

2019-20

Northview High School Program of Studies



A planning guide for junior high and high school students and their parents.





SYLVANIA NORTHVIEW HIGH SCHOOL



www.sylvanianorthview.org

Sylvania Northview High School

5403 Silica Dr.
Sylvania, Ohio 43560
www.sylvanianorthview.org

Administration 419-824-8580

Steve Swaggerty	Principal
Gracy Hinojosa-Lloyd	Assistant Principal Teaching & Learning
Libby McIlwain	Assistant Principal Student Services
Chris Irwin	Athletic Director

Guidance 419-824-8715

Crystal Burnworth	School Counselor
Melanie Rogers	School Counselor
Kate Henk	School Counselor
Stacie Wachowiak	School Counselor
Brian Hede	School Counselor

High School Mission Statement

*Sylvania Northview High School believes
that all students will be empowered
with the skills and strategies to be life long
learners in a respectful caring,
and safe environment.*

Sylvania Schools

4747 N. Holland-Sylvania Rd.
Sylvania, Ohio 43560

Superintendent's Office 419-824-8500

Adam Fineske	Superintendent
Lisa Shanks	Treasurer
Keith Limes	Asst. Superintendant of Operations
Tim Zieroff	Asst. Super. of Academic Affairs
Sheryl O'Shea	Dir. of Information Technology
Julie Sanford	Director of Teaching and Learning

Board of Education

Julie Hoffman	President
Vicki Donovan-Lyle	Vice President
Jim Nusbaum	
Stephen Rothschild	
Shannon Szyperski	

School District Vision Statement

*To be an exceptional public school
district that teaches and inspires
students to contribute to society in
meaningful and compassionate ways.*

Mission

*To prepare students to be life-long
learners and engaged citizens.*

Northview High School

Principal

Steve Swaggerty



Assistant Principals

Gracy Hinojosa-Lloyd

Libby McIlwain



Athletic Director

Chris Irwin

Monday, October 29, 2018

Dear Students and Parents,

We are very excited about the 2019-2020 Sylvania Northview Program of Studies, as we are introducing several new courses: Next year, Northview will be offering several new courses that we are excited about. First, students will have another Advanced Placement option in Social Studies: **AP Economics**. This will bring the total number of AP courses running at Northview to twenty-one. We have more than doubled our AP offerings over the past five years, continuously looking for ways to make our curriculum more rigorous, and to help students earn college credit while here at Northview. Along those same lines, we will be adding **CCP Geology** next school year as well. Another new course being offered that I would like to highlight is **Debate**. As students grow professionally in a world where those who can exceptionally communicate through spoken and written word excel, we are happy to give students another opportunity to sharpen their skill set.

The Program of Studies is organized in a manner that focuses on career pathways. This format is designed to help students better identify which courses to take, and help them decide upon their career goals. Hopefully, this format will assist you in focusing your individual goals, and ruling out what you may or may not want to do in the future.

Remember that students now have several specialized diploma offerings that both help students immerse themselves into their areas of interest, and will help set them apart from other college applicants down the road:

- **AP Capstone Diploma**
- **Global Studies Diploma**
- **Honors Diploma**

Northview is among only 1,500 schools worldwide that have been accepted into the **AP Capstone** program. This advanced track will give students an advantage academically in that completion will mean they will be equipped with top-level collegiate academic research, thinking, writing, and communicative skills. When students complete the AP Capstone courses (Seminar and Research), and score a 3 or higher on any four additional AP courses that we already offer, they will earn an elevated AP Capstone Degree. The **Global Studies Diploma** is an exciting new program available to the classes of 2021, 2022, and 2023 focused on promoting global competency and an enhanced worldview. Students who participate in the Global Studies Diploma program will experience a set of educational and community activities and experiences that will challenge students to explore and engage with other cultures. The goals of this program are to help students develop cultural awareness, empathy and advocacy and to prepare students with the 21st century skills needed for success in the globalized world. The Global Studies Diploma program consists of four concentrations: *Celebrate Culture*, *Deeper Investigation through Globally Significant Research*, *Communicate Effectively*, and *Action*. Each concentration should take

students one year to complete. The first three badges will be completed independently by the student through coursework and community experiences with the help of the program advisor. The Action badge will require students to complete a capstone project or internship. Students completing the capstone project will enroll in the Global Studies Capstone course. After completing the program, students will receive the Global Studies Diploma recognition from the World Affairs Council of Northwest Ohio. Finally, the **Ohio Department of Education** now offers several specialized **Honors Diplomas**, in addition to the general academic Honors Diploma that has been awarded to students meeting the criteria for years, including **STEM, Arts, Social Science & Civic Engagement, and Career Technical Education**. If one of these diploma programs sounds like a fit, see your counselor to discuss the requirements and best course selections for the 2019-20 school year. Our mission is help our young people get ready for life's next chapter. We believe this year's new course additions will help us live that mission.

Students, as you begin to select your classes for next year, keep in mind the individual interests that you are developing. Talk to the adults in your life about your hopes, plans, and dreams. Remember that high school, college, and post-secondary education serve as opportunities to explore who you are as you advance on the path to your ultimate career goals. Also, please pay extra attention to the special information section, which explains adding and dropping classes, and other pertinent information.

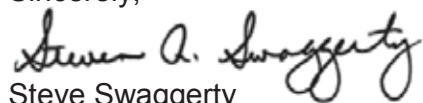
Parents, please ask questions of Northview's faculty and staff, and make suggestions so that we can continue to meet the individual learning style of your student. In addition, please assist your child in the course selection process to ensure that he or she is taking classes aligned with his or her future goals.

The following counselors and administrators are available to assist you on your journey

Counselors:	Mrs. Crystal Burnworth
	Mrs. Kate Henk
	Mrs. Melanie Rogers
	Mrs. Stacie Wachowiak
Assistant Principals:	Mrs. Libby McIlwain – Student Services
	Mr. Gracy Lloyd – Curriculum & Instruction

We hope you have an enjoyable and successful school year, and are looking forward to helping achieve your career goals, whatever they may be.

Sincerely,



Steve Swaggerty
Principal

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General Information

2019-2020



STATEMENT OF COMPLIANCE WITH FEDERAL LAWS

The Sylvania Schools District complies with federal laws to prohibit discrimination in programs and activities receiving federal assistance.

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin.

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination on the basis of an individual's disability.

Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex.

The Age Discrimination Act of 1975 prohibits discrimination on the basis of age.

The Sylvania Schools District also complies with the Family Education Rights and Privacy Act of 1974, which grants to parents/guardians the rights to examine their children's official school records.

The Sylvania Schools District does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups.

NOTICE TO STUDENTS

The Board of Education is committed to equal opportunity in education and employment.

Qualified students shall not be denied admission to the public schools, or to a particular course or otherwise discriminated against on the basis of race, color, national origin, sex, or disability, or any other basis of unlawful discrimination.

To carry out these policies, the following individuals have been designated to coordinate compliance within designated areas. Questions, requests for information or complaints should be directed to the appropriate office or person listed below:

System Wide Compliance Coordinator

Mr. Keith Limes
Bradley J. Rieger Building
4747 N.Holland-Sylvania Rd.
Phone: (419) 824-8531

Title VI Compliance Coordinator (Non-discrimination on basis of race, color, national origin)

Contact: Ms. Rose Gaiffe
Bradley J. Rieger Building
4747 N.Holland-Sylvania Rd.
Phone: (419) 824-8594

Americans with Disabilities Act and Section 504 Coordinator (Non-discrimination on basis of disability)

Contact: Ms. Rose Gaiffe
Bradley J. Rieger Building
4747 N.Holland-Sylvania Rd.
Phone: (419) 824-8594

Career Technical Education Compliance Coordinator

Contact: Ms. Julie Sanford
Bradley J. Rieger Building
4747 N.Holland-Sylvania Rd.
Phone: (419) 824-8578

Title IX Compliance Coordinator (Non-discrimination on basis of gender)

Contact: Mr. Robert Verhelst
Bradley J. Rieger Building
4747 N.Holland-Sylvania Rd.
Phone: (419) 824-8583

Guidance and Counseling Services

Each student at Sylvania Northview High School is assigned a counselor. The Guidance Office telephone number is 419-824-8715. Counselor assignments are alphabetical:

Mrs. Crystal Burnworth	A-FL	cburnworth@sylvaniaschools.org
Ms. Melanie Rogers	FO-L	mrogers@sylvaniaschools.org
Mrs. Kate Henk	M-RO	khenk@sylvaniaschools.org
Mrs. Stacie Wachowiak	RU-Z	swachowiak@sylvaniaschools.org
Mr. Brian Hede	A-Z	bhede@sylvaniaschools.org

Students are encouraged to visit the guidance office to see their counselors. Parents are welcome to phone for an appointment with their student's counselor. Additional information is available to parents and students through the school newsletter, *Wildcat Weekly*, as well as on the Northview Guidance Webpage:

www.sylvanianorthview.org (Click "Guidance")

Some areas in which counselors may be of help:

The Student and High School

Course selection and scheduling
Coping with the demands of high school
Opportunities for involvement in school and community life
Administration and interpretation of standardized tests

The Student as a Person

Understanding oneself — one's strengths and limitations
Discussion of personal concerns, friends, relationships to others
Family situations which affect school performance
Referral to school and community resources for psychological or psychiatric help,
family counseling, medical needs

The Student and Their Future

Career opportunities for post-high school education, colleges, and technical schools
Applications to colleges and technical schools.

STUDENT GUIDE TO SUCCESS

PARENTS:

1. Know your child's schedule and teachers.
2. Keep in contact with school - be visible.
3. Attend as many functions as possible.
4. Remain an active part of child's education.
5. Contact counselors for updated information.
6. Use PowerSchool Account.

STUDENTS:

1. Keep all work up until exams.
2. Develop an organizational system.
3. Use your agenda book daily.
4. Utilize the extra help programs; math tutoring, guided study hall, and after school intervention.
5. Keep in touch with your teachers - know how and when to talk to them.
6. Check the guidance website.
7. Use PowerSchool Account.

GRADUATION PARTICIPATION REQUIREMENTS

Graduation participation will be based on Sylvania City School District Board of Education policy. Beginning with the class of 2018, students must pass the Ohio Core Curriculum, participate in all Ohio State Tests (OST), and meet an approved pathway to graduation defined by the Ohio Department of Education. Link to the requirements <http://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements>.

All students must participate in commencement practice in order to participate in commencement.

EARLY COMPLETION (GRADUATION)

Students may be eligible for early completion. A student desiring to complete his/her credits before the spring of their senior year must meet with their counselor to discuss if this is a possibility. If the student has all the pre-requisites that are needed, the next step would be for the student/parent to make an appointment with the principal and counselor by the 5th day of the start of the senior year to ensure correct scheduling.

Seniors who graduate early are **not** eligible to participate in extracurricular activities during the second semester. However, sport seasons that overlap the time of early graduation may be completed. January graduates are eligible to participate in the June graduation ceremony.

STUDENT RECOGNITION (GRADUATION)

For the graduating classes of 2018 and beyond:

The class ranks of students will be calculated and reported consistent with board policies and guidelines, but will not be published.

