promotion, and marketing management. Along with class work, students will also be members of DECA, a student organization that enhances classroom learning through DECA's Comprehensive learning program. Students enrolling in this course should consider taking Marketing Education II their senior year.

Marketing Education II**7035****Gr: 12****Length: Yr.****Credit: 1 credit****Prerequisite: The student must have 15 credits, be at least 16 years of age, and be approved for admission by the Marketing Education Coordinator and Guidance Counselor.**

Marketing Education II is a continuation of Marketing Education I. It is a program of studies for students planning a business career or interested in business. The course content stresses the development of certain mental, physical, and social attributes that are needed for marketing studies. Student involvement in various research and civic projects help develop certain personal characteristics that are useful in a marketing environment. This class meets one period per day and students earn one credit. Along with class work, students will also be members of DECA, a student organization that enhances classroom learning through DECA's Comprehensive learning program.

World Language

German I**1720****Gr: 9-10-11-12****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Satisfactory completion of English with a "C" or better is recommended**

This course serves as an introduction to the German language and culture. This course is taught utilizing textbooks, workbooks, technology, and authentic resources to prepare students for real-world language use. A variety of activities will be used to improve students' abilities to read and communicate in German. Students will create portfolios based on ACTFL and OFLA standards to showcase their proficiency growth.

German II**1730****Gr: 10-11-12****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Satisfactory completion of German I with a "C" or better is recommended**

This course continues to build students' knowledge of the German language and culture. This course is taught utilizing textbooks, novels, magazines, technology, and authentic resources to prepare students for real-world language use. A variety of activities will be used to improve students' abilities to read and communicate in German. Students will continue to build their portfolios based on ACTFL and OFLA standards to showcase their proficiency growth.

German III **1740**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**
Prerequisite: Satisfactory completion of German II with a "C" or better is recommended
This course reinforces and continues to build upon students' knowledge of the German language and culture. This course is taught utilizing textbooks, novels, magazines, technology, and authentic resources to prepare students for real-world language use. A variety of activities will be used to improve students' abilities to read and communicate in German. Students will continue to build their portfolios based on ACTFL and OFLA standards to showcase their proficiency growth. Upon completion of this course, students will have mastered novice level collegiate German.

German IV (H) **1750**
Gr: 12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**
Prerequisite: Satisfactory completion of German III with a "B" or better is recommended
This weighted course reinforces and continues to build students' knowledge of the German language and culture. This course is conducted primarily in German and students are expected to use the target language daily. This course is taught utilizing novels, magazines, technology, and authentic resources to prepare students for real-world language use. A variety of activities will be used to improve students' abilities to read and communicate in German. Students will complete their portfolios based on ACTFL and OFLA standards to showcase their four years of proficiency growth. Upon completion of this course, students will have mastered intermediate level collegiate German.

Spanish I **1820**
Gr: 9-10-11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**
Prerequisite: Satisfactory completion of English with a "C" or better is recommended
This course serves as an introduction to the Spanish language and culture. This course is taught utilizing textbooks, workbooks, technology, and authentic resources to prepare students for real-world language use. A variety of activities will be used to improve students' abilities to read and communicate in Spanish. Students will create portfolios based on ACTFL and OFLA standards to showcase their proficiency growth.

Spanish II **1830**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**
Prerequisite: Satisfactory completion of Spanish I with a "C" or better is recommended
This course continues to build students' knowledge of the Spanish language and culture. This course is taught utilizing textbooks, novels, magazines, technology, and authentic resources to prepare students for real-world language use. A variety of activities will be used to improve students' abilities to read and communicate in Spanish. Students will continue to build their portfolios based on ACTFL and OFLA standards to showcase their proficiency growth.

Spanish III **1840**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**
Prerequisite: Satisfactory completion of Spanish II with a "C" or better is recommended
This course reinforces and continues to build upon students' knowledge of the Spanish language and culture. This course is taught utilizing textbooks, novels, magazines, technology, and authentic resources to prepare students for real-world language use. A variety of activities will be used to improve students' abilities to read and communicate in Spanish. Students will continue to build their portfolios based on ACTFL and OFLA standards to showcase their proficiency growth. Upon completion of this course, students will have mastered novice level collegiate Spanish.

Spanish IV (H)	1850
Gr: 12	Length: Yr.
Credit: 1 credit	NCAA Approved
Prerequisite: Satisfactory completion of Spanish III with a "B" or better is recommended	
This weighted course reinforces and continues to build students' knowledge of the Spanish language and culture. This course is conducted primarily in Spanish and students are expected to use the target language daily. This course is taught utilizing novels, magazines, technology, and authentic resources to prepare students for real-world language use. A variety of activities will be used to improve students' abilities to read and communicate in Spanish. Students will complete their portfolios based on ACTFL and OFLA standards to showcase their four years of proficiency growth. Upon completion of this course, students will have mastered intermediate level collegiate Spanish.	

College Spanish II (H)	18000
Gr: 10-11-12	Length: Yr.
Credit: 1 credit HS/4 sem. credits Elementary Spanish 1101 Sinclair	NCAA Approved
	QPA weighting 1.1
Prerequisite: Completion of prior Spanish I course with a B average is recommended	
This course will provide a foundation for understanding, speaking, reading and writing Spanish.	

College Spanish III (H)	18150
Gr: 11-12	Length: Yr.
Credit: 1 credit HS/4 sem. credits Elementary Spanish 1102 Sinclair	NCAA Approved
	QPA weighting 1.1
Prerequisite: Completion of prior Spanish II course with a B average is recommended	
This course will provide a foundation for understanding, speaking, reading and writing Spanish.	

College Spanish IV (H)	18300
Gr: 11-12	Length: Yr.
Credit: 1 credit HS/3 sem. credits Intermediate Spanish 2201 Sinclair	NCAA Approved
	QPA weighting 1.1
Prerequisite: Completion of College Spanish II (16-17 school year) or Spanish III with B average is recommended; or a sufficient score on the WEBCAPE Placement Exam.	
In this college-level course, students will reinforce and build upon their prior knowledge of the Spanish language and Hispanic cultures. Students will review and extend basic Spanish-language through composition and conversation, stressing fluency. Students will also study the traditional Northmont level III units, novels and movies.	

Health

CPR/First Aid/Health	9570
Gr: 10-11-12	Length: Sem.
Credit: 1/2 credit	
This course is composed of current health issues and practical ways of handling emergency situations. Certified health instructors and certified CPR and First Aid instructors teach this course. The students will also have the opportunity to earn CPR and First Aid cards during this course.	

Sports Nutrition/Athletic Training	9575
Gr: 11-12	Length: Sem.
Credit: 1/2 credit	
Prerequisite: Successful completion of CPR/First Aid/Health	
In this elective course, students will learn the principles of Athletic Training including prevention, assessment, evaluation, and treatment of injuries. They will also be taught the proper way to maintain a balanced and healthy diet to achieve optimal athletic performance.	

College Health **9000**
Gr: 11-12 **Length: Sem.**
Credit: 1 credit HS/ 3 semester credits Nutrition for Health & Fitness WSU QPA Weighting 1.0
Prerequisite: Successful completion of CPR/First Aid/Health with a minimum of a B average.
In this course, the students will learn the principles of Sports Nutrition by maintaining a healthy diet to achieve proper athletic performance and/or maintain a healthy personal lifestyle. The program will also incorporate food choices, disease prevention, diets, and other concepts related to proper nutrition. The students will also gain an understanding in Athletic Training that include: prevention, assessment, and treatment of injuries.

Physical Education

The Ohio Legislature allows districts to set local policy regarding waiving Physical Education credit as a graduation requirement. The Northmont Board of Education has determined that students participating in the following activities meet the standard of activity time, and may request a Physical Education credit waiver.

Any student participating in two seasons of interscholastic athletics, which includes competition cheerleading; two years of marching band; or two years of NJROTC competition teams may apply for the waiver. Any student interested in the PE waiver should consult a counselor.

Physical Education I **9000**
Gr: 9 **Length: Sem.**
Credit: 1/4 credit
This course is designed for freshmen, with emphasis on participation, every day, in a wide variety of physical activities. Students will be evaluated on their participation in the activities, proper dress, and being active. They will also be involved in the Presidential Fitness Testing to address their personal fitness levels.

Physical Education II **9100**
Gr: 10 **Length: Sem.**
Credit: 1/4 credit
This course includes both lifetime activities and team sports. Activities covered may include, but will not be limited to: basketball, flag football, softball, track and field, volleyball, archery, badminton, tumbling, juggling, tennis, outdoor recreational activities, aerobics, and fitness walking.

Functional Athletic Development **9289 & 9290**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/4
Prerequisite: Coach Recommendation
This course is open to students participating in Northmont High School athletics. Students will learn and perform weight-training principles and gain an understanding of why this development is important for their activity.

English Language Arts

Course work in Journalism and Yearbook can be counted toward the credits required for graduation but cannot be counted as a portion of the English Language Arts major or the English Language Arts graduation requirement.

English Language Arts 9 **0110**

Gr: 9

Length: Yr.

Credit: 1 credit

This course concentrates on developing composition, communication, and writing skills. The course offers major units of study in the novel, short fiction, poetry, nonfiction, and mythology. Writing assignments range from constructing complete sentences early in the year to writing competent argumentative, expository, and narrative paragraphs as students progress. The fundamentals of the research process will be improved upon through multiple, short research-based projects and essays. The State Standards will be the main focus of the curriculum, with resources such as *Romeo and Juliet*, the *Odyssey*, and a variety of other reading selections. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 9 Academic **0120**

Gr: 9

Length: Yr.

Credit: 1 credit

NCAA Approved

In this course, the first step in preparing students for college level work, students are expected to complete essays with emphasis on proficiency in the narrative, argumentative, and expository modes. In addition, students will become acquainted with the structure of the essay, including the use of organizational techniques and transitions. Research skills will be reinforced and improved upon through multiple, short research-based projects and essays. The Ohio State Standards will be the main focus of the curriculum, with resources such as *Romeo and Juliet*, the *Odyssey*, and a variety of other reading selections - both literature selections and nonfiction informational selections - serving as support.

English Language Arts 9 Advanced (H) **0130**

Gr: 9

Length: Yr.

Credit: 1 credit

NCAA Approved

Prerequisite: Required summer reading; teacher recommendation; successful completion of English Language Arts 8 with a "B" or above is recommended.

Students are required to read two pre-selected novels the summer prior to the first quarter. Summer reading lists are available in May. Students may check with their 8th grade LA teacher, counselor, the Northmont website, or the Northmont branch of the Dayton Metro Library for the list. Follow-up assignments covering summer reading will take place the first few weeks of school. This course is designed for the motivated and self-directed student who will accept the challenge of a fast-paced class. Students will be expected to choose additional selections for independent reading that should relate to the curriculum. Discussions are in greater depth and writing assignments are more complex than those in the academic level class. Students are also expected to develop a personal writing style over the course of the year. Vocabulary development, usage, and research skills are an integral part of the course. Students will read and evaluate nonfiction informational texts as well, including modern essays, narratives, and classic documents via written and oral evaluation. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 10**0210****Gr: 10****Length: Yr.****Credit: 1 credit****Prerequisite: Satisfactory completion of English Language Arts 9**

This course is designed for the student who struggles with reading comprehension and written expression and who is unsure about college plans; it also reinforces the fundamentals needed by students. It consists of reading and writing about novels, short fiction, and works of drama, such as *Macbeth* and *The Oedipus Cycle*. Nonfiction texts, including modern essays, narratives, and informational documents, will also be examined to help students build vocabulary skills, recognize author's purpose, evaluate argumentative approaches, and become aware of textual inferences. Composition emphasizes basic paragraph development and introduces the structure of the multi-paragraph theme, including the use of organizational techniques and transitions. The course will reinforce basic skills, including recognizing valid Internet sources, and citing sources. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 10 Academic**0220****Gr: 10****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Successful completion of English Language Arts 9 or 9 Academic**

This course is designed for the college bound student. Dramatic techniques as well as characteristics of tragedy are taught with the study of *The Oedipus Cycle*, *Macbeth*, and *Of Mice and Men*. Major works are supplemented by selected short fiction, poetry, and nonfiction units, which provide topics for discussion of major literary techniques. Nonfiction texts, including modern essays, narratives, and informational documents, will also be examined to help students build vocabulary skills, recognize author's purpose, evaluate argumentative approaches, and become aware of textual inferences. Composition emphasizes basic paragraph structure with supporting details, including examples and criticism, and includes the use of organizational techniques and transitions. Several grammatical elements including phrases, clauses, and sentence structures are taught and reinforced throughout the year. Most compositions are based on the reading assignments. Students will reinforce collegiate research skills through a research paper. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 10 Pre-Advanced Placement (H)**0230****Gr: 10****Length: Yr.****Credit: 1 credit****NCAA Approved**

Prerequisite: Required summer reading; teacher recommendation; successful completion of English Language Arts 9 Advanced with a "C" or above is recommended. Any student not currently enrolled in English Language Arts 9 Advanced should have the recommendation of his/her English Language Arts 9 Academic teacher.

Students are required to read two pre-selected novels the summer prior to the beginning of the fall term. Summer reading lists will be available in May (students should check with their 9th grade LA teacher and/or access the lists on the Northmont High School website). Students need to be prepared for follow-up assignments and tests concerning the summer reading selections that will be reflected in the student's first semester grades. This class encompasses many of the same concepts and skills taught in the Academic class (see 10 Academic course description), but the discussions of literature go into more depth, the composition assignment load is heavier, and additional works of literature and nonfiction are read. Students are expected to learn and demonstrate sophisticated organization, development, and sentence structure in both the expository and analytical writing modes. The students will complete a research project. The course is designed to prepare students for either English Language Arts 11 Advanced or AP English 11: English Language & Composition. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 11**0310****Gr: 11****Length: Yr.****Credit: 1 credit****Prerequisite: Satisfactory completion of English Language Arts 9 and 10**

This course is designed for the non-college bound student who struggles with reading comprehension and written expression. It reinforces basic skills in reading comprehension and written expression as the students gain an understanding of the origin and characteristics of American literature. In addition to studying units in short fiction, nonfiction, and poetry, the students will read several American novels, such as *The Great Gatsby*, and others, along with long works of nonfiction. Students will also study a dramatic work, *The Crucible*. Students will improve literary skills and develop proficiency of expression in their writing as they analyze elements of fiction and nonfiction and show relationships between literature and life experiences. Students will write a reflective essay in relation to reading assignments. Students will continue to develop their skills with multi-paragraph themes. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 11 Academic**0320****Gr: 11****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Successful completion of English Language Arts 9 Academic and 10 Academic**

This course is designed for the college bound student who is proficient at reading comprehension and written expression. Students will study the origin and characteristics of American literature and other seminal works from the Native American times to the present. Students will further develop basic literacy skills by analyzing the elements of fiction and nonfiction to see how authors manipulate these elements for their purpose. Throughout the year students will gain an understanding of the American experience and the American Dream through their study of various fiction and nonfiction works. Students will also write a formal research paper. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 11 Advanced (H)**0330****Gr: 11****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Required summer reading; teacher recommendation; successful completion of English Language Arts 10 Pre-Advanced Placement with a "B" or above is recommended. Any student not currently enrolled in English Language Arts 10 Pre-Advanced Placement should have the recommendation of his/her English Language Arts 10 Academic teacher.**

This class works with the same concepts, skills, and materials taught in the academic class, but the discussions of literature tend to go into more depth, composition assignments are more demanding, and additional works of literature are read. Students taking this course are expected to have an appreciation of literature as an art form, the ability to think and to work independently, and the skills necessary to develop a recognizable personal writing style. Students will be responsible for reading three pre-selected works the summer prior to fall term. Summer reading lists will be distributed in May. Students need to be prepared for follow-up assignments and tests concerning the summer reading selections that will be reflected in the student's first semester grade.

AP English 11: English Language & Composition**0340****Gr: 11****Length: Yr.****Credit: 1 credit****NCAA Approved**

Prerequisite: Required summer reading; teacher recommendation; successful completion of English Language Arts 10 Pre-Advanced Placement with a “B” or above is recommended. Any student not currently enrolled in English Language Arts 10 Pre-Advanced Placement should have the recommendation of his/her English Language Arts 10 Academic teacher.

This course has a two-fold focus. The AP English Language and Composition course requires nonfiction readings that give students opportunities to identify and explain author’s use of rhetorical strategies and techniques. Students will come to understand and analyze the rhetorical triangle. In addition to preparing for the May AP exam, AP English continues the progression of Northmont language arts instruction by examining American literature through the centuries. Students are required to complete assigned summer reading (five books) and are expected to test successfully on those readings in the first week of school. Also, students will be expected to read six to eight major works during the year. Students will work with various types of research and become skilled in judging the validity of both online and print materials. Students that sign-up for AP English 11 should be enthusiastic readers, good writers, and hard workers.

English Language Arts 12**0410****Gr: 12****Length: Yr.****Credit: 1 credit****Prerequisite: Satisfactory completion of English Language Arts 11**

This course is designed for students who are unsure of their post secondary plans. It includes a chronological survey of British literature, covering such major works as *Beowulf*, *The Canterbury Tales*, and *Hamlet*. Students will also read novels, essays, and short stories, and they will write reflective compositions, responses to literature, and functional documents (e.g. request for information and resumes) throughout the year. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 12 Academic**0420****Gr: 12****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Successful completion of English Language Arts 11, Academic, or Advanced.**

This course surveys World literature through the twenty-first century. The selections (novels, plays, poems, and short stories) will form the basis, which will be supported by informational texts such as literary criticism, biography, and historical/philosophical texts. Students will use the research collected from informational texts to support their own analysis of the literature. Students will write both formal compositions, including research papers, in-class essays, and informal journal entries to demonstrate comprehension and analysis of various topics, texts, and issues. Students will also be expected to participate in teacher-led and student-led discussions concerning both literary and informational texts. Some units will culminate in student synthesis of ideas in project/presentation format based on literary research. Students will also receive individualized instruction in the preparation of a college application essay. The curriculum for this course is based on the Ohio State Standards.