Honor	G.P.A.
Cum Laude	3.5 – 3.749
Magna Cum Laude	3.75 – 3.999
Summa Cum Laude	4.0 and above

Students will be recognized at graduation according to the honors listed above.

OHIO COLLEGE ENTRANCE RECOMMENDATIONS

- 4 credits of English
- 3 credits of Social Studies
- 4 credits of Science
- 4 credits of Mathematics
- 2 or 3 credits of World Language
- 1 credit of Fine Arts

Checklist for College Planning

WHEN TO BEGIN	WHAT TO DO	HOW TO DO IT
Freshman and sophomore years	Become familiar with college entrance requirements and continue career exploration activities. Which courses in your high school curriculum satisfy college requirements? Do you have a plan for extracurricular involvement?	Work with parents, teachers, and counselors to create a four-year high school curriculum plan to satisfy your goals. Try job shadowing. Get involved at school and in your community.
September - March of junior year	Think about your reasons for going to college. What are your goals? What learning opportunities are most important? Do your college plans include career plans?	Talk with your parents, counselors, teachers, and friends. Investigate possible career options and degree level required.
January - March of junior year	Identify important factors in choosing a college. Two-year or four-year? Locations? Cost? Kind of atmosphere? Variety of study programs available? Entrance test requirement?	Focus on your goals and interests. Consult college guidebooks. Explore colleges on the Internet. Prepare for your college admission test.
March - August of junior year	List colleges you are considering and collect information. Have you included all possible choices? What information do you need? How can you get it?	Attend college fairs and college night programs. Prepare for and visit colleges. Take appropriate college admission test.
June - December of senior year	Compare the colleges on your list. Have you weighed pros and cons carefully? Which colleges will meet your needs?	Continue visiting colleges. Organize information into detailed, useful comparisons.
August - December of senior year	Apply to your "choice" colleges. Do you have all the necessary forms? Are you sure of the application deadlines?	Continue visiting colleges. Organize information into detailed, useful comparisons.
October - February of senior year	Apply for financial aid. Have you investigated all possible sources of aid? When should you apply?	Consult financial aid office. Secure forms and note deadlines. Complete the FAFSA after October 1.
November - May of senior year	Make some final decisions. What additional preparation might be helpful? Should you consider summer school? Do you feel comfortable with your final choice?	Confer with parents and counselors. Confirm your decision, and decline other admission offers. Show initiative.

Distinguished Graduation Options

GLOBAL STUDIES CAPSTONE

The Global Studies Diploma program focuses on promoting global competency and an enhanced worldview for high school students. Students who participate in the Global Studies Diploma program will participate in a set of educational activities and experiences in their community that will challenge them to explore and engage with other cultures. The goals of this program are to help students develop cultural awareness, empathy and advocacy and to prepare students with the 21st century skills needed for success in the globalized world.

The Global Studies Diploma program consists of 4 concentrations: Celebrate Culture, Deeper Investigation through Globally Significant Research, Communicate Effectively, and Action. Each concentration should take students 1 year to complete. The first 3 badges will be completed independently by the student through coursework and community experiences with the help of the program advisor. The Action badge will require students to complete a capstone project or internship. Students completing the capstone project will enroll in the new Global Studies Capstone course. After completing the program, students will receive the Global Studies Diploma recognition from the World Affairs Council of Northwest Ohio.

AP CAPSTONE

The College Board's AP Capstone is an innovative college-level program based on two new courses - AP Seminar and AP Research - that complement and enhance discipline-specific AP courses.

The program provides students with an opportunity to engage in challenging scholarly practice of the core academic skills necessary for successful college completion. The ability to think independently, write effectively, research, collaborate, and learn across disciplines is essential for success in college, career, and beyond.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. This signifies their outstanding academic achievement and attainment of college level academic and research skills. Students who earn scores of 3 or higher in both AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate.

OHIO DIPLOMA WITH HONORS

Ohio offers several options for Honors Diplomas, including

- **Academic Honors**
- **Career Tech Honors**
- **STEM Honors**
- **Arts Honors**
- **Social Science & Civic Engagement Honors**

Please check the table on page 13 for detailed requirements for each Honors Diploma.

CRITERIA FOR DIPLOMA WITH HONORS

New Diploma with Honors criteria will be effective for the class of 2021 and beyond. These criteria may be used by graduating classes of 2017-2020 as well.



Ohio High School Honors Diploma

Criterion	Ohio Diploma	Academic Honors Diploma	International Baccalaureate Honors Diploma	Career Tech Honors Diploma	STEM Honors Diploma	Arts Honors Diploma (Includes dance, drama/theatre, music, and visual art)	Social Science & Civic Engagement Honors Diploma
Math	4 units, must include one unit of algebra II or equivalent	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	5 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content ⁴	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content
Science	3 units	4 units, including two units of advanced science ²	4 units, biology, chemistry, and at least one additional advance science ²	4 units, including two units of advanced science ²	5 units, including two units of advanced science ²	3 units, including one unit of advanced science ²	3 units, including one unit of advanced science ²
Social Studies	3 units	4 units	4 units	4 units	3 units	3 units	5 units
World Languages	N/A	3 units of one world language, or no less than 2 units of each of two world languages studied	4 units minimum, with at least 2 units in each language studied	2 units of one world language studied	3 units of one world language, or no less than 2 units of each of two world languages studied	3 units of one world language, or no less than 2 units of each of two world languages studied	3 units of one world language, or no less than 2 units of each of two world languages studied
Fine Arts	2 Semesters	1 unit	1 unit	N/A	1 unit	4 units	1 unit
Electives	5 units	N/A	N/A	4 units of Career-Technical minimum ³	2 units with a focus in STEM courses	2 units with a focus in fine arts course work	3 units with a focus in social sciences and/or civics
GPA	N/A	3.5 on a 4.0 scale	3.5 on a 4.0 scale	3.5 on 4.0 scale	3.5 on a 4.0 scale	3.5 on a 4.0 scale	3.5 on a 4.0 scale
ACT/SAT/WorkKeys¹	N/A	27 ACT/1280 SAT ⁸	27 ACT/1280 SAT ⁸	27 ACT/1280 SAT ⁸ /WorkKeys (6 Reading for Information & 6 Applied Mathematics) ⁷	27 ACT/1280 SAT ⁸	27 ACT/1280 SAT ⁸	27 ACT/1280 SAT ⁸
Field Experience	N/A	N/A	Complete a field experience and document the experience in a portfolio specific to the student's area of focus ⁵	Complete a field experience and document the experience in a portfolio specific to the student's area of focus ⁵	Complete a field experience and document the experience in a portfolio specific to the student's area of focus ⁵	Complete a field experience and document the experience in a portfolio specific to the student's area of focus ⁵	Complete a field experience and document the experience in a portfolio specific to the student's area of focus ⁵
Portfolio	N/A	N/A	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus that is reviewed and validated by external experts ⁶	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus that is reviewed and validated by external experts ⁶	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts ⁶	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts ⁶	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts ⁶
Additional Assessments	N/A	N/A	N/A	Earn an industry-recognized credential or achieve proficiency benchmark for appropriate Ohio Career-Technical Competency Assessment or equivalent	N/A	N/A	N/A

NOTE: Items shaded in blue are changes that were made to the honors diploma system, including the entire STEM, Arts, and Social Science and Civic Engagement Honors Diplomas

½ unit physical education
½ unit health

½ unit in American history
½ unit in government

****Advanced science refers to courses in the Ohio Core that are inquiry-based with laboratory experiences and align with the 11/12th grade standards (or above) or with an AP science course, or with the new high school syllabi, or with an entry-level college course (clearly preparing students for a college freshman-level science class, such as anatomy, botany, or astronomy), or contain material above the current OST level.**

DIPLOMA SEALS

Two diploma seals are available to Sylvania graduates. Both will appear on the student's transcript.

OHIO MEANS JOBS READINESS SEAL

Ohio high school students now can earn recognition by showing they are prepared to contribute to the workplace and their communities. The OhioMeansJobs-Readiness Seal is a formal designation students can earn on their high school diplomas and transcripts indicating they have the personal strengths, strong work ethic and professional experience that businesses need. For more information visit the Ohio Department of Education website: <http://education.ohio.gov/Topics/New-Skills-for-Youth/SuccessBound/OhioMeansJobs-Readiness-Seal> or talk with your school counselor.

OHIO SEAL OF BILITERACY

A Seal of Biliteracy recognizes graduating seniors who can demonstrate high levels of proficiency in English and at least one other language. A school or district gives this award by following state-established guidelines. For more information visit the Ohio Department of Education website: <http://education.ohio.gov/Topics/Learning-in-Ohio/Foreign-Language/Ohio-Seal-of-Biliteracy> or talk with your school counselor.

PRESIDENTIAL ACADEMIC FITNESS AWARD

Granted for excellence based on:

1. overall point average (3.5 on a 4 point scale)
2. outstanding scores on the SAT or ACT (80% percentile)
3. earn an average score of 4 or higher on all of the EOC exams.

NCAA ELIGIBILITY

<http://www.ncaa.org/student-athletes/future>

Students who wish to participate in College Division I or Division II sports must now be certified by the National Collegiate Athletic Association (NCAA). Eligibility requirements are subject to change; therefore, students should begin this process early in their junior year with their counselors.

The NCAA has approved the following courses for use in establishing the initial-eligibility certification status of student athletes from Northview High School:

English

English 9
Hon English 9
English 10
Hon English 10
American Literature
AP English Lit & Comp
AP English Lang & Comp
Creative Focus (SV)
Creative Writing
Debate
Public Speaking
Senior Humanities
Senior Composition & Literature
AP Language and Composition
AP Literature and Composition
Oral Communications I
Junior Humanities

Social Science

American Government
AP US Government
American History
AP European History
AP World History
AP Economics
AP US History
Contemporary Law
Geography
Global Studies Capstone
AP Economics
Psychology I
AP Psychology
Sociology
World Studies
Hon World Studies

Mathematics

Algebra I
Algebra II
Hon Algebra II
Algebra I 2B (1cr/year max)
Hon Calculus
Calculus AB/AP
College Prep Math
Geometry I 2B (1cr/year max)
Modern Geometry
Hon Modern Geometry
Pre-Calculus
Hon Pre-Calculus
Statistics /AP
Calculus BC/AP

Additional Core Courses

Chinese I
Chinese II
Honors Chinese III
Honors Chinese IV
French I
French II
Honors French III
Honors French IV
French Language/AP
German I
German II
Honors German III
Honors German IV
Spanish I
Spanish II
Honors Spanish III
Honors Spanish IV
Spanish Language/AP

Natural/Physical Science

Anatomy
Honors Anatomy
Anatomy
Astronomy I
Astronomy II
Biology
BiologyAP
Chemistry
ChemistryAP
Environmental Science I
Environmental Science II
Environmental Science AP
Geology
Zoology I
Zoology II
Physics I
Physics II
Physics I AP
Honors Physics
Hon Physical Science 9
AP Seminar
AP Research
Forensic Science

Actual registration can also be completed online with Internet access. Students should take the ACT test or the SAT test (or both) beginning their junior year. These scores plus the grade point average (GPA) will be used by the NCAA clearinghouse to determine eligibility to participate in college sports at the Division I and Division II levels.