English Language Arts 12 Advanced (H)**0430****Gr: 12****Length: Yr.****Credit: 1 credit****NCAA Approved**

Prerequisite: Required summer reading; teacher recommendation; successful completion of English Language Arts 11 Advanced or AP English 11 with a “B” or above is recommended. Any student not currently enrolled in English Language Arts 11 Advanced or AP English 11 should have the recommendation of his/her English Language Arts 11 Academic teacher.

This course works with the same concepts, skills, and materials taught in the academic class, but the discussions of literature tend to go into more depth, composition assignments are more demanding, and additional literary works are read. Students taking this course should have an appreciation of literature as an art form, a recognition of the evolution of ideas and literary techniques, the ability to think and work independently, and the skills necessary to develop a recognizable personal writing style. Students will be responsible for reading three pre-selected novels the summer prior to the beginning of the fall term. Summer reading lists will be distributed in May. Students need to be prepared for follow-up assignments and tests concerning the summer reading selections that will be reflected in the student's first semester grades. The curriculum for this course is based on the Ohio State Standards.

College English Composition**11000 & 11200****Gr: 11- 12****Length: Yr.****Credit: 2 credit HS/3 semester credits English Composition I Sinclair****NCAA Approved****3 semester credits English Composition II Sinclair QPA Weighting 1.2**

Prerequisite: Successful completion of two units of English/Language Arts with a minimum of a B average

English Composition is comprised of two semester-long writing-intensive courses designed on basic principles and practices of rhetoric and composition. This course explores how such principles and practices can be useful for producing writing that is effective for its purpose, audience, and context.

In ENG 1101 students learn reflective, analytical and argumentative writing strategies, incorporating sources and personal experience. Students will negotiate between public and private rhetorical situations and purposes to achieve academic literacy. They will write multiple drafts using a recursive writing process as they work toward fluency in style and mechanics.

In ENG 1201, building on the skills in ENG 1101, students will develop rhetorical literacy through research, critical reading and multi-genre writing tasks. Through major and minor, cumulative and stand-alone assignments, students construct arguments and analyses, ethically incorporating academic sources while developing their own voices as writers and citizens.

Per Northmont High School requirements, a student is permitted to withdraw from a course no later than the tenth school day for a yearlong course, and a student may not add a yearlong course after the tenth school day. Students who withdraw from a course after the above stated deadlines will receive a final grade of F, which will be used in the calculation of the cumulative grade point average. This course will become part of the student's permanent college record and will be posted on all transcripts. Partial credit will not be issued.

AP English 12 Literature and Composition**0440****Gr: 12****Length: Yr.****Credit: 1 credit****NCAA Approved**

Prerequisite: Required summer reading; teacher recommendation; successful completion of English Language Arts 11 Advanced or AP English 11 with a “B” or above is recommended. Any student not currently enrolled in English Language Arts 11 Advanced or AP English 11 should have the recommendation of his/her English Language Arts 11 Academic teacher.

This course is designed to foster college level writing and literacy skills through the curricular requirements outlined in the AP Course Description in preparation for the May AP exam. Students will examine, discuss, and produce both formal and in-class essays on literature through diction, syntax, literary traditions, historical and cultural influences, and various literary devices. Students are required to complete assigned summer readings (five novels) and are expected to write in-class essays analyzing these works based on past open-ended AP Exam prompts within the first two weeks of the school year. They will continue to work with the summer reading novels throughout quarter one. Total summer reading assignments will account for approximately one half of the quarter one grade. Students will also be expected to read six to eight major works during the school year, such as *Hamlet*, *Nineteen Eighty-Four*, *A Streetcar Named Desire*, *St. Maybe*, *The Sparrow*, and *Invisible Man*, as well as selected British, American, and World poetry and prose. Each quarter students will read one independent novel outside of class and complete an in-class essay analyzing the novel's literary devices. Students will also receive direct instruction and practice over prose, poetry, and multiple-choice sections of past AP Exams. AP students culminate their studies with an intensive comparative study of three works by an author of their choice.

Etymology/Vocabulary**0525****Gr: 10-11-12****Length: Sem.****Credit: 1/2 credit****NCAA Approved**

This one semester class focuses on vocabulary skills, word origins, and the history of the English language. The focus of vocabulary development is to improve performance on the SAT and ACT college entrance exams. Curriculum includes recognition of prefixes, suffixes, and common roots. Computers are used to complete projects using the Oxford English Dictionary online.

Journalism I**0700****Gr: 9-10-11-12****Length: Yr.****Credit: 1 credit**

Students in Journalism I will learn the fundamentals of journalistic writing using AP style to write different types of news stories. They will learn the techniques of proofreading, brainstorming, advertising, photography, website design, and interviewing. Some students' writing will be published on the school news website, *The Surge*, and students will work closely with students on the journalism staff. Students electing to take this course must have a good grasp of English fundamentals and be willing to learn journalistic writing.

Journalism II-III-IV**0710 / 0720 / 0725****Gr: 10-11-12****Length: Yr.****Credit: 1 credit**

Prerequisite: Satisfactory completion of Journalism I; application and instructor approval.

Students who are part of Journalism Staff will serve as editors while perfecting skills learned in previous years of journalism class. They are responsible for creating and running *The Surge*, a 100% student-led news website. Students will brainstorm ideas, write stories, edit articles, conduct interviews, take photos, sell advertisements, maintain the website, and mentor and collaborate with other students. Some after school and/or weekend time is required for this class.

Sports Literature**0730****Gr: 12****Length: Yr.****Credit: 1 credit**

Sports Literature is a course designed to examine the connections between sports and themes of everyday life. By looking at life through the lens of sport, we will determine how sports both match the values we profess to admire in society and simultaneously defy them. To do this, we will explore various themes prevalent in sport, including but not limited to: ethics, equality, justices, honor, rivalry, cooperation, and obsession with excellence. These topics will be explored through various fiction and nonfiction titles, including *Friday Night Lights*, *Eight Men Out*, *Shoeless Joe*, *Senna vs Prost*, *Glory Road*, *Raging Bull*, *Joseph Carter*, among others. Throughout this course, the students will explore these topics through class discussions, informal writing assignments, formal academic writing assignments, and small group projects. The curriculum for this course is based on the Ohio State Standards. As some of the themes addressed in this course may be geared towards mature audiences, parental approval will be required prior to student participation.

Film and Literature**0735****Gr: 12****Length: Yr.****Credit: 1 credit**

The film analysis and composition course offers Northmont seniors the opportunity to view, critique, and analyze film through a traditional literary-analysis lens. The objective of the course is to analyze various forms of both film and literature in order to create more active, critical viewers of our world. Students will be asked to critique literary elements such as plot development, setting, characterization, stylistic choices, and theme as they apply to both traditional genres of literary study as well as film study. Students are expected to also read various informational texts and to conduct research to support their analyses in various types of written assignments such as reader/viewer response journals, in-class essays, formal essays, and class discussions and presentations. The curriculum for this course is based on the Ohio State Standards.

Yearbook I**077****Gr: 9-10****Length: Yr.****Credit: 1 credit****Prerequisite: Application**

The Yearbook I class will be introduced to all facets of photojournalism and publication design, including copywriting, graphic design and layout, photography, and marketing. Students electing to take this course must be interested in pursuing writing, graphic design, and/or photography. Students in the class will make frequent contributions to the yearbook staff and be exposed to all elements that go into creating the Northmont High School yearbook.

Yearbook Staff**0750****Gr: 11-12****Length: Yr.****Credit: 1 credit****Prerequisite: Satisfactory completion of Yearbook I, application and instructor approval**

The Yearbook staff will be responsible for planning, designing, creating, and marketing the Northmont High School yearbook. Students will be involved in all facets of its production, including copywriting, graphic design and layout, photography/photojournalism, and marketing. Students enrolled in this publication design course should be self-directed and committed to creating a high-quality product.

College Communications**10000****Gr: 12****Length: Yr.****Credit: 1 credit HS/ 3 sem. credits Effective Public Speaking 2211 Sinclair****NCAA Approved
QPA Weighting 1.2****Prerequisite: Successful completion of two units of English/Language Arts with a minimum of a B average**

This course will study the nature of communication and its effect on both personal and professional interactions. Students will explore how communication plays a vital role in the development and maintenance of relationships as well as how to effectively share and receive information. A specific focus will include the understanding and effective use of verbal and nonverbal concepts to be applied to appropriate speaking and listening skills in a variety of settings.

Technical Theatre I**0855****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit**

This course offers students instruction and practical experience in technical theatre. Major units of study will include lighting design and operation, scenery design and construction, sound reinforcement, costuming, makeup, and props. Hands-on experience with stage equipment operation and set construction will be emphasized, but classroom instruction and evaluation will also be included in the course.

Technical Theatre II**0856****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit****Prerequisite: Technical Theatre I**

Technical Theatre II students will concentrate on designing sets, lighting, sound, properties, costumes, and makeup, which will reflect an understanding of the artistic purpose and practical considerations of theatre design. Tech II students will also serve as crew chiefs for Tech I students. Students taking this course will work in teams as well as independently and must be self-motivated.