More information and registration forms are available through www.ncaaclearinghouse.net

Special Programs

ADVANCED PLACEMENT COURSES

Sylvania offers Advanced Placement (AP) courses in English, Mathematics, Social Studies, World Languages and Science. These courses provide an opportunity for students to enroll in college-level courses while still in high school. AP classes are rigorous, demanding, challenging in-depth approaches to the subject matter. They prepare students for college level work.

The following are the AP course offerings:

English Literature & Composition	Statistics	Spanish Language & Culture
English Language & Composition	Calculus AB	Art History
European History (SV)	Calculus BC	Music Theory
World History (NV)	Chemistry	Computer Science Principles
US History	Biology	Computer Science A
Psychology	Environmental Science	Seminar
Economics	Physics I	Research
US Government & Politics	French Language & Culture	

(Prerequisites for AP courses are listed in the course description.)

AP Course offerings are subject to change according to the AP Audit process conducted by the College Board

AP or Honors changes - A teacher/parent conference is recommended before changes are made to a student's schedule.

Selection Criteria

The measures listed below are required for admission to an AP course. The first item (teacher or department recommendation) is mandatory. One or more of the other six measures must be met depending on the individual course.

1. Teacher or department recommendation
2. Scholastic achievement
3. Counselor recommendation
4. Interview
5. Essay
6. Standardized test results
7. Required prerequisite courses

AP Examinations

AP courses also prepare students to take the AP Exams. Depending upon performance on these tests and the policies of the college they attend, students can earn college credit. Students enrolled in AP classes should consider taking the AP Exam.

Students who cannot afford to pay the AP Exam fee may be eligible to receive financial help. A request for financial aid must be filed with the Assistant Principal for Teaching and Learning by October 1 of each year.

AP Grading Procedure

A weighted grading scale is in use for Honors and AP courses (Refer to grading scale, p. 19). Students who earn a grade of D at the end of the first 9 weeks in an AP course are encouraged to have a conference with the teacher, the student's counselor, and the parent. Existing procedures for dropping or transferring from a course will be used.

Special AP Fee

Please note there is an annual fee of \$10 for enrolling in any AP course. The fee is \$10 each year the student enrolls in an AP class, regardless of the number of AP courses taken that year. This fee covers the cost of access to online review materials to help students prepare for exams.

PROGRAMS FOR ACCELERATED STUDENTS

HONORS COURSES

Eligibility for Honors Courses is based upon:

1. Teacher recommendation
2. Student achievement in subject matter

Honors Courses offered:

English

English 9 & 10

Science

Physical Science

Biology

Chemistry

Anatomy

Physics (SV)

Social Studies

World Studies

Music

Band/Orchestra/Choir

World Language

Spanish III

Spanish IV

French III

French IV

German III

German IV

Chinese III

Chinese IV

Art

Senior Studio 2D Design

Senior Studio 3D Design

Math

Modern Geometry

Algebra II

Pre-calculus

Calculus

Communication

Journalism

Yearbook

Drama

Theatre Workshop

Public Speaking

Career Tech

Business Technology

Computer Programming

Construction

Education and Training

Engineering Tech Prep

Financial Management

Horticulture

Interactive Media

Medical Technology

Theatrical Performing Arts

Visual Communications Design

Special Information

ATHLETIC ELIGIBILITY

Eligibility shall be determined on a quarter by quarter basis. The required 1.5 grade point average shall be cumulative of all courses taken the previous quarter. Student participants in athletics must meet OHSAA standards which is equivalent to **5 units of credit** the previous quarter and the Sylvania policy standard which is the 1.5 grade point average the previous quarter.

No player may transfer from one sport to another after the first scheduled contest. If a player quits, or is removed from a team, he/she may not join another sport or participate in any preseason conditioning, open gyms, open skates, etc., until the season which they are no longer participating in is completed.

INCOMPLETE GRADES “I”

Students who receive an “I” for incomplete must make arrangements to make up the work within two (2) weeks of the end of the quarter or the grade will become an “F.” Exceptions to this must be approved by the principal.

HONOR ROLL

Outstanding academic achievement is recognized by the Honor Rolls, compiled and published at the end of each nine week grading period. A student must take five courses to be considered for the honor roll.

Highest Honor	4.0 or better
Honor Roll	3.5 - 3.99
Merit Roll	3.0 - 3.499

REPEATING COURSES

Required courses that are failed should be taken in summer school or through Sylvania credit recovery programs when possible. Failure to make up a course in the summer may ultimately delay graduation. Students must consult with their counselor to develop a credit recovery plan. Students who hire a private tutor to repeat coursework must have assistant principal of teaching and learning approval, sign a contract, and meet state guidelines. The student must take a department exam to earn course credit. The student should see a counselor BEFORE he or she considers this option. Grades from alternative learning opportunities (e.g. GradPoint) will be averaged with other grades. If any course is repeated via traditional delivery method, the higher grade will be counted in the GPA. The class being repeated must be the same class as originally taken. Courses taken during the summer must be completed prior to the start of the next school year.

OPEN ENROLLMENT POLICY

Open enrollment for secondary schools begins the **first day school is in session in November through the last school day before the Winter Break of the current year.** Applications can be obtained through Student Services located on the first floor in the Administration Building between the hours of 7:30 am - 4:00 pm, Monday - Friday. Approval is contingent upon space availability in the school of your choice. A copy of the open enrollment policy will be provided with all applications.

COLLEGE CREDIT PLUS

Eligible students can take a course and earn high school and college credit that appears on both the high school and college transcripts.

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

With both programs, there are several conditions that must be met. Students interested in participating in College Credit Plus must see their school counselor for full details. **Prior to the deadline, a required informational meeting will be scheduled to outline the details of this program. All interested students and parents must attend.**

For more information visit sylvania <http://www.sylvaniaschools.org/HighSchoolCurriculumAlternatives.aspx>

CREDIT FLEXIBILITY

Students will have an opportunity to earn credits through the district's Credit Flexibility Plan. Please visit the district website at <http://www.sylvaniaschools.org/CreditFlex.aspx> to view and download the Sylvania Credit Flex Plan.

GRADING SCALE

The grade card contains the following information each semester:

1. A letter grade for the first and second nine-week periods.
2. A letter grade for the exam.

Each reporting period is 40% of the semester average while the exam equals 20%. The final percentage determines the letter grade that is listed on the transcript.

The semester grade is determined by multiplying the 1st marking period grade by two as shown in the chart below. The 2nd marking period grade is also multiplied by two. Finally, the exam grade is added to the sum of both marking periods and divided by five.

Example:

1 st Quarter Grade	2 nd Quarter Grade	1 st Semester Exam
99/A+	91/A-	91/A-

$$A+ A- A- = (99 \times 2) + (91 \times 2) + 91 = 471/5 = 94.2 = A$$

A minimum total of 298 is necessary to receive a passing grade for the semester.

Grading Scale & Conversion Chart

Grade	Grade Range	Conversion Equivalent	Honors Conversion Equivalent	Advanced Placement Conversion Equivalent
A+	98-100	4.0	4.5	5.0
A	93-97	4.0	4.5	5.0
A-	90-92	3.7	4.2	4.7
B+	87-89	3.3	3.8	4.3
B	83-86	3.0	3.5	4.0
B-	80-82	2.7	3.2	3.7
C+	77-79	2.3	2.8	3.3
C	73-76	2.0	2.5	3.0
C-	70-72	1.7	2.2	2.7
D+	67-69	1.3	1.3	1.3
D/P	60-66	1.0	1.0	1.0
F	50-59	0	0	0
DNA	Did Not Attempt	0	0	0

- The top of the grading scale is capped at 100 while the bottom is set at 50.
- For honors classes, a student earning the grade of A+ through C- will receive an additional .5 on the semester average GPA.
- For Advanced Placement (AP) classes, a student earning the grade of A+ through C- will receive an additional 1.0 on the semester average GPA.
- A student earning any combination of two F's in one semester automatically fails the course.
- A student may receive a grade of "P" if in the teacher's judgment the effort is commensurate with a passing grade.
- "I" is an incomplete. An "I" must be removed within ten school days or it becomes an "F" unless the administration grants an extension.
- "W" is a withdrawal from the course.
- "DNA" (Did Not Attempt) is a designation used for students who do not attempt an exam. The DNA value is zero. DNA designation may include by not be limited to: Non-attendance, attendance but not attempted, answers minimal questions, answers are random and indicates student had not read the questions, and final score is extremely low and does not show work if required.

Career Technical Education

PROGRAM INFORMATION

PLAN NOW FOR YOUR LIFE AFTER HIGH SCHOOL

Career Technical Education programs will provide all students with the knowledge, skills, and attitudes essential to meet a lifetime of career challenges in a competitive global society by recognizing and drawing upon the strengths and interests of each student. Programs offered respond to the needs of a fast changing global workforce and economy. The Career Technical Education programs provide career related experiences, advanced college placement and/or credits, and licensure/certification opportunities. Career Technical Education is the place where your career begins. The programs stress the importance and need of strong academic knowledge and skills along with the high school to postsecondary transitions. Career Technical Education brings education to life using problem-based and inquiry based curriculum. The classes provide a seamless pathway for students to easily advance to postsecondary education or the workforce.

Career Technical Education provides:

- A way to combine academic and career technical courses to achieve a first-class education
- Hands-on experiences that can unlock many new options
- Employability skills, from job-related skills to workplace ethics
- Career pathways that link secondary and postsecondary education
- Advanced credit and articulated credit options
- A way to explore a field that interests you
- A skill that can help you pay for your education
- Industry credentials and access to and enhanced eligibility for scholarships upon completion of Career Technical programs
- Opportunities for internships, job shadowing, clinicals and early placements
- A curriculum driven by business and industry partnerships

Career Technical Education involves technical, academic and employability skills needed to prepare you to make informed career choices and to successfully enter, compete and advance in a changing workforce. In the next 10 years, 65 percent of Ohio's new jobs will require high-tech skills. The skills you will learn with a Career Technical Education will give you the extra edge in post secondary education and today's competitive market.

COLLEGE TECH PREP PROGRAM OFFERINGS

Two Year Tech Prep Programs (11 & 12)

Cosmetology
Visual Communication Design
Business Technology
Education and Training

Financial Management
Interactive Media
Computer Programming
Construction Technology

Engineering
Medical Technology
Horticulture
Theatrical Performing Arts

Family & Consumer Science

Career and College Readiness
Child Development
Food Science
Culinary Arts Fundamentals
Personal Wellness and Development
Principles of Food

Career Cluster Pathways Offered

Arts & Communications
Business & Management
Engineering & Industrial
Environmental & Agriculture
Health, Education and Human Services
Information Technology

CAREER TECHNICAL EDUCATION

ADMISSIONS AND ENROLLMENT POLICY

The selection and admission process for Sylvania's Career Technical Education programs begins in the sophomore year. Through the various career awareness activities held on both school campuses, students have an opportunity to learn about each program.