Theatre Arts I**0860****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit****NCAA Approved**

This course will offer students the opportunity to learn the techniques of acting. Emphasis is placed on the use of the voice and body, acting techniques, and stage movement. Students work with other class members in the production of scenes from plays. This course involves some written assignments and reading of plays, but the emphasis is on performance and production.

Theatre Arts II**0865****Gr: 9-10-11-12****Length: Sem.****Credit: 1/2 credit****NCAA Approved****Prerequisite: Successful completion of Theatre Arts I.**

Theatre Arts II will allow serious students of theatre to refine the acting skills they developed in Theatre Arts I. An in-depth study of different acting theories and techniques will be undertaken through both improvisation and scene work. Students will also study plays representing various styles and historical periods from an acting/production viewpoint. Directing will be introduced with each student being given the opportunity to direct a scene.

Mathematics

Math I **2400**

Gr: 9 **Length: Yr.**

Credit: 1 credit

This course covers Algebra I content in preparation for end of course exams and future math courses. Students successfully completing this course are expected to take Math II the following year. A graphing calculator is required for Math I. The instructor will use a TI-83+ or TI-84+

Algebra I **2500**

Gr: 9 **Length: Yr.**

Credit: 1 credit

NCAA Approval

The major topics covered in this course are simplifying expressions, representations of relations, functions and function notation, solving and graphing linear equations and inequalities. A graphing calculator is required for Algebra I. The instructor will use a TI-83+ or TI-84+.

Algebra I Academic **2510**

Gr: 9 **Length: Yr.**

Credit: 1 credit

NCAA Approved

Prerequisite: Completion of Pre-Algebra with a grade of (A or B)

In this course students will review concepts such as order of operations and basic math facts. The focus of Algebra will be on linear equations and functions. Students will solve and graph linear equations and inequalities with one or two variables. Students will work with exponents and be introduced to exponential equations, and will finish the year working with polynomials and solving quadratic equations. Successful completion of this course will allow students to proceed to Geometry. Graph paper and a graphing calculator are required for Algebra I. The instructor will use a TI-83+ or TI-84+ graphing calculator.

Math II **2501**

Gr: 10 **Length: Yr.**

Credit: 1 credit

NCAA Approved

Prerequisite: Math I or Algebra I

This course covers content from Algebra I and Geometry in preparation for end of course exams and future math courses. Graphing paper, a protractor, a compass, and a graphing calculator will be required for all Math II students. The instructor will use a TI-83+ or TI-84+ graphing calculator.

Geometry **2600**

Gr: 9-10 **Length: Yr.**

Credit: 1 credit

NCAA Approved

Prerequisite: Satisfactory completion of Algebra I

This course will help develop logical reasoning and knowledge of geometric figures. This course provides a solid foundation for the understanding of concepts in geometry necessary for higher math courses. Students will incorporate previously learned Algebra concepts to determine solutions to geometric problems. A graphing calculator and a compass are required for this course. The required compass can be purchased from the teacher or at a school store for approximately \$2. The instructor will use a TI-83+ or TI 84+ graphing calculator.

Geometry Advanced (H) **2625**
Gr: 9-10 **Length: Yr.**
Credit: 1 credit **NCAA Approved**
Prerequisite: A or B in Algebra I Academic or an A in Algebra I with teacher recommendation
This course works with the same concepts, skills, and materials taught in the academic class, but the discussions and problems will go into more depth and be more demanding. Students taking this course need to be ready for a faster paced lesson in which they will need to think and work independently. A graphing calculator and a compass are required for this course. The required compass can be purchased from the teacher or at the school store for approximately \$2. The instructor will use a TI-83+ or TI 84+ graphing calculator.

Consumer Mathematics **2320**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit
Prerequisite: Completion of two high school math credits
This course is devoted to the review of fundamental math skills necessary for students graduating from high school. Topics included are checking and savings accounts, taxes, installment loans and interest, acquiring different types of insurance, and making decisions about purchasing products by analyzing consumer costs. A scientific calculator, the TI 30 XII, is required for this class.

Math III **2650**
Gr: 11 **Length: Yr.**
Credit: 1 credit **NCAA Approved**
Prerequisite: Satisfactory completion of Math I or Algebra I and Math II or Geometry
This course completes the study of Geometry in preparation for its end of course exam. The course is structured to follow the Math I and Math II courses by reinforcing topics already studied; additional topics that are covered in Algebra I and Geometry will be supplemented in preparation for Algebra II or equivalent.

Algebra II **2700**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit
NCAA Approved - students will receive a maximum of one total NCAA credit for Algebra II and/or Algebra III
Prerequisite: Geometry credit and a grade of C or D in Algebra I
This class reinforces concepts learned in Algebra I. It works with the same concepts, skills, and materials taught in the academic class, but goes at a slower pace. A graphing calculator is required for Algebra II. The instructor will use a TI-83+ or TI-84+ graphing calculator.

Algebra II Academic **2770**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit
NCAA Approved - students will receive a maximum of one total NCAA credit for Algebra II and/or Algebra III
Prerequisite: Geometry credit and a C or better in Algebra I
This course will extend the material studied in Algebra I. It includes variable relationships, functions, and geometric and algebraic concepts connected to topics in probability, statistics, logarithms, and trigonometry. Special emphasis is given to the concept of change as embodied in polynomial, exponential, logarithmic, and trigonometric functions. A graphing calculator is required for Algebra II. The instructor will use a TI-83+ or TI-84+ graphing calculator.

Algebra II Advanced (H) **2780**
Gr: 10-11-12 **Length: Yr.**

Credit: 1 credit

NCAA Approved – students will receive a maximum of one total NCAA credit for Algebra II and/or Algebra III

Prerequisite: A Geometry credit and an A in Algebra I

This course works with the same concepts, skills, and materials taught in the academic class, but the discussions and problems will go into more depth and be more demanding. Students taking this course need to be ready for faster paced lessons in which they will need to think and work independently. Algebra II Advanced is designed for those students who wish to go on to Pre-Calculus, then onto Calculus. A graphing calculator is required for Algebra II Advanced. The instructor will use a TI-83+ or TI-84+ graphing calculator.

Polynomials and Functions **2782**
Gr: 11-12 **Length: Yr.**

Credit: 1 credit

Prerequisite: Completion of Algebra II with teacher recommendation

This course will help develop logical reasoning and knowledge of Algebra topics. This course provides a solid foundation for the understanding of concepts in Algebra necessary for higher math courses. Students will incorporate previously learned Algebra concepts to review and advance those ideas. A graphing calculator is required for this course. The instructor will use a TI-83+ or TI-84+ graphing calculator.

Algebra III **2785**
Gr: 11-12 **Length: Yr.**

Credit: 1 credit

NCAA Approved – students will receive a maximum of (1) total NCAA credit for Algebra II and/or Algebra III

Prerequisite: Algebra II credit

The focus for Algebra III will be complex numbers, the algebra of functions, exponential and logarithmic functions, trigonometric functions, trigonometric identities, conic sections, systems of equations, and matrices. Successful completion of Algebra III will allow students to proceed to Pre-Calculus. A graphing calculator is required for Algebra III. The instructor will use a TI-83+ or TI-84+ graphing calculator.

Statistics AP **2790**
Gr: 11-12 **Length: Yr.**

Credit: 1 credit

NCAA Approved

Prerequisite: Outstanding completion of Algebra III, Pre-Calc, or with recommendation of an Algebra II teacher

This college-level course will include topics in exploring data, planning a study, using probability as it relates to distribution of data, and applying inferential reasoning. A graphing calculator is required for this course. The course instructor will use and teach with the TI-83+ or TI-84+ graphing calculator. Students taking this course will be prepared to take the AP Statistics exam.

Pre-Calculus **2800**
Gr: 11-12 **Length: Yr.**

Credit: 1 credit

NCAA Approved

Prerequisite: Algebra II or Algebra III credit

In this course, students will analyze graphs of functions and relations including continuity, end behavior, and limits. Students will explore power, polynomial, rational, exponential, logarithmic, quadratic, and trigonometric functions. Successful completion of Pre-Calculus will allow students to proceed to AP Calculus AB or Calculus. A graphing calculator is required.

College Pre-Calculus **21100**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit HS/5 sem. credits Pre-Calculus Sinclair **NCAA Approved**
QPA Weighting 1.2

Prerequisite: Completion of prior Math courses with a B average including Algebra III is recommended.

Topics covered will be functions and graphs, polynomial and rational functions, trigonometric and inverse trigonometric, conic, systems of equations, exponential and arithmetic functions, geometric series, and binomial theorem.

Calculus AB Advanced Placement **2901**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Outstanding completion of Pre-Calculus

This college-level course covers the material found in the syllabus for the advanced placement course Calculus AB, as well as additional topics helpful to students. Students will be required to successfully complete a summer assignment before the school year begins. The class includes an extensive review prior to the AP exam to increase student success. Students are encouraged, but not required, to take the AP exam. The College Board restricts which graphing calculator may be used on the AP exam. The TI-83+ or TI-84+ graphing calculator is required for student use.