Students interested in applying for a Career Technical Education program must complete an application (available in the guidance office) that is signed by the parent/guardian and returned to the guidance counselor. Programs begin in the fall of the junior year. Credits earned for parts of the total program passed each semester will be added to the student's cumulative total. Students who fail their program will be withdrawn and rescheduled in other academic classes necessary for graduation.

Students who are entering their junior year are eligible to apply for a program if they have completed the minimum requirements of:

- 2 credits English
- 2 credits Math
- 2 credits Science
- 1 credit physical education/health

Seniors applying are required to have additional courses plus a minimum of 12 credits.

If a student does not meet the minimum eligibility requirements, and there is space available in the program, an educational plan may be used to admit that student.

Some Career Tech Education programs can be taken for Honors credit. See your counselor for details.

Students will be considered for admission to the Career Technical Program on the basis of scholastic record, related experiences, attendance, and discipline record. Program space is limited and will be based on availability and application ranking.

Every effort will be made to place students in their proper programs based on the Career Pathways model as adopted by both Sylvania Northview and Southview. Some programs require, by law, background checks and/or medical releases for participation. See your guidance counselor for more details.

CAREER TECHNICAL OVER-ENROLLMENT POLICY

Career Technical Programs are enrolled with students who can most benefit from class. Good behavior and attendance are extremely important to the success of the student in the programs. Programs will be enrolled to capacity using the following criteria:

1. Completion of the career tech application process.
2. Class status-Juniors will be given priority in the first year of a two year program.
Seniors may enroll in the first year of a two year program if space is available. Seniors are not permitted to enroll in programs that require two year participation for licensing/industry credentialing.
3. Attendance-Most Career Technical programs meet more than one period per day over a two year period of time. Attendance is critical to the success of students in these programs.
4. Discipline history-The discipline history will be used for calculating scores on the enrollment rubrics.
5. The cumulative GPA will be used for the enrollment rubrics.

Every effort will be made to place students in their proper programs based on the Career Pathways model as adopted by both Sylvania Northview and Southview.

Seniors may choose to spend their senior year in the first year of a two year program, space permitting. It is not unusual that some seniors get to their final year in high school and realize that they don't (or won't) have any hands-on-experience in preparing for the world of work. The idea that "one year's experience is better than no experience" has worked for some pathway areas. Seniors are not permitted to enroll in programs that require two year participation for licensing/industry credentialing.

HOME SCHOOL ENROLLMENT POLICY

All Career Technical Education programs are available to all juniors and seniors regardless of their home school. Home school designation is based on your residence and district boundaries. Enrollment in a Career Technical Education program does not change your designated home school.

TRANSFER BUS POLICY

Students who travel between high schools for their Career Technical Education program will have the opportunity to take the school transfer bus. This option may not be available for single period Career Technical classes.

Students who wish to drive between buildings must follow the driving/parking procedures indicated in the students' home school handbook and complete a Permission to Drive form available from the Career Technical Office or program instructor.

STUDENT ACTIVITIES

Career Technical Education students are encouraged to participate in their home school's extra-curricular activities such as sports, clubs, music, etc. The student will be under the eligibility rules established by the Sylvania Board of Education and the State of Ohio.

EARLY PLACEMENT

Students who have demonstrated above average achievements and have a recommendation from their instructor may be eligible for early job placement. Students are placed in a job related to their field of technical training. Early placement will take place during the second semester as arranged by the instructor. They are graded on their work by their employer and may also be paid. The experience provides an opportunity for students to begin the transition from school to work with the encouragement and assistance of their career technical instructor.

CAREER TECHNICAL STUDENT ORGANIZATIONS

Career Technical Education programs offer co-curricular activities in student organizations that provide leadership opportunities at the local, regional, state and national levels.

Business Professionals of America- Today's students—tomorrow's business professionals. This national organization for Business Technology, Financial Management, and Computer Programming and Interactive Media students provides the members with the opportunity for development of leadership skills, personal and professional growth, social awareness, civic responsibility and an understanding of the business community. Students may compete in regional, state, and national competitions.

FFA- Students enrolled in Horticulture are eligible to participate in FFA activities. Activities at the local, district, state and national level help students develop leadership skills in fulfilling occupational, social and civic responsibilities. Members are eligible for local, district, state and national awards in various contests and activities.

FCCLA- Family Community & Career Leaders of America helps prepare students with salable skills, opportunities to work with people in the business community and to participate in activities at district, state, and national levels. Students enrolled in Education in Training, and Family and Consumer Sciences programs are eligible for membership.

Skills/USA - Activities center on discussion and investigation of occupational opportunities, competition that displays skills learned, and efforts to better understand the citizenship responsibilities as they are unique to the individual person. Students enrolled in Construction Tech Prep, Cosmetology, Engineering Tech Prep, and Visual Communication Design may become members of Skills USA.

HOSA – Future health professionals in Medical Technology develop leadership and technical skills through participation in this intracurricular activity.

Educators Rising, a national organization for students in the Education and Training Program, cultivates highly skilled educators by guiding young people on a path to become teachers, beginning in high school and extending through college and into the profession. Participation in local, state and national competitions and conferences allows students to demonstrate their knowledge, skills and leadership in education. Scholarship opportunities are available as well."

*** Note: Fees are reviewed annually for Board of Education approval.**

Career Pathways

2019-2020

Information to Parents

Defining and exploring a career path during high school that matches a student's interests and skills is crucial to attaining success in college and careers. This Career Connections Guide will help students and parents design a high school learning experience that will prepare students academically and technically for a career of their choice.

Sylvania Schools offers coursework in six career pathways and twelve career fields. Career Pathways provide a collective look at education and training, wage, and job outlook information for related occupations. A Career Pathway includes an Academic Pathway that serves as the foundation for related careers.

Sylvania Schools Career Pathways

Arts & Communications – page [22](#)

Business & Management – page [24](#)

Environmental & Agriculture – page [26](#)

Health, Education & Human Service – page [28](#)

Engineering & Industrial – page [30](#)

Information Technology – page [32](#)

Our counselors and teachers will lead students through career advising activities and guide them to the completion of a student success plan. This process helps students understand how their personal interests, strengths, and values might predict satisfaction and success in school and related career fields, as well as how to link these interests and strengths to their academic and career goals. Students will create a high school schedule, which will prepare them for college and careers, by aligning academic coursework, career exploration, and career skill attainment.

Overview of the Student Success Plan Outline

	6	7	8	9	10	11	12
Learning style	x			x			x
Career interests	x	x	x	x	x	x	x
Strengths/skills	x	x		x	x	x	x
Work values	x	x				x	x
Academic and career pathways	x	x	x	x	x	x	x
School courses and programs	x	x	x	x	x	x	x
Career exploration activities	x	x	x	x	x	x	x
Postsecondary education and training programs				x	x	x	x
College and career planning and preparation		x	x		x	x	x

Getting Started

Complete [The Student Success Plan](#), and use the resources below to define a career path. Then, refer to the Career Pathways pages 22-33 to connect your high school courses to your chosen career. A sample schedule is provided for each pathway. All students are encouraged to take the academic and career courses that will prepare them for a future career. The pathway electives section highlights courses that will provide career-ready skills for the chosen career.

[Ohio Means Jobs K-12](#)

[Occupation Search](#)

[In-Demand Careers](#)

[Career Pathways](#)

Explore, Plan, Fund, Find Careers

Select Industry (Pathways) & Explore Interests

Current Job Market Trends

Overview of Career Options & Education Required

CAREER PATHWAY HIGH SCHOOL

Occupations - Arts & Communications

The **Arts & Communications** cluster includes the entry, technical and professional level career options within the performing, visual, written, and media arts. This cluster includes but is not limited to the following industries: theater, film, mass media, journalism, literature, fine arts, TV/radio broadcasting, advertising, public relations, graphic design, printing/publishing, telecommunications, and technical writing. Many of the skills learned in this area can be transferred to areas in business and human services. Because communication is a skill needed for success in working with people, this pathway is often considered a foundation skill for other areas.

IS THIS YOU?

- Can you work accurately with detailed information?
- Can you read and follow directions?
- Do you have artistic ability?
- Do you visually like to express your feelings and ideas?
- Do you have clear written and verbal communication skills?
- Do you have observation skills?
- Do you have the ability to work alone and in groups?
- Are you creative and innovative?

If you answer "yes" to most of these questions, the Arts & Communications Pathway may be for you.

Career Opportunities by Educational Level

Four Years of College and beyond

Agents and Business Managers	Desktop Publishers	Painters & Illustrators
Architectural Drafters	Editors	Producers
Art Directors	Fashion Designers	Public Relations Specialists
Choreographers	Interpreters and Translators	Sculptors
Copy writers	Landscape architects	Audio/Video Equipment Technicians
Creative Writers	Music directors	Set & Exhibit Designers
Curators		Technical Writers

1-2 Years Training/Education

Actors	Interior designers	Paste up Workers
Broadcast Technicians	Interpreters & Translators	Pre-Press Technicians
Cartoonists	Jewelers	Professional Photographers
Commercial & Industrial Designers	Make-up Artists (Theatrical Performances)	Proofreaders
Computer Systems Analysts	Musical Instrument Repairs	Web Developers
Film & Video Editors		Telecommunications Line Installers & Repairers
Graphic Designers		

High School

Copy Writers	Film Lab Technicians	Job Printers
Craft Artist	Floral Designers	Stock Clerk, Sales Floor
Etchers & Engravers		Telemarketing

Arts and Communications Career Cluster

Courses are offered at various academic levels (Honors and AP) and delivery systems (block and single period). Counselors will assist students in choosing the appropriate level at the time of scheduling.

Recommended Schedule						Pathway Electives	
Grade	Core	Additional requirements may be necessary for acceptance to some colleges. See your counselor for information.				Refer to course descriptions for further information about these electives or consecutive courses in the cluster.	
9	English Math Science World Studies	Health & Physical Education	World Language	Career Based Elective		<ul style="list-style-type: none"> •Art Foundations •Drama I •Theater Workshop •Dance Foundations •Public Speaking •Photojournalism (NV) •Introduction to Journalism (NV) 	<ul style="list-style-type: none"> •Orchestra(s) •Band(s) •Choir(s) •Computer Graphic Design I •Intro to Visual Technology •Computer Graphic Design I •Journalism Writing & Design (SV)
10	English Math Science American History	Physical Education	World Language	Elective	Elective	<ul style="list-style-type: none"> •2D or 3D Design •Art Appreciation •Drama I •Theater Workshop •Dance Foundations •Public Speaking •Photojournalism (NV) •Introduction to Journalism (NV) •Journalism •Yearbook 	<ul style="list-style-type: none"> •Orchestra(s) •Band(s) •Choir(s) •Broadcast Journalism (NV) •Journalism Writing & Design (SV) •Computer Graphic Design II
11	American Literature Math Science Social Studies Elective	World Language (recommended for college prep)	Elective	Elective	Elective	<ul style="list-style-type: none"> •Intermediate 2D or 3D Design •AP Art History •Journalism •Yearbook •AP Music Theory •Theatrical Performing Arts I 	<ul style="list-style-type: none"> •Orchestra(s) •Band(s) •Choir(s) •Pop Music •Interactive Media I* •Visual Communication Design I** •Broadcast Journalism (NV)
12	Senior English Math Science American Government	Elective	Elective	Elective	Elective	<ul style="list-style-type: none"> •Honors Senior Studio 2D or 3D Design •AP Art History •Journalism •Yearbook •AP Music Theory •Theatrical Performing Arts II 	<ul style="list-style-type: none"> •Orchestra(s) •Band(s) •Choir(s) •Pop Music •Interactive Media II* •Visual Communication Design II** •Broadcast Journalism (NV)

Industry Credential Opportunities: Unavailable

Fine Arts credit required. One credit earned in a career technical track may serve as a fine arts credit.

“Career-technical track” is interpreted as a minimum of one credit or one year in coursework representing coherent sequential career-technical content.

*Dual enrollment or articulated college credits may be awarded upon successful completion of CTE program.

Refer to course descriptions for further information about electives.

CAREER PATHWAY HIGH SCHOOL

Occupations - Business & Management

Business & Management careers include a variety of jobs in areas related to administration and management as well as marketing, finance, accounting, and data processing. Workers in this group use mathematical and analytical skills to design financial systems and interpret records. Others set policies and priorities as well as participate in marketing and sales activities. Professional occupations in this area which require high educational attainment and offer high earnings are expected to grow rapidly.

IS THIS YOU?

- Is it important for you to have day-to-day contact with the public?
- Are you able to use logical thinking and personal judgment to perform a variety of office tasks?
- Are you able to make decisions based on your own judgment and company policy?
- Are you able to follow instructions without close supervision?
- Are you able to deal with people?
- Are you able to change work activities frequently?

If you answer "yes" to most of these questions, the Business & Management Pathway may be for you.

Career Opportunities by Educational Level

Four Years of College and beyond

Administrative Services Managers	Credit Analysts	Marketing Managers
Accountants	Financial Examiners	Purchasing Managers
Actuaries	Financial Managers	Sales Agents
Advertising & Promotions Managers	Human Resources Specialists	Statisticians
Budget Analysts	Insurance Underwriters	Treasurers, Controllers
Computer Hardware Engineers	Loan Officers	Chief Financial Officers
Computer Systems Analysts		Management Analysts

1 – 2 Years Training/Education

Bookkeeping, Accounting, Auditing Clerks	Court Reporters	Lodging Managers
Budget Analysts	First-line Supervisors	Medical Transcriptionist
Communication Equipment Mechanics, Installers, Repairers	Food Service Managers	Operations Research Analysts
Computer Programmers	Insurance Adjusters	Real Estate Brokers
Computer, Automated Teller, and Office Machine Repairs	Job Analysis Specialists	Sales Representatives
		Technical Writers
		Travel Agents
		Wholesale and Retail Buyers

High School

Assessors	Insurance Claims Clerks	Payroll & Timekeeping Clerks
Bill & Account Collectors	Insurance Sales Agent	Postal Service Mail Carriers
Brokerage Clerks	Loan Interviewers and Clerks	Reservation & Transportation Ticket Agents
Computer Operators	Meter Readers, Utilities	Retail Salespersons
Customer Service Representatives	Office Clerks, General	Tellers
Data Entry Keyers		
Energy Brokers		

Business & Management Career Cluster

Courses are offered at various academic levels (Honors and AP) and delivery systems (block and single period). Counselors will assist students in choosing the appropriate level at the time of scheduling.

Recommended Schedule						Pathway Electives	
Grade	Core	Additional requirements may be necessary for acceptance to some colleges. See your counselor for information.				Refer to course descriptions for further information about these electives or consecutive courses in the cluster.	
9	English Math Science World Studies	Health & Physical Education	World Language	Business Foundations	Elective	<ul style="list-style-type: none"> •Software Applications •Business Foundations •Intro to Marketing 	•Public Speaking (NV)
10	English Math Science American History	Physical Education	World Language	Intro to Marketing	Elective	<ul style="list-style-type: none"> •Software Applications •Business Foundations •Intro to Marketing •Financial Accounting (NV) 	
11	American Literature Math Science Social Studies Elective	World Language (recommended for college prep)	Business Technology I		Elective	<ul style="list-style-type: none"> •Software Applications •Intro to Marketing •Financial Accounting (NV) •Money Management 	<ul style="list-style-type: none"> •Business Technology I* •Financial Management I*
12	Senior English Math Science American Government	Business Technology II		Elective	Elective	<ul style="list-style-type: none"> •Software Applications, •Intro to Marketing •Financial Accounting (NV) •Money Management 	<ul style="list-style-type: none"> •Business Technology II* •Financial Management II*

Industry Credential Opportunities: Unavailable

Fine Arts credit required. One credit earned in a career technical track may serve as a fine arts credit.

“Career-technical track” is interpreted as a minimum of one credit or one year in coursework representing coherent sequential career-technical content.

*Dual enrollment, honors credits, or articulated college credits may be awarded upon successful completion of CTE program.

Refer to course descriptions for further information about electives.

CAREER PATHWAY HIGH SCHOOL

Occupations - Environmental & Agricultural

The **Environmental & Agriculture Systems** career cluster includes a variety of jobs within environmental and agricultural industries. This cluster includes careers related to service, research, education and production. Numerous career opportunities exist in agricultural sales and services, animal and crop production, education, engineering and mechanical systems, food processing, horticulture, and natural resources.

IS THIS YOU?

Working in a wide variety of working conditions, inside and outside?

Having contact with plants and animals?

Can you read scientific information and follow directions?

Enjoy working with equipment?

Like to be creative?

Like working with your hands?

If you answer "yes" to most of these questions, the Environmental & Agricultural Systems Pathway may be for you.

Career Opportunities by Educational Level

Four Years of College and beyond

Agricultural Engineers	Farmers & Ranchers	Park Naturalists
Agricultural Inspectors	Food Scientists & Technologists	Plant Scientists
Animal Scientists	Foresters	Range Managers
Biologists	Hydrologists	Soil Conservationists
Criminal Investigators	Landscape Architects	Veterinarians
Environmental Scientists	Nursery & Greenhouse Managers	Zoologists & Wildlife Biologists

1 – 2 Years Training/Education

Animal Breeders	Floral Designers	Nursery & Greenhouse Managers
Animal Scientists	Forest Fire Inspectors & Prevention	Pest Control Workers
Animal Trainers	Specialists	Veterinary Assistants
Biological Technicians	Foresters	Laboratory Animal Caretakers
Bus & Truck Mechanics	Landscaping & Groundskeeping	Veterinary Technologists &
Farmers & Ranchers	Workers	Technicians
Fish & Game Wardens		

High School

Agricultural Equipment Operators	Forest & Conservation Workers	Nursery Workers
Animal Trainers	General Farm Workers	Pesticide Handlers
Butchers & Meat Cutters	Landscaping & Grounds Keeping	Pest Control Workers
Farmers & Ranchers	Workers	Retail Salespersons
Food Batchmakers	Materials Inspectors	Welder-Fitters

Environmental & Agricultural Career Cluster

Courses are offered at various academic levels (Honors and AP) and delivery systems (block and single period). Counselors will assist students in choosing the appropriate level at the time of scheduling.

Recommended Schedule						Pathway Electives	
Grade	Core	Additional requirements may be necessary for acceptance to some colleges. See your counselor for information.				Refer to course descriptions for further information about these electives or consecutive courses in the cluster.	
9	English Math Science World Studies	Health & Physical Education	World Language	Animal and Plant Science	Elective	•Public Speaking	•Business & Management Foundation
10	English Math Science American History	Physical Education	World Language	Plant and Horticulture	Elective	<ul style="list-style-type: none"> •Horticulture Leadership and Management •Introduction to Alternative Energy •Engineering Applications •Engineering Design •CAD 	<ul style="list-style-type: none"> •Horticulture Leadership and Management •Plant and Horticulture •Introduction to Alternative Energy •Engineering Applications •Engineering Design •CAD
11	American Literature Math Science Social Studies Elective	World Language (recommended for college prep)	Elective	Elective	Elective	•Horticulture I	•Money Management
12	Senior English Math Science American Government	Elective	Elective	Elective	Elective	•Horticulture II	

Industry Credential Opportunities: OSHA 10

Fine Arts credit required. One credit earned in a career technical track may serve as a fine arts credit.

“Career-technical track” is interpreted as a minimum of one credit or one year in coursework representing coherent sequential career-technical content.

*Dual enrollment or articulated college credits may be awarded upon successful completion of CTE program.

Refer to course descriptions for further information about electives.

CAREER PATHWAY HIGH SCHOOL

Occupations - Health, Education & Human Services

Health & Human Services careers include a variety of jobs in law and legal services, community support areas such as education, medical technician, personal services such as cosmetology, and community support areas such as fire and city services. Medical and educational services are projected to be some of the fastest growing occupations. The jobs in this sector are charted to increase dramatically in the next several years.

IS THIS YOU?

- Can you work accurately with detailed information?
- Can you work independently?
- Do you have excellent physical condition and stamina?
- Do you have knowledge of basic math and biology?
- Do you have clear verbal skills?
- Can you use judgment and reasoning to cope with emergencies such as illnesses, accidents, or interrupted service?
- Can you direct, manage, or supervise the activities of others?

If you answer "yes" to most of these questions, the Health & Human Services Pathway may be for you.

Career Opportunities by Educational Level

Four Years of College and beyond

Biostatisticians
Dietitians & Nutritionists
Fitness Trainers & Aerobics
Instructors
Health Educators
Occupational Therapists
Physical Therapists

Registered Nurses
Veterinarians
Child, Family & Social Workers
Coaches & Scouts
Food Service Managers

Medical Scientists
Mental Health Counselors
Molecular Biologists
Psychologists
Respiratory Specialists
Special Education Teacher
Training & Development Specialists

1 – 2 Years Training/Education

Chefs and Head Cooks
Child Care Workers
Dental Assistants
Dietetic Technicians
Embalmers
Fashion Designers
Fitness Trainers
Flight Attendants
Hairdressers, Hairstylists &
Cosmetologists

Loan Counselors
Massage Therapists
Social & Human Service
Assistants
Cardiovascular Technologists &
Technicians
Dental Hygienists
Dental Laboratory Technicians

Emergency Medical Technicians
Paramedics
Medical Assistants
Medical Equipment Repairers
Nuclear Medicine Technologists
Occupational Therapist Assistants
Pharmacy Technicians
Phlebotomists
Physician Assistants
Surgical Technologists

High School

Ambulance Drivers
Bus Drivers
Dental Assistants
Commercial Pilots
Home Health Aides
Medical Assistants
Nursing Aides, Orderlies
Nursing Attendants

Psychiatric Aides
Cashiers
Child Care Workers
Fire Inspectors
Food Preparation Workers
Hotel, Motel & Resort Desk Clerks

Medical Records
Ophthalmic Laboratory Technicians
Patient Representatives
Receptionists
Information Clerks
Recreation Workers
Security Guards
Teacher Assistants

Health, Education & Human Services Career Cluster

Courses are offered at various academic levels (Honors and AP) and delivery systems (block and single period). Counselors will assist students in choosing the appropriate level at the time of scheduling.