Calculus BC Advanced Placement **2902**
Gr: 12 **Length: Yr.**
Credit: 1 Credit **NCAA Approved**

Prerequisite: Outstanding completion of Calculus AB

This college level course covers the material found in the syllabus for the advanced placement course Calculus BC, as well as additional topics helpful to students. Calculus BC is a full year course in calculus functions of a single variable. It includes all topics covered in Calculus AB. This class includes extensive review prior to the AP exam to increase student success. Students are encouraged, but not required, to take the AP exam. The content of Calculus BC is designed to qualify the student for placement and credit in a course that is one level beyond that granted for Calculus AB. The TI-83+ or TI 84+ graphing calculator is required for student use.

Calculus (H) **2900**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Pre-Calculus

This college-level course covers much of the material found in the first two quarters of a four-quarter college Calculus course. Most of the topics covered may be found in the syllabus for AP Calculus with minor changes. Calculus requires either the TI-83+ or the TI-84+ graphing calculator for student use.

Music

Music Theory I **8700**
Gr: 9-10-11-12 **Length: Sem.**
Credit: 1/2 credit

This is a beginning class for all students wanting to learn how to read music in various clefs, rhythmic patterns and notation, major and minor scales, key signatures, chords, and simple harmonization. Students in current performing groups are encouraged to participate. Students will have the opportunity for hands-on experiences with piano, drums, and other percussion instruments as they write, create, and perform their own compositions. Students will also be introduced to musical time periods and hear compositions by famous composers. Class workbooks are purchased by the student and are not included in general class fees.

Music Theory II **8710**
Gr: 9-10-11-12 **Length: Sem.**

Credit: 1/2 credit

Prerequisite: Successful completion of Music Theory I, or permission of the instructor for piano students and students in band, choir, and orchestra.

This class is a continuation of Music Theory I. Students will have experience harmonizing melodies using primary and secondary chord structures. Also transposition, inversions of triads, chords, modulations, cadences, composition, and music arranging for strings, brass, and woodwinds will be covered. Class workbooks are purchased by the student and are not included in general class fees.

Music Theory - AP **8711**

Gr: 11-12

Length: Yr.

Credit: 1 credit

Prerequisite: Music Reading/Music Theory or special permission from department head.

The equivalent of a first-year college course will introduce students to musicianship, theory, musical materials, and procedures. It emphasizes music harmony and integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition, and history.

The History of Popular Music in America **8745**

Gr: 9-10-11-12

Length: Sem.

Credit: 1/2 credit

The course is designed to give an in-depth look at the musicians that have made music in this country as famous and diverse as the people themselves. From Louis Armstrong to the Beatles, Miles Davis to Led Zeppelin, many of the great pioneers and innovators of American music will be focused on to give the student a true appreciation of popular music in America.

Instrumental Performance

Students participating in instrumental performance groups are expected to participate in after-school practices and performances. Failure to participate can result in removal from the performance group without credit.

Jazz Band **8750**

Gr: 9-10-11-12

Length: Yr.

Credit: 1 credit

Prerequisite: Wind and Percussion Instrumentalists must be enrolled in Concert Band, Symphonic Band, or Wind Ensemble. Bass, Piano, and Guitar students are only admitted after auditions.

Jazz Band is for students who have achieved a high degree of proficiency on a woodwind, brass, guitar, bass, or percussion instrument. Members are selected on the basis of performance ability, which is ascertained from the scores obtained from a performance test individually administered by the directors. Audition materials can be picked up at the band office in the band room. Jazz Band performs difficult literature and is highly recommended that students study privately. A number of public performances are expected, and some out of school rehearsal is required. Performances will include: Jazz Band Concert, Show Choir Performances, Pep Band. Failure to attend these performances may result in a failing grade. All wind and percussion students need to be enrolled in concert ensemble.

Wind Ensemble **8780****Gr: 10-11-12****Length: Yr.****Credit: 1 credit****Prerequisite: Assignment by Band Director**

Wind Ensemble is a highly selective premiere band for students who have achieved an advanced degree of proficiency on a woodwind, brass, or percussion instrument. Members are selected on the basis of performance ability, which is ascertained from the scores obtained from a performance test individually administered by the directors. Wind Ensemble performs difficult band literature and it is highly recommended that students in this group study privately. A number of public performances are expected, and out of school rehearsal time is required of members. Participation in events such as the OMEA competition, public concerts, pep band performances, and community functions are required. Failure to attend these performances may result in a failing grade or reassignment to another ensemble. Students will be required to purchase a tuxedo or gown for this performing ensemble through the music department. Students who are unable or unwilling to procure a tuxedo or gown will be reassigned to Concert Band.

Wind Ensemble (H) **8781****Gr: 12****Length: Yr.****Credit: 1 credit****Prerequisite: Assignment by Band Director**

Please see instructor for details and required activities for earning honors credit.

Symphonic Band **8785****Gr: 10-11-12****Length: Yr.****Credit: 1 credit****Prerequisite: Assignment by Band Director**

Symphonic Band is for students who have achieved a high degree of proficiency on a woodwind, brass, or percussion instrument. Members are selected on the basis of performance ability, which is ascertained from the scores obtained from a performance test individually administered by the directors. A wide variety of music, individual skills, and theory will be covered in this course. A number of public performances are expected, and out of school rehearsal time is required of members. Participation in events such as the OMEA competition, public concerts, pep band performances, and community functions are required. Failure to attend these performances may result in a failing grade or reassignment to another ensemble. Students will be required to purchase a tuxedo or gown for this performing ensemble through the music department. Students who are unable or unwilling to procure a tuxedo or gown will be reassigned to Concert Band.

Concert Band **8790****Gr: 9****Length: Yr.****Credit: 1 credit****Prerequisite: Assignment by Band Director**

Concert Band is for students who have achieved a basic degree of proficiency on a woodwind, brass, or percussion instrument. Members are selected on the basis of performance ability, which is ascertained from the scores obtained from a performance test individually administered by the directors. Emphasis will be placed on basic skills and theory. A number of public performances are expected, and out of school rehearsal time is required of members. Participation in events such as the OMEA competition, public concerts, pep band performances, and community functions are required. Members of the Concert Band are eligible to participate in Marching Band, a co-curricular activity.

Chamber Orchestra **8820**
Gr: 9-10-11-12 **Length: Yr.**
Credit: 1 credit

Prerequisite: Audition and selection by the Orchestra Director

Chamber Orchestra is a selected group of 9th, 10th, 11th, and 12th graders chosen by the audition process. This course requires a high level of proficiency on violin, viola, cello, and double bass. Students in this class have the opportunity to perform many styles and genres of music, including Symphonic Orchestra, throughout the year. Students in this class should be involved in outside activities such as Dayton Junior Strings, Dayton Philharmonic, and Southwest Region Orchestra. Participation in OMEA Solo and Ensemble and large group competitions is required.

Chamber Orchestra (H) **8821**
Gr: 12 **Length: Yr.**
Credit: 1 credit

Prerequisite: Audition and selection by the Orchestra Director

Please see instructor for details and required activities for earning honors credit.

Concert Orchestra **8825**
Gr: 9-10-11-12 **Length: Yr.**
Credit: 1 credit

Prerequisite: Strings - Completion of 8th grade Orchestra or consent of Orchestra Director

This course is open to students who have achieved moderate playing proficiency on violin, viola, cello, and double bass. Students are required to purchase concert attire for performances. Emphasis is placed on technical skills such as vibrato, upper position, and tone quality. A wide variety of musical genres represent student abilities while developing a life-long appreciation for music. Attendance at all rehearsals and concerts is required.

Vocal Performance

Students participating in vocal performance groups are required to participate in after-school performances and rehearsals. Failure to participate can result in removal from the performance group without credit.

Freshman Choir **8900**
Gr: 9 **Length: Yr.**
Credit: 1 credit

The Freshman Choir is open to any 9th grade student who can demonstrate the ability to match pitch and rhythm patterns. Students are required to perform at concerts and contests outside of school.

Choir I **8910**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit

Prerequisite: Assignment by Choir Director

Choir I members are selected on the basis of performance ability which is ascertained by an audition based on sight-singing and vocal performance. Choir I students will sing all kinds of music, including sacred music, show tunes, and popular music. Some of the activities of the choir will be outside of school time with performances given for various groups and organizations. Students are required to perform at concerts and contests that occur outside of the regular school day. Students are required to purchase concert attire for this course.

Choir II **8912**
Gr: 10-11-12 **Length: Yr.**

Credit: 1 credit

Prerequisite: Assignment by Choir Director

Choir II members are selected on the basis of performance ability, which is ascertained by an audition based on sight-singing and vocal performance. Choir II students will sing all kinds of music, including sacred music, show tunes, and popular music. Some of the activities of the choir will be outside of school time with performances given for various groups and organizations. Students are required to perform at concerts and contests that occur outside of the regular school day. Students are required to purchase concert attire for this course.

Show Choir (Encore) **8915**

Gr: 10-11-12

Length: Yr.