Recommended Schedule						Pathway Electives	
Grade	Core	Additional requirements may be necessary for acceptance to some colleges. See your counselor for information.				Refer to course descriptions for further information about these electives or consecutive courses in the cluster.	
9	English Math Science World Studies	Health & Physical Education	World Language	Career Based Elective	Elective	•Public Speaking (NV) •Teen Issues	•Introduction to Education •Health Careers •Foundation
10	English Math Science American History	Physical Education	World Language	Elective	Elective	•Nutrition & Healthy Lifestyles	•Child Development
11	American Literature Math Science Social Studies Elective	World Language (recommended for college prep)	Elective	Elective	Elective	•Psychology •AP Psychology •Sociology •Contemporary Law •Healthy Foods	•Medical Tech I* •Money Management •Education and Training I* •Cosmetology I
12	Senior English Math Science American Government	Elective	Elective	Elective	Elective	•Life After Graduation •Child Development •Healthy Foods	•Medical Tech II* •Education and Training II* •Cosmetology II

Industry Credential Opportunities:

Education and Training - First Aid/CPR, Child Abuse Awareness, Communicable Disease Awareness, CDA Eligible

Medical Technology - First Aid/CPR, First Responder, CERT, Ohio Nurse Aide (STNA)

Cosmetology - State Cosmetology License

Fine Arts credit required. One credit earned in a career technical track may serve as a fine arts credit.

“Career-technical track” is interpreted as a minimum of one credit or one year in coursework representing coherent sequential career-technical content.

*Dual enrollment or articulated college credits may be awarded upon successful completion of CTE program.

Refer to course descriptions for further information about electives.

CAREER PATHWAY HIGH SCHOOL

Occupations - Engineering, Industrial, Civil, Biomedical & Aeronautical

The **Industrial & Engineering** careers include a variety of jobs in the automotive, industrial, construction, manufacturing and engineering industries. Often jobs in this area do not require a college degree but must have specific post-secondary training in a specific area. After receiving this training many offer higher than average earnings. Workers in this group collect, record, and coordinate technical information and solve problems related to production. Others operate and maintain equipment or inspect and/or test materials and products to be sure they meet quality standards.

IS THIS YOU?

- Can you work independently and with a team to complete projects?
- Can you read scientific information and follow directions?
- Do you have above average mathematics and science skills?
- Can you use the scientific method and arrive at logical solutions?
- Do you enjoy solving problems using facts and judgments?
- Can you work accurately with detailed information?

If you answer "yes" to most of these questions, the Industrial & Engineering Pathway may be for you.

Career Opportunities by Educational Level

Four Years of College and beyond

Airplane Pilots	Biomedical Engineer	Industrial Production Manager
Construction Managers	Air Traffic Controllers	Industrial Safety Engineer
Electronics Engineer	Chemical Engineers	Materials Engineers
Mechanical Engineer	Construction & Building Inspector	Occupational Health & Safety Specialists
Aeronautical Engineer	Cost Estimators	Remote Sensing Technologists
Quality Control Engineer		Sales Engineers
Civil Engineer		

1 – 2 Years Training/Education

Auto body Repairer	Construction Carpenters	Power generating Plant Operators
Aircraft Mechanics	Cost estimators	Production Inspectors
Architectural drafters	Electro-Mechanical Technicians	Production, Planning, and Expediting Clerks
Avionics Technicians	Engineering Technicians	Surveyors
Civil Engineer Tech	Mechanical Drafters	Quality Control Analysts
Computer Service Tech		

High School

Aircraft Structure Assemblers	Energy Auditors	Industrial Machinery Mechanics
Appliance Services	First Line Supervisors of Construc- tion	Operating Engineers
Construction Laborers	Trades	Purchasing Agents
Conveyor Operators & Tenders	Heating & Air Conditioning Mechanics	Roofers
Drywall Installers	Elevator Installers & repairers	Stationary Engineers & Boiler Operators
Electricians Assistance		Tool & Die Makers
Electrical Powerline Installers		Welders & Cutters

Engineering & Industrial Career Cluster

Courses are offered at various academic levels (Honors and AP) and delivery systems (block and single period). Counselors will assist students in choosing the appropriate level at the time of scheduling.

Recommended Schedule						Pathway Electives	
Grade	Core	Additional requirements may be necessary for acceptance to some colleges. See your counselor for information.				Refer to course descriptions for further information about these electives or consecutive courses in the cluster.	
						Northview	Southview
9	English Math Science World Studies	Health & Physical Education	World Language	Elective	Elective	<ul style="list-style-type: none"> •Engineering Applications •Engineering Design •CAD •Intro to Alternative Energy •3D Design 	<ul style="list-style-type: none"> •Engineering Applications •Engineering Design •CAD •Intro to Alternative Energy •Woods/Metals Technology •Robotics •Green Systems Design
10	English Math Science American History	Physical Education	World Language	Elective	Elective	<ul style="list-style-type: none"> •Engineering Applications •Engineering Design •CAD •Intro to Alternative Energy •3D Design 	<ul style="list-style-type: none"> •Engineering Applications •Engineering Design •CAD •Intro to Alternative Energy •Woods/Metals Technology •Robotics •Green Systems Design
11	American Literature Math Science Social Studies Elective	World Language (recommended for college prep)	Elective	Elective	Elective	•Engineering Tech I*	<ul style="list-style-type: none"> •Construction Technology I* •Engineering & Fabrication Tech I*
12	Senior English Math Science American Government	Elective	Elective	Elective	Elective	•Engineering Tech II*	<ul style="list-style-type: none"> •Construction Technology II* •Engineering & Fabrication Tech II*

Industry Credential Opportunities:

Construction Technology - OSHA Safety Certification

Engineering - FEMA and NCCER Credential

Fine Arts credit required. One credit earned in a career technical track may serve as a fine arts credit.

“Career-technical track” is interpreted as a minimum of one credit or one year in coursework representing coherent sequential career-technical content.

*CTAG college credits may be awarded upon successful completion of CTE program

Refer to course descriptions for further information about electives.

CAREER PATHWAY HIGH SCHOOL

Occupations - Information Technology

The **Information Technology** cluster includes the entry, technical and professional level career options within the information management, commercial art, visual, written, and media arts, marketing, and computer information systems. Workers in this group use technical knowledge, artistic expression to communicate and maintain the operations of technical equipment including workstation, systems and networks. Employers in this cluster seek lifelong learners who can locate and use information.

IS THIS YOU?

- Are you a logical thinker?
- Are you able follow instructions and specific procedures?
- Do you have artistic ability?
- Are you capable of expressing yourself visually?
- Do you like solving problems?
- Do you like to direct, modify and assess your own work?

If you answer "yes" to most of these questions, the Information Technology Pathway may be for you.

Career Opportunities by Educational Level

Four Years of College and beyond

Art Directors
Computer & Information Systems
Manager
Computer Hardware Engineering
Computer Programmers

Computer Systems Analysts
Creative writers
Database Administrators
Desktop Publishers
Graphic Designers

Information Security Analysts
Network Architects
Network & Computer Systems
Administrators
Software Developers

1 – 2 Years Training/Education

Cartoonists
Computer, Automated Teller
& Office Machine Repairs
Computer User Support Specialists
Database Administrators
Electronic Drafters

Film & Video Editors
Graphic Designers
Network Support Specialists
Operations Research Analysts

Radio Mechanics
Screen Printing Machine Setters
& Set-up Operators
Telecommunications Line
Installers & Repairers
Web Developers

High School

Audio Visual Collections
Specialists
Computer Operators
Data Entry Keyers
Job Printers

Office Clerks, General
Photoengravers
Photographers Assistants
Receptionists & Information
Clerks

Sound Engineering Technicians
Visual Artists
Sound Engineering Technicians
Telemarketer
Word Processor

Information Technology Career Cluster

Courses are offered at various academic levels (Honors and AP) and delivery systems (block and single period). Counselors will assist students in choosing the appropriate level at the time of scheduling.

Recommended Schedule						Pathway Electives	
Grade	Core	Additional requirements may be necessary for acceptance to some colleges. See your counselor for information.				Refer to course descriptions for further information about these electives or consecutive courses in the cluster.	
9	English Math Science World Studies	Health & Physical Education	World Language	Career Based Elective	Elective	<ul style="list-style-type: none"> •Information Technology Foundation •Today's Technology (NV) 	<ul style="list-style-type: none"> •Computer Graphics Foundation •2D Game Design
10	English Math Science American History	Physical Education	World Language	Elective	Elective	<ul style="list-style-type: none"> •Software Applications (NV) •Intro to Programming •Today's Technology (NV) 	<ul style="list-style-type: none"> •Computer Graphic Design I •Computer Graphic Design II •AP Computer Science Principles •2D Game Design
11	American Literature Math Science Social Studies Elective	World Language (recommended for college prep)	Elective	Elective	Elective	<ul style="list-style-type: none"> •Interactive Media I* (NV) 	<ul style="list-style-type: none"> •Visual Communications Design I* (SV) •Computer Science I* (NV) •Honors Programming I* (SV)
12	Senior English Math Science American Government	Elective	Elective	Elective	Elective	<ul style="list-style-type: none"> •Interactive Media II* (NV) 	<ul style="list-style-type: none"> •Visual Communications Design II* (SV) •Computer Science II* (NV) •Honors Programming II* (SV)

Industry Credential Opportunities: Unavailable

Fine Arts credit required. One credit earned in a career technical track may serve as a fine arts credit.

“Career-technical track” is interpreted as a minimum of one credit or one year in coursework representing coherent sequential career-technical content.

*Dual enrollment or articulated college credits may be awarded upon successful completion of CTE program.

Refer to course descriptions for further information about electives.

Course Descriptions

2019-2020



www.sylvanianorthview.org

Telephone Numbers

Sylvania Northview High School.....419-824-8570

Administration

Steve Swaggerty, *Principal* x5101
Leslie Wakeland, *Secretary* x5100
Bonnie Kobee, *Records Secretary*..... x5104
Gracy Hinojosa-Lloyd, *Assistant Principal, Teaching and Learning*..... x5106
Gina Ragland, *Secretary*..... x5107
Libby McIlwain, *Assistant Principal, Student Services*..... x5105
Cathy Bohland, *Secretary* x5103
Chris Irwin, *Athletic Director*..... x5113

Guidance

Ann Kuebler, *Guidance Secretary*..... 419.824.8715
Crystal Burnworth, *A - FL Guidance Counselor*..... 419.824.8711
Melanie Rogers, *FO - L Guidance Counselor*..... 419.824.8709
Kate Henk, *M - RO Guidance Counselor*..... 419.824.8716
Stacie Wachowiak, *RU - Z Guidance Counselor* 419.824.8714
Brian Hede, *A - Z Guidance Counselor*..... 419 824-8720

Resource Center

Darla Omey, *Media Specialist*..... x5208

Department Chairs/Liaisons

Career Technology Tami Blue
English Amy Schloegl
Guidance..... Stacie Wachowiak
Math Greg Christy
Science Kathryn Nelson
Social Studies Perry Lefevre
Special Education Christine Saverstrom/Amy Loyd
Supporting Disciplines Terri Seal-Roth
World Language..... Lindsey Jurski



GRADUATION REQUIREMENTS

It is the student's responsibility to see that the requirements for graduation are met. Northview High School will make every effort to keep up-to-date records and students and parents informed about the status of progress toward completing the necessary course work for graduation. However, it is the student's responsibility to be acquainted with necessary graduation requirements.

In order to meet the prescribed standards set forth by the State Department of Education and Sylvania Board of Education and to help pupils select the proper sequence of courses, the following regulations and suggestions are listed:

•Twenty-two (22) units of satisfactory work at the high school level are required for graduation.

•Sylvania Board of Education Policy 6140 (Promotion Through the Grades) requires that some identified students with learning difficulties will be assigned to appropriate classes for remediation. Successful completion of these courses shall take precedence over taking other courses outside the core curriculum.

CLASSES OF 2019 and Beyond

•Students must pass the Ohio Core Curriculum, participate in end of course exams, and meet one of the **state-required pathways** to graduation (<https://education.ohio.gov/getattachment/Topics/Ohio-s-Graduation-Requirements-rev/Earning-an-Ohio-High-School-Diploma-for-the-Cl-1/GradReq2019.pdf.aspx>) Follow this link for updated information on Graduation Pathways requirements.

- 1.** Earn the required individual and cumulative scores on end-of-course Ohio State Tests. The scores will be set by the State Board of Education.
- 2.** Earn a "remediation-free" score on a nationally recognized college admission exam such as ACT or SAT.
- 3.** Earn a State Board of Education-approved, industry-recognized credential or a state-issued license for practice in a career and achieve a score that demonstrates workforce readiness and employability Work Keys.

*Additional graduation options may exist. Refer to the ODE website for updated details. <http://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements>

1. *One credit of World Studies, 1 credit American History, .5 credit American Government, remaining 1 credit elective.*
2. *Math units must include Algebra II.*
3. *Students must complete at least two semesters of fine arts. Students following a career-technical pathway are exempted from the fine arts requirement. Please see your guidance counselor for details.*
4. *Five of the 6 electives must be chosen from foreign language, fine arts, business, career-technical education, family and consumer sciences, technology, agricultural education, or English, mathematics, or science, social studies courses not otherwise required.*
5. *Please see the course descriptions for qualifying courses.*

<i>Sylvania Requirement</i>	<i>Credits</i>
English	4
Social Studies¹	3
Science	3
Math²	4
Health/Physical Education	1
Fine Arts³	1
Electives⁴	6.0
Total Credits	22

SCHEDULING PROCEDURES

1. All eighth, ninth, tenth and eleventh grade students must fill out registration forms for the next year even though they may plan to attend another school.
2. Students should discuss course selections for the following year with their parents.
3. The registration form must be filled out and signed by both student and parent (Recommended courses will be indicated). Course Selection will be completed online.
4. The recommended course load is six (6) periods of course work per semester for seniors and seven (7) periods for underclassmen.
5. Juniors and seniors may request an AM or PM flexible schedule. An AM flexible schedule will allow for a delayed starting time. A PM flexible schedule will allow for an early release time (Please see your counselor for the flex scheduling paperwork detailing rules and restrictions.).
6. The school reserves the right to limit or cancel any classes which are offered in the program of studies.

POST SECONDARY TRANSITION ACTIVITIES (FLEX SCHEDULING)

Post Secondary Transition Activities provide the opportunity to explore educational and work options outside of the traditional school day. This student-centered format encourages students to explore job shadowing, internships, or early job placement through the creation of a flexible schedule.

Juniors and seniors may request an AM or PM flexible schedule. An AM flexible schedule will allow for a delayed starting time. A PM flexible schedule will allow for an early release time. With this flexible schedule option, the district is not responsible for transportation outside regular scheduled routes. All flexible schedule requests are contingent upon the master schedule and course requirements for graduation.

The following contract (located on the student registration sheet) will need to be signed by the student and parent in order for a flexible schedule to be enacted.

1. I understand that the student is responsible for meeting all Sylvania course requirements for graduation as well as Ohio State Graduation Pathways requirements. A flexible schedule may be cancelled in order to meet these requirements.
2. I understand that the student is responsible for knowing changes to the time schedule and attending all scheduled classes when in session (e.g. assembly or two-hour delay).
3. If the student participates in extra-curricular activities, he or she must maintain athletic eligibility. All athletes must pass a minimum of five full credit courses per quarter according to OHSAA Bylaws. Students who plan to participate in collegiate-level athletics must also follow NCAA Clearinghouse regulations.
4. Students with a flexible schedule must enter or leave the building at the designated time period. Students are not permitted to remain at school at unauthorized times.
5. The student and/or parent are responsible for the transportation to and/or from school at times other than the regularly scheduled bus routes.
6. Sylvania Schools is not responsible for students scheduled out of the building during the flexible scheduling time.
7. The Sylvania administration reserves the right to revoke a student's privilege for early release or late arrival for violations of the code of conduct, attendance issues, or academic concerns.

RECOMMENDATIONS

Teacher recommendations are made early in the school year, yet teachers have the opportunity to re-evaluate/change their decision as the year progresses. If the student's grade drops or a change in student performance occurs, the teacher can opt to change the recommendation. If that occurs, the student and parent will be notified by the child's counselor. If a parent/student disputes the change, he or she must contact the counselor to resolve the conflict.

If a parent wishes to override the recommendation of a teacher, they must sign a Recommendation Override Authorization, available from the school counselor. In addition, if an override is enacted, a subsequent class change must still follow the Schedule Changes policy in the student handbook.

SCHEDULE CHANGES

Planning a schedule for the next school year is a difficult task, and situations may occur requiring a change in that schedule. Changes have a serious effect on class size, teacher assignments, and the overall master schedule. **Thus, students and parents are urged NOT to plan a program with the idea that it can be changed.** If a parent-approved schedule change is to be considered, you should see your counselor prior to the closing of the school year. **No personal preference changes will be made after the start of school.** Space availability will be a major factor in honoring your request. A student/parent may not request a specific teacher.

Only the following reasons will constitute a need for a change:

1. A technical error was made in the process of scheduling the student's requests.
2. The student has been academically misplaced.
3. There is a scheduling conflict.
4. There is a scheduling overload.

Schedule changes are official when the following conditions are met:

1. All schedule changes must go through the assigned counselor.
2. Schedules will not be changed without appropriate signatures on the change form.
3. The schedule change has been entered into the computer.
4. The student has been given a new, updated copy of the schedule.

ADDING A CLASS AFTER SCHOOL BEGINS: Course additions must occur no later than five (5) school days after the beginning of a course. A course may be scheduled in place of a study hall or commons. The student's schedule will not be rearranged to accommodate an additional course.

COURSE WITHDRAWAL AFTER SCHOOL BEGINS: Students may drop a course without penalty until the end of the tenth (10th) school day of a semester or year-long course with the teacher and parent permission. The course will be replaced with a study hall. Freshmen and sophomores will not be permitted to drop the course if their course load would drop below the seven (7) recommended course load each semester. Juniors and seniors are required to maintain course loads to meet scheduled graduation requirements.

Students dropping a course after ten school days will receive an "F" for the semester unless it is dropped with written teacher recommendation. Teacher recommendation will be based on the following criteria:

1. The student has sought assistance from the teacher.
2. The student has taken advantage of any available tutorial services.
3. The student's work does not indicate the ability to meet minimum course requirements with conscientious effort.

Students will be assigned to a study hall (not commons) for the remainder of the semester if the course is dropped. Students are expected to complete all year-long classes; however, a semester's credit will be given to a student who has successfully passed one semester of a year-long course if the student was enrolled in the course for the entire year or special circumstances exist to warrant a drop at the end of the first semester.

FRESHMAN: Course Offerings

It is strongly recommended that students review the **Career Pathways** schedules and Pathway Electives online before beginning the scheduling process. Refer to the following course descriptions to finalize course selections.

A freshman schedule should include the required courses listed below plus a minimum of one elective.

Required Courses: *English 9, Math, Science 9, World Studies, Health, Physical Education*

The following course descriptions are designed to assist in scheduling the freshman year. Northview has a nine-period day. It is recommended that freshman take six courses with a lunch and study hall each semester. Open periods will be filled with an additional study hall.

Note: The school reserves the right to limit or cancel course offerings.

ENGLISH CURRICULUM

3100 ENGLISH 9

Year Credit 1 Est Fee: \$25 (Required Novels)

English 9 is a required course that combines the study of various literary genre (both fiction and nonfiction), composition, research skills, and vocabulary. Literature study will develop through the study of short stories, novels, drama, poetry, articles, essays, and other nonfiction sources. Composition focuses on a variety of different kinds of writing that require a multi-paragraph development. Students will be required to complete the state mandated end of course assessment. Supplemental materials are required and must be purchased or supplied by the student. A summer reading assignment, located on the Northview website at www.sylvanianorthview.org, is required for this course.

3101 HONORS ENGLISH 9

Year Credit 1 Est Fee: \$30 (Required Novels)

Prerequisite: 8th grade teacher's recommendation

Honors English 9 is an intensified study in literature, composition, grammar, and vocabulary that expands the English 9 curriculum. This course features and explores an extended scope of literature; literary analysis in essay tests; extensive work in writing skills and vocabulary. Students should have advanced critical thinking and writing skills. Students will be required to complete the state mandated end of course assessment. Supplemental texts are required and must be purchased or supplied by the student. A summer reading assignment, located on the Northview website at www.sylvanianorthview.org, is required for this course.

MATH CURRICULUM

****See Math Course Flow Chart pg 70**

3306 ALGEBRA I

Year Credit 1 Grades 9-12

Algebra I generalizes the concepts of arithmetic through the use of symbols. The student will begin to develop the ability to reason abstractly. The course addresses five critical areas of focus: relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. Application of these concepts will be emphasized throughout the course. Summer work is required for this course. A scientific calculator is required. Alternately a TI-83+ or TI-84+ graphing calculator may be used but graphing concepts will be taught using Chromebooks.

3308 GEOMETRY

Year Credit 1 Grades 9-12

Prerequisite: *Algebra I (2B) or Algebra I*

In Geometry, students will study examples of geometry in the physical world and how to use geometric concepts to solve problems. Critical areas of focus include: congruence, proof, and construction; similarity, proof, and trigonometry; connecting algebra and geometry through coordinates; circles with and without coordinates; extending to three dimensions; and applications of probability. Developing proof writing and reading skills are a significant part of the course. Summer work is required for this course. A scientific calculator is required. Alternately a TI-83+ or TI-84+ graphing calculator may be used but graphing concepts will be taught using Chromebooks.

3309 HONORS GEOMETRY

Year Credit 1 Grade 9-10

Prerequisite: *Algebra I and teacher recommendation*

In addition to all of the concepts covered in the regular geometry course, students will develop skills in critical thinking, logical reasoning, and problem solving. Emphasis is given to the structure of geometry and the development of direct proofs. Proof-writing skills are developed by beginning with short and simple ideas that gradually lead to more complex proofs. Students will understand how geometry grows from observations and common relationships. Students will study examples of geometry in the physical world and how to use geometric concepts to solve problems. Other ideas that are developed include: trigonometry, indirect proofs, inductive reasoning, non-Euclidean geometries, transformations, and symmetry. Throughout the course students will utilize algebraic skills and develop constructions using compass and straight edge. A TI-83 Plus or TI-84 Plus graphing calculator is required.