Credit: 1 credit

Prerequisite: Audition

The Northmont Show Choir is a select group of 10th, 11th, and 12th graders chosen by audition. Their selection is determined by vocal ability, ability to do simple dance, stage presence, ability to work well in a small group, and interest in the group. The student is also required to submit a teacher recommendation. In choosing the members of the Show Choir, the director takes school attendance and grade point average into consideration. Members of the show choir perform show tunes and popular music at various times of the school year and should be prepared for after-school and evening performances. The Show Choir not only does school related performances, it also performs for a variety of community clubs and organizations. Students are required to purchase concert attire.

Show Choir (Encore) (H) **8916**

Gr: 12

Length: Yr.

Credit: 1 credit

Prerequisite: Audition

Please see instructor for details and required activities for earning honors credit.

NJROTC

Naval Science I

3000

Gr: 9-10-11-12

Length: Yr.

Credit: 1 credit

The purpose of this course is to introduce students to the precepts of citizenship, the elements of leadership, and the value of scholarship in attaining goals. This course is also designed to engender a sound appreciation for the heritage and traditions of America and develop in each cadet a growing sense of pride in his/her organization, associates, and self. In addition, this course combines all the information on military drill and ceremonies, uniform regulations, physical fitness, orienteering, principles of health, first aid, and survival into one program. These elements are pursued at a fundamental level and practiced at several orientation visits (field trips and competitions) to military bases and camps throughout the United States.

Course content will include introduction to the NJROTC program: instruction in naval leadership and fellowship traits and principles; the duties, rights, and responsibilities of informed citizens; the basis of our government and its role in society; the various types of government in different parts of the world; the students' role as citizens of the United States; the role of the military forces in our national defense; the mission and construction of Navy ships and Navy aircraft, instruction in NJROTC uniform regulations, uniform appearance, uniform composition and requirements for earning ribbon awards; introduction to military drill ceremonies, customs, and courtesies; demonstrate the hoisting, lowering, and folding of national and organizational flags; health education; introduction to physical fitness and sound exercise program; introduction to first aid and being prepared to give medical assistance to persons injured in battle, fire, collision and/or other accidents; and introduction to orienteering and survival. Through a waiver, Physical Education credit is offered when participating on NJROTC competition teams for two or more years or completing the course physical fitness requirements including passing the physical fitness test in the fall and spring for two or more years.

Naval Science II

3010

Gr: 10-11-12

Length: Yr.

Credit: 1 credit

Prerequisite: Successful completion of Naval Science I; interview with and approval by NJROTC Instructor

This course will build on the general introduction provided in Naval Science I to further develop the traits of citizenship and leadership in cadets, introduce cadets to technical areas of Naval Science, and engender a deeper awareness of the vital importance of the world's oceans to the continued well-being of the United States. Furthermore, cadets will begin developing their skills in leadership and event planning as well as practice advanced military drill. These elements are pursued at a greater level and practiced at several orientation visits (field trips and competitions) to military bases and camps throughout the United States.

Course content will include understanding: the importance of sea control and how sea power influenced the growth of early western civilization; naval history and heritage from the American Revolution through 1783; introduction of the growth of American sea power from 1783-1860; knowledge of the Civil War, 1861-1865; the importance of the Navy's role from The Rise to World Power Status 1865-1914; the importance of the Navy's role from World War I, 1914-1918; the importance of the Interwar Years, 1918-1941; the events that took place and military readiness of the Navy during World War II, 1941-1945; the events that took place in naval history in the Pacific War from 1941-1945; knowledge of naval history from the end of World War II to the Cold Era, 1945-1999, and naval history from the 1990's and beyond. In addition, all cadets will be able to demonstrate, on a more advanced level, military drill, ceremonies, customs, and courtesies. Through a waiver, Physical Education credit is offered when participating on NJROTC competition teams for two or more years or completing the course physical fitness requirements including passing the physical fitness test in the fall and spring for two or more years.

Naval Science III**3020****Gr: 11-12****Length: Yr.****Credit: 1 Credit****Prerequisite: Successful completion of Naval Science II; interview with and approval by NJROTC Instructor**

This course will build on the general introduction provided in Naval Science II and Naval Science I to further develop the traits of citizenship and leadership in cadets. The purpose of this course is to further develop the understanding and importance of sea power and national security, naval operations and support functions, military law, international law, and the sea. Furthermore, cadets will hone their skills in leadership and event planning as well as practice advanced military drill. These elements are pursued at a greater level and practiced at several orientation visits (field trips and competitions) to military bases and camps throughout the United States.

Course content will include investigating: the role of sea power and national security; naval operations and support functions; military law, discipline and punishment; the fundamentals of international law of the sea, and the law of war at sea, and collective security. In addition, all cadets will be able to demonstrate, at an advanced level, military drill, ceremonies, customs, and courtesies. Physical Education credit is offered when participating on NJROTC teams for two or more years or completing the course physical fitness requirements including passing the physical fitness test in the fall and spring for two or more years.

Naval Science IV**3030****Gr: 12****Length: Yr.****Credit: 1 credit****Prerequisite: Successful completion of Naval Science III; interview with and approval by NJROTC Instructor**

This is the ongoing study of the principles of Naval Leadership. There is practical application of leadership theory through assignment to positions of leadership within the NJROTC unit. This course will include in-depth study of fundamentals of leadership, responsibilities, and qualities of leadership and achieving effective communication. Physical Education credit is offered when participating on NJROTC teams for two or more years or completing the course physical fitness requirements including passing the physical fitness test in the fall and spring for two or more years.

Naval Science will account for ½ credit in Social Studies.

Career Based Education

Jobs for Graduates**8000****Gr: 12****Length: Yr.****Credit: 1 credit**

Jobs for Northmont Graduates will explore career possibilities for the high school senior. Students will assess career interests and determine what education and special skills are necessary to succeed in those careers; discuss what employers expect of employees and how to get ahead in the workforce; and learn budgeting and banking techniques to enable themselves to plan for after-graduation expenses. This class also includes the Career Association, a social and community service club that students must participate in throughout the school year as part of the curriculum. Out of school activities will be required. Officers will be elected to run the career association.

Science

Biology I **3209****Gr: 9-10-11-12****Length: Yr.****Credit: 1 credit**

Biology is an introductory level class designed to support student knowledge of heredity, evolution, diversity, and interdependence of life and cells. This course is enhanced through hands-on activities. Successful completion of this course would allow students to progress to Physical Science.

Biology I Academic **3210****Gr: 9-10-11-12****Length: Yr.****Credit: 1 credit****NCAA Approved**

This course is the first step in preparing students for college level work. Concepts discussed, but not limited to, include: heredity, evolution, diversity, and interdependence of life and cells. During the early part of the school year, emphasis is placed on similarities among living things. Living chemistry and cell structures are of major importance. Individual plants, animals and microorganisms are also studied. The functioning of the human body, as it pertains to inheritance, and a study of our changing environment are some of the major topics studied in this course. Successful completion of this course would allow students to progress to Physical Science or Chemistry.

Biology I Advanced (H) **3211****Gr: 9-10-11-12****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Teacher recommendation**

This course is for the motivated and self-directed student who will accept the challenge of a fast-paced class and is interested in Pre-AP course work. Students will experience, in more depth, the same core concepts discussed in Biology I Academic. Students are expected to have the ability to grasp multiple levels of interpretation of material and be able to apply those to solve problems. Successful completion of this course would allow students to progress to Chemistry I Advanced (H).

Advanced Placement Biology (Life) **3230****Gr: 11-12****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Successful completion of Biology I and Chemistry I; recommended B average in science courses**

The AP Biology course follows the guidelines described in the Advanced Placement Biology Curriculum. Students in this course will build on their knowledge from Biology I. Topics that are covered include molecular biology, cells, energy transformations, genetics, evolution, diversity, plant & animal form and function, and ecology. AP Biology is adapted to cover the same curriculum as a college freshman Biology course; this includes a required lab component. This course is designed to prepare students for the AP exam, although taking the exam is not required. At least one hour of study time per night is recommended.

College Biology (H) **32000****Gr: 11-12****Length: Yr.****Credit: 1 credit HS/4 semester credits General Biology 1111 Sinclair****NCAA Approved****Prerequisite: Chemistry****QPA Weighting 1.2**

This course is designed as the first in a series of two general education science courses. Covers basic chemistry and biochemistry; cellular and molecular biology.

Physical Science **3120**
Gr: 9-10-11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Completion of Biology I

Physical science is a course that satisfies the Ohio Core science graduation requirements. This course involves hands on laboratory experiences that engage students in gathering and analyzing information. Physical science introduces students to key concepts and theories that provide a foundation for its reactions, energy, transformations, waves, forces, motion, and the universe.

Chemistry I (Physical) **3320**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Algebra I or A in Math I and completion of Biology I

Chemistry I provides a survey of the concepts of physical chemistry including atomic theory, bonding theory, types of reactions, chemical calculations, families of elements, and the gas laws. Adequate experience in the chemistry laboratory is included in this course.

Chemistry I Advanced (Physical) (H) **3321**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Algebra I and Biology I, with teacher recommendation

Advanced Chemistry will cover the same topics as Chemistry I, except at a much more detailed approach. This class is highly recommended for students who are considering taking AP Chemistry or Chemistry II in high school and/or considering careers in science such as medicine or engineering. The class will provide a survey of the concepts of inorganic chemistry including atomic structure, chemical bonding, types of reactions, stoichiometry, gas laws, kinetics, equilibrium, thermodynamics, periodic trends, and properties. Adequate experience in the chemistry laboratory is included in this course.

Chemistry II (Physical) (H) **3325**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Chemistry I with teacher recommendation

Chemistry II is an intermediate college level course between Chemistry I and AP Chemistry. The class is designed for the student who would like more chemistry but is not ready for the workload or difficulty of the AP class. Students will cover 60-70% of what is covered in the Advanced Placement class. Students are permitted to take AP Chemistry upon completion of Chemistry II. A college-level text is used and students are expected to apply a college-level work ethic throughout the course. Topics that are covered include structure of matter, chemical reactions, solutions, equilibrium, electrochemistry, kinetics, organic chemistry, and laboratory explorations.

Advanced Placement Chemistry (Physical) **3340**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Chemistry I; recommended B average in science courses

AP Chemistry is the equivalent of a first year college chemistry course. A college-level text is used and students are expected to complete college-level work. The Advanced Placement syllabus is followed and students have the option of taking the Advanced Placement Examination to receive placement or credit on the college level. Topics covered include structure of matter, states of matter, reactions, organic chemistry, and descriptive chemistry. Students enrolling in AP Chemistry should expect to work and expend time consistent with a college level course.

Environmental Science (Life) **3200**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Environmental Science is an investigation of communities, populations, and ecosystems. Attention is given to plant and animal relationships and adaptations to their environment. Students will also study the effects of weather and climate, pollution, natural resources, energy, taxonomy, and life in the past.

Geology (Earth/Physical) **3205**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Geology is a course designed to study physical and historical geology in-depth. The first three quarters will include mineral and rock identification, origins and occurrences, weathering and erosion, crystal deformations, and plate tectonics. Quarter 4 will concentrate on the reconstruction of the earth's history.

Physics (Physical) **3330**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Algebra I and completion or enrollment in Algebra II

Physics is a course designed to give students a better understanding of the physical world around them and to prepare them for further studies in the field of science. Basic topics of study include mechanics, forces, energy, waves, electricity, and magnetism.

Physics I AP **3335**
Gr: 11 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Chemistry and Algebra II

This algebra-based course is equivalent to the first semester of a college physics course and is based on the Advanced Placement program designed by the College Board. Topics include mechanics, work, energy, power, waves, sound, electrostatics, DC circuits, and optics.

Physics II AP **3345**
Gr: 12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Physics I AP and teacher recommendation

This algebra-based course is equivalent to the second semester of a college physics course and is based on the Advanced Placement program designed by the College Board. Topics include fluid dynamics, thermodynamics, electricity and magnetism, optics, atomic physics, and nuclear physics. This course is designed to support in-depth, student-led inquiry of topics where critical thinking and problem solving are emphasized.

Human Anatomy and Physiology (Life) (H) **3220**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: Satisfactory completion of Biology I and Chemistry I

Physiology is a study of the human body, its functions, and physical make-up. Laboratory work involves the dissection of a cat, which is studied on a comparative basis. Genetics and abnormal functions of the body are also covered.

Social Studies

College Psychology **4600****Gr: 11-12****Length: Sem.****Credit: 1 credit HS/ 3 semester credits General Psychology Sinclair****NCAA Approved****Prerequisite: Successful completion of two units of English/Language Arts with a minimum of a B average.**

This course will examine the human from a psychological perspective. It will analyze the psychology of the human mind, history and systems of psychology, research methods, physiology of the brain and functions, sensation, behavior, perception, memory, consciousness, social psychology, mental disorders and therapies, and personality.

College Sociology **46100****Gr: 11-12****Length: Sem.****Credit: 1 credit HS/ 3 semester credits Introduction to Sociology Sinclair****NCAA Approved****Prerequisite: Successful completion of two units of English/Language Arts with a minimum of a B average.**

This course will examine the human from a sociological perspective. It will look at a social interaction, or sociology of American society with concentrations in major sociological theories, research methods, culture, socialization, groups, social structure, social institutions, deviance, social processes, and change in society.

Adolescent Social Problems **4540****Gr: 10-11-12****Length: Sem.****Credit: 1/2 credit**

This course is a study of social and individual problems that are pertinent to adolescent development. A multitude of topics such as authority and obedience, youth in society, family violence, drug abuse, dysfunctional families, mental health, social networking, stress management, and eating disorders will be investigated. Students will be encouraged to examine their own values with regard to these social problems.

Sociology **4510****Gr: 11-12****Length: Sem.****Credit: 1/2 credit****NCAA Approved**

The first part of this course is devoted to the basic concepts of sociology including culture, conformity and deviance, roles, relationships and groups, social stratification, social institutions, and socialization. The second part of the course studies current social issues and problems including suicide, child abuse, rape, and homelessness.

Social Psychology **4500****Gr: 11-12****Length: Sem.****Credit: 1/2 credit****NCAA Approved**

This course is a general survey of psychology as the science of the mind and the body. Areas of concentration are learning processes, personality development, and psychological influences in everyday living. Psychology is designed to provide a frame of reference for the development of personal understanding and the establishment of satisfactory social relationships.

Peer Facilitation **4950**

Gr: 10-11-12 **Length: Yr.**

Credit: 1 credit

Prerequisite: Instructor Approval

The Peer Facilitation course is designed to train students to serve as positive role models and resources for other young people. The course is designed to train students to offer confidential active listening, support, alternatives, and information to a peer in an attempt to help him or her resolve his or her problem. Peer helpers try to reach students who might be reluctant to speak with adult helpers about small problems. Some peers will be invited to participate in the class for a second year in order to aid in the training of new peer facilitators.

Peer Facilitation II **4952**

Gr: 11-12 **Length: Yr.**

Credit: 1 credit

The aim of this course is leadership training. Instruction will center on group process, organizational skills, small group facilitation, and teen social problems. Activities in this course will center on assisting members of the NHS student body, training peer mediators, and publicizing the services provided by the peer facilitation program.

Peer Tutoring **4951**

Gr: 10-11-12 **Length: Yr.**

Credit: 1 credit

Prerequisite: Selection through application and interview process

The Peer Tutor program educates and trains students to effectively support students with disabilities. Peer Tutors will research and investigate a variety of disabilities, such as Autism, Developmental Disabilities, Dyslexia, visual impairments, etc. In addition, students will learn and implement strategies to support these students in various settings: classes, community, job-site coaching, etc. Peer Tutors serve as important role models and advocates for individuals with disabilities. Peer Tutors are expected to complete quarterly projects and journals, attend monthly meetings, have strong attendance, and be able to apply the tutoring strategies taught during training sessions and daily experiences. Students may participate as a Peer Tutor for a maximum of two years. (Availability of class will be determined by enrollment.)

World History **4645**

Gr: 9 **Length: Yr.**

Credit: 1 credit **NCAA Approved**

This course will examine world events from 1600 through the age of imperialism, and will culminate with the events of the 20th century. This course will also explore the impact of democratic and industrial revolutions, domination of European powers and the effects of global interdependence. Additionally, this course will examine the following units in relation to the 20th century: WWI, Russian Revolution, WWII, Cold War, and the world today.

Great American Wars 4830

Gr: 10-11-12 **Length: Sem.**

Credit: 1/2 credit **NCAA Approved**

Wars have helped to shape American domestic and foreign policy. Through involvement in wars, the United States has continually enlarged its role in world affairs. In this course, an attempt will be made to trace America's foreign involvement and the growth of America's domestic industry resulting from warfare beyond our borders. (Availability of class will be determined by enrollment.)

The Holocaust **4860**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit **NCAA Approved**

This course explores the events of the Jewish genocide conducted by Nazi-controlled Germany. Emphasis will be placed on the Nazi abuse of political power, Aryan supremacy, the stark realities of camp life, and the atrocities committed to achieve Hitler's "Final Solution".

College Western Civilization **46000**
Gr: 12 **Length: Yr.**
Credit: 1 credit HS/3 semester credits Western Civilization I and **NCAA Approved**
3 semester credits Western Civilization II Sinclair **QPA Weighting 1.2**

Prerequisite: Completion of prior Social Studies courses with a B average is recommended.

Western Civilization will cover the development of politics, economics, culture and social dynamics from prehistory through today. The course will cover two college courses (Western Civilization I and Western Civilization II), allowing students to take two college courses during one high school academic year.

American History **4800**
Gr: 10 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

This course will examine the history of the United States from 1877 to the present. Understanding how these events have shaped our society is the purpose of this course. This course will examine the following units: Historical Documents, Industrialization, WWI, Great Depression, WWII, Cold War, Civil Rights Movement, and the world today.