SCIENCE CURRICULUM

See Science Course Flow Chart on p. 72

3401 PHYSICAL SCIENCE

Year Credit 1 Grade 9 Est. Fee: \$6

Through lecture and laboratory investigations, students are introduced to the basic concepts of chemistry and physics. Chemistry topics include the properties of matter, patterns in the periodic table of elements, and reactions of matter. During the physics overview, students will be introduced to dynamics (Newton's laws of motion and universal gravitation) through the study of speed, acceleration, force, and pressure. Students will discover the nature of waves and energy transfer through study of mechanical waves, light waves (electromagnetic radiation), and sound waves. In addition to the subject matter, students are trained in the techniques of the scientific method through assembling lab equipment, conducting investigations, collecting and analyzing data, and writing lab reports. Applications of scientific reasoning to everyday life as well as techniques of measurement in qualitative and quantitative problem solving are applied throughout the course. Algebra is recommended as this course involves analytical problem solving and mathematical concepts including graphing.

3402 HONORS PHYSICAL SCIENCE

Year Credit 1 Grade 9 Est. Fee \$6

Prerequisite: *Algebra I and teacher recommendation*

Honors Physical Science is designed for the advanced freshman student who has a strong interest in STEM fields (science, technology, engineering and/or mathematics) and plans to pursue upper level Honors and/or AP science courses. Utilizing developmentally appropriate inquiry experiments, quantitative problem solving, project-based learning, lecture and discussion, Honors Physical Science gives an in-depth treatment to the topics covered in Physical Science 3404/3405. Honors Physical Science also introduces material not covered in 3404/3405 but expected in the summer assignments for the upper level Honors Chemistry and Physics courses. Most Honors Physical Science students naturally progress to Honors Biology. Some students who are highly motivated and successful in Honors Physical Science may choose to take Honors Biology and Honors Chemistry concurrently in their Sophomore year, giving them more AP course options during their junior and senior year.

SOCIAL STUDIES CURRICULUM

3200 WORLD STUDIES

Year Credit 1 Grade 9

This course completes a chronological study of world history from 1750 to the present. This study includes not only history, but integrates each of the other six social studies standards. As students study each historical event, they consider the geographic setting, the cultural perspectives, the economic implications and the role of the governments. They develop a deeper understanding of their role as citizens and continue to expand their command of social studies skills and methods.

3201 HONORS WORLD STUDIES

Year Credit 1 Grade 9

The Honors course requires students to study concepts in greater depth and to complete some extended reading and writing assignments. A recommendation from 8th grade English and Social Studies teachers is required. Students will be expected to complete a considerable amount of reading. Students will be expected to express themselves well both orally and in writing.

FRESHMAN: Electives

ARTS & COMMUNICATION

- 3740** Art Foundations: *Year, 1 credit*
- 3113** Drama I: *Semester, .5 credit*
- 3114** Theater Workshop *Semester, .5 credit*
- 3117** Public Speaking: *Semester, .5 credit*
- 3171** Debate, *Semester, .5 credit*
- 3120** Intro to Journalism: *Semester, .5 credits*
- 4760** Art of Photojournalism: *Semester, .5 credit*

Music

- 3758** Symphonic Band: *Year, 1 credit*
- 3756** Concert Band: *Year, 1 credit*
- 3750** Band Auxiliary: *Quarter, .25 credit*
- 3751** Concert Orchestra: *Year, 1 credit*
- 3752** Wind Ensemble: *Year, 1 credit*
- 3762** Chamber Orchestra: *Year, 1 credit*
- 3776** Women's Chorus: *Year, 1 credit*

BUSINESS & MANAGEMENT

- 8310** Business Foundations: *Semester, .5 credit*
- 8313** Intro to Marketing: *Semester, .5 credit*

ENGINEERING & INDUSTRIAL

- 8392** Engineering Design: *Semester, .5 credit*
- 83921** 3D Modelling & Prototyping: *Year, 1 credit*
- 8394** Engineering Applications: *Semester, .5 credit*
- 8396** Introduction to Alternative Energy:
Semester, .5 credit
- 8398** Computer Aided Design: *Semester, .5 credit*

ENVIRONMENTAL & AGRICULTURE

- 8441** Agriculture & Environmental Systems (SV):
Year, 1 credit
- 8442** Plant and Horticulture (SV): *Year, 1 credit*

3218 AP WORLD HISTORY

Year Credit 1 Grade 9

AP World History focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance — focusing on the environment, cultures, state-building, economic systems, and social structures — provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions.

HEALTH / PHYSICAL ED.

3502 HEALTH

Semester Credit 1/2 Grade 9-12

Health classes meet every day for one semester. The course includes instruction in the following areas: health skills, mental and emotional health, family and social health, sexuality, HIV/AIDS, contraception, nutrition, and alcohol, tobacco, and drug prevention. The National Standards for Health are used to help students develop a knowledge base from which to make healthy life-style choices in everyday living.

3500 PHYSICAL EDUCATION

Semester Credit 1/4 Grade 9-10

Physical Education classes meet every day for one semester. Appropriate clothing is required for participation. The course includes instruction covering the six state standards including knowledge content and physical activity. Activities may include: tennis, volleyball, badminton, aerobic conditioning, fitness testing, swimming, basketball, group games and other activities. Emphasis is placed on active participation, effort, knowledge and responsible personal and social behavior in a physical activity setting.

HEALTH, EDUCATION & HUMAN SERVICES

- 8376** Personal Wellness and Development:
Semester, .5 credits
- 8377** Principles of Nutrition and Wellness:
Semester, .5 credit
- 8380** Principles of Food: *Semester, .5 credit*
- 8360** Introduction to Education: *Semester, .5 credit*
- 8330** Health Careers Foundations: *Semester, .5 credit*
- 8351** Cosmetology Foundations: *Semester, .5 credit*

INFORMATION TECHNOLOGIES

- 8309** Today's Technology: *Semester, .5 credit*
- 8415** Intro to Computer Programming: *Semester, .5 credit*
- 8545** 2D Game Design, *Semester, .5 credits*
- 8598** Intro to Visual Technology: *Semester, .5 credits*

SCIENCE

- 3413** Biology *Year, 1 credit*
- 3411** Honors Biology *Year, 1 credit*

SOCIAL STUDIES

- 3228** Geography: *Semester, .5 credit*

WORLD LANGUAGES

- 3700** French I: *Year, 1 credit*
- 3701** French II: *Year, 1 credit*
- 3730** Spanish I: *Year, 1 credit*
- 3731** Spanish II: *Year, 1 credit*
- 3720** German I (SV) : *Year, 1 credit*
- 3726** Chinese I: *Year, 1 credit*
- 3727** Chinese II, *Year, 1 credit*

SOPHOMORE: Course Offerings

It is strongly recommended that students review the **Career Pathways** schedules and Pathway Electives online before beginning the scheduling process. Refer to the following course descriptions to finalize course selections.

A sophomore schedule should include the required courses listed below plus a minimum of 1.5 electives.

Required Courses: *English 10, Math, Biology, American History, Physical Education*

The following course descriptions are designed to assist in scheduling the sophomore year. Northview has a nine-period day. It is recommended that sophomores take six courses with a lunch and study hall each semester. Open periods will be filled with an additional study hall.

Note: The school reserves the right to limit or cancel course offerings.

ENGLISH CURRICULUM

3110 ENGLISH 10

Year **Credit 1** **Est Fee: \$30 (Required Novels)**

Prerequisite: English 9

English 10 is a survey of world literature that emphasizes universal themes from a variety of cultural and historical sources, both fiction and nonfiction. Diligent active reading strategies and ongoing literary analysis will be introduced and reinforced. Writing instruction will focus on clear and effective exposition, persuasion and documentation through the composition of logically-developed essays. Students will be required to complete the state mandated end of course assessment. Supplemental texts are required and must be purchased or supplied by the student. A summer reading assignment, located on the Northview website at www.sylvanianorthview.org, is required for this course.

3112 HONORS ENGLISH 10

Year **Credit 1** **Est Fee: \$30 (Required Novels)**

Prerequisite: English 9 and 9th grade teacher's recommendation.

Honors English 10 addresses all aspects of the English 10 core curriculum and will differ in the selection of the material and depth of analysis and critical response required to evaluate literature. Students learn advanced skills of literary analysis and annotation. Composition focuses on literary analysis, logically developed expository and argumentative essays, as well as the development of the research paper. This honors course is designed to prepare students for Advanced Placement English in the junior year. Students will be required to complete the state mandated end of course assessment. Supplemental texts are required and must be purchased or supplied by the student. A summer reading assignment, located on the Northview website at www.sylvanianorthview.org, is required for this course.

MATH CURRICULUM

****See Math Course Flow Chart pg 70**

3306 ALGEBRA I

Year **Credit 1** **Grade 9-12**

Algebra I is a course which generalizes the concepts of arithmetic through the use of symbols. The student will begin to develop the ability to reason abstractly. The course covers the following topics: data analysis as it relates to functions, solving linear equations and inequalities, properties of exponents, ratios, proportions, percents, factoring, graphing linear and quadratic functions, finding solutions to quadratic functions and systems of equations, and applications of these concepts. **A TI-83 Plus or TI-84 Plus graphing calculator is required. Summer work is required for this course, please see instructor.**

3308 GEOMETRY

Year **Credit 1** **Grade 9-12**

Prerequisite: Algebra I or Algebra I (2B)

This course discusses the properties of plane and space figures, including parallel and perpendicular lines, triangles (including right triangles and trigonometry), parallelograms, trapezoids, and circles. It also teaches the concepts of congruence, similarity, and parallelism, and uses these concepts to develop logical reasoning skills so that proof-reading skills are developed. Students will calculate the area and volume of various polygons and three-dimensional figures. Students will study examples of geometry in the physical world and how to use geometric concepts to solve problems. **A TI-83 Plus or TI-84 Plus graphing calculator is required. Summer work is required for this course, please see instructor.**

3309 HONORS GEOMETRY

Year **Credit 1** **Grade 9-10**

Prerequisite: Algebra I and teacher recommendation

In addition to all of the concepts covered in the regular geometry course, students will develop skills in critical thinking, logical reasoning, and problem solving. Emphasis is given to the structure of geometry and the development of direct proofs. Proof-writing skills are developed by beginning with short and simple ideas that gradually lead to more complex proofs. Students will understand how geometry grows from observations and common relationships. Students will study examples of geometry in the physical world and how to use geometric concepts to solve problems. Other ideas that are developed include: trigonometry, indirect proofs, inductive reasoning, non-Euclidean geometries, transformations, and symmetry. Throughout the course students will utilize algebraic skills and develop constructions using compass and straight edge. **A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3312 ALGEBRA II

Year **Credit 1** **Grade 10-12**

Prerequisite: Geometry or Intermediate Algebra

Algebra II studies the problems of Algebra I in greater depth and is a more sophisticated treatment of those problems. In addition, the concept of function is developed through the use of linear, quadratic, exponential, logarithmic, and radical functions. Critical areas