American History – Advanced Placement **4801**
Gr: 10-11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Prerequisite: teacher recommendation; required summer reading and writing assignment; successful completion of World History with a "B" or above is recommended

The AP American History course is designed for the student who can complete college level studies in the secondary school. The AP American History course follows the AP syllabus provided by College Board. It is a comprehensive examination of American History from the Ages of Exploration through the 1980s. The course emphasizes the student's reading, writing, and interpretive comprehension skills. In May, the Advanced Placement Examination will be given for those students who desire to take the exam. Those who succeed on this exam may earn college level American History credit.

American Government: The Role of the American Citizen **4900**
Gr: 11-12 **Length: Yr.**
Credit: 1 credit **NCAA Approved**

Students will explore the role of the U.S. citizen in American democracy at the local, state, and national level. Students will recognize the components and benefits of our American democracy and the federal system. Students will examine the American political system and the election process.

American Government – Advanced Placement **4905****Gr: 11-12****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Selection will be determined by the course instructor based upon successful completion of American History or American History Advanced Placement and a teacher recommendation.**

The AP American Government course is designed for students who can complete college level studies. The AP American Government course follows the AP syllabus provided by College Board. Students will study the general concepts used to interpret U.S. government and politics, with a specific focus on the Constitutional basis of government, political beliefs and behaviors, political parties and mass media, institutions of national government, public policy, civil rights and civil liberties, and current events related to national government. In May, students are encouraged to take the Advanced Placement exam, successful completion of which may earn the student college-level Government credit.

Criminal Studies **4520****Gr: 10-11-12****Length: Sem.****Credit: 1/2 credit****NCAA Approved**

Emphasis in this course will be given to the criminal justice processes from arrest to sentencing. Students may be offered the opportunity to participate in the "Ride-Along" program with the local police department. Many guest speakers will be utilized throughout the course.

Human Geography – Advanced Placement **4545****Gr: 11-12****Length: Yr.****Credit: 1 credit****NCAA Approved**

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the earth's surface. Students will interpret maps, analyze geospatial data, analyze changing interconnectedness of the world, and examine socioeconomic organization and its environmental consequences.

Economics – Advanced Placement **4550****Gr: 11-12****Length: Yr.****Credit: 1 credit****NCAA Approved****Prerequisite: Selection will be determined by the course teacher based upon successful completion of American History or American History AP and a teacher recommendation.**

AP Economics is a combination of two semester-long AP courses: AP Microeconomics and AP Macroeconomics. The AP Economics course will follow the syllabus provided by the College Board. Students will study basic economic concepts such as supply and demand, consumer choice, the behavior of firms, monopolies, price elasticity, and market failures. In May, students are encouraged to take both the AP Microeconomics and AP Macroeconomics Advanced Placement exams, successful completion of which will earn students college level Government credit as well as high school credit.

Link Crew **4953****Gr: 11-12****Length: Sem.****Credit: 1/2 credit****Prerequisite: Selection through the application and interview process**

The purpose of this course is to further the training of selected Link Crew students. The importance of extending the connections between Link leaders and freshmen beyond orientation is emphasized. Lessons include themes such as Achieving Excellence, Building Strong Relationships, Cooperation and Competition, Looking at Your Future, Making Choices, Perspective, Shaping and Managing Time, and Suspending Judgment. Class members will be trained in a variety of academic follow-up activities and will be expected to present these activities to freshmen classes. The aim of this course is twofold: class members receive leadership training while members of the freshmen class are provided inspiration and tools critical for success during their high school career.

ACT Preparation **5000**
Gr: 11 **Length: Sem.**
Credit: 1/2 credit

This course is designed to prepare students for the American College Test. Students will be exposed to test taking strategies, practice tests, and sample questions with the goal of improving their ACT score. Opt out exemptions are as followed: 3.5 GPA, 190 PSAT score, 23 ACT score, 2 Honors courses with a B average. Students wanting to opt out of this course must see their counselor if exemptions apply.

Family and Consumer Science

Career and College Readiness **6305**
Gr: 11-12 **Length: Sem.**
Credit: 1/2 credit

Prerequisite: Interview with instructor

In this course, students will develop effective learning strategies and skills to provide a strong foundation for successful lifelong learning. Throughout the course, students will research careers and occupations, review postsecondary admissions qualifications, develop interviewing skills, and participate in internships. Additional topics will include principles and techniques of professionalism, networking, conflict-resolution, negotiation, leadership, and entrepreneurship.

Culinary Fundamentals **6440**
Gr: 11-12 **Length: Sem.**
Credit: 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, while demonstrating safety and sanitation procedures. Students will learn to select ingredients and recipes based on nutritional needs, conduct standard recipe conversions, and use proper measuring techniques to create successful dishes during specially designed food labs.

Child Development **6470**
Gr: 10-11-12 **Length: Sem.**
Credit: 1/2 credit

In this course, students will study principles of child growth and behavior from prenatal development through childhood. An emphasis will be placed on cognitive development of a child and sensory and motor skills. In addition, students will be required to participate in a baby simulation experience for one weekend (alternative project available if needed).

Credentialing Courses

Nurse Aide Training Program **1000**
Gr: 12 **Length: Yr.**
Credit: 1 credit

The Nurse Aide Training Program is approved by the Ohio Department of Health. This program prepares the student for state testing to function as a State Tested Nursing Assistant (STNA) in a variety of health care settings. Excellent attendance required. Any hours missed must be made up per Ohio Department of Health guidelines. Pre-admission requirement: physical and two-step Mantoux (TB) test. WorkKeys assessment required.

Robotics and Manufacturing**1100****Gr: 12****Length: Yr.****Credit: 1 credit**

The Robotics and Manufacturing course will prepare students to understand basic operation of both the Yaskawa and FANUC robot platforms. The program will provide students the opportunity to earn certifications in both Yaskawa and FANUC. A description of both trainings are explained in further detail below.

Robotics Yaskawa – FS100 Basic Programming with Material Handling: This is a 32-hour hands-on training course that will utilize the “Teach Pendant” to operate the Yaskawa robots. Students will learn basic operations and programming as well as troubleshooting. WorkKeys assessment required.

Robotics FANUC Robot Handling Tool Operations & Programming: This is a hybrid course that includes both online and lab curriculum. The 30 hours of online curriculum must be completed before starting hands-on training. Attendance at one online orientation is required. The hands-on training will include utilizing the “Teach Pendant” to operate the FANUC robots. Students will learn basic operations and programming as well as troubleshooting and maintenance. WorkKeys assessment required.

Requirement Criteria

	Graduation	MVCTC Admission	Honors Diploma Northmont	Honors Diploma MVCTC	College "Core"	NCAA Div. I	NCAA Div. II
Language Arts	4 credits	2 credits	4 credits	4 credits	4 credits	4 credits	3 credits
Math	4 credits Must include Algebra II or equivalent	2 credits	4 credits Algebra I, Geometry, Algebra II, & a higher level course	4 credits Algebra I, Geometry, Algebra II, & a higher level course	4 credits	3 credits Algebra I and higher	2 credits Algebra I and higher
Social Studies	3 credits World History, Am. History, Am. Gov't	World History Am. History	4 credits	4 credits	3 credits	2 credits	2 credits
Science	3 credits 1 Life, 1 Physical, 1 elective	1 Life 1 Physical	4 credits Must include Physics and Chemistry	4 credits Must include Physics and Chemistry	3 credits	2 credits	2 credits
Health	.5 credit	.5 credit	.5 credit	.5 credit	.5 credit	.5 credit	.5 credit
Physical Education	.5 credit PE I and PE II or equivalent	.5 credit PE I and PE II or equivalent	.5 credit PE I and PE II	.5 credit PE I and PE II	.5 credit PE I and PE II	.5 credit PE I and PE II	.5 credit PE I and PE II
Fine Arts	1 credit		1 credit		1 credit	1 credit	1 credit
Foreign Language	None	None	3 credits or 2 credits of 2 different languages		2 credits		
Additional				4 units of Career Technical Minimum		1 extra credit of English, Math or Science	2 extra credits of English, Math, or Science
Other requirements	Enough elective courses to equal 21 total credits	Tech Prep: no deficiencies (all courses listed above are passed); Allied Health, Biotechnology and Sports Medicine also require a grade of "C" or better in Biology		Achieve proficiency benchmark established for appropriate Ohio Career Technical Competency Assessment or equivalent		4 additional credits of English, Math, Science, Foreign Language, Philosophy, or Nondoctrinal Religion	3 additional credits of English, Math, Science, Foreign Language, Philosophy, or Nondoctrinal Religion
Other requirements	Completion of one of the state test pathways. Enrollment in the minimum of credits. (see page 3)		3.5 accumulative GPA (grades 9-12), Qualifying test score on ACT (27) or SAT (1210), 7 of the 8 areas plus the other requirements for the standard diploma - see "Graduation" at left	3.5 accumulative GPA (grades 9-12), Qualifying test score on ACT (27) or SAT (1210), 7 of the 8 areas plus the other requirements for the standard diploma - see "Graduation" at left	High School Diploma	Meet initial eligibility sliding scale minimums NCAA.org	Meet initial eligibility sliding scale minimums NCAA.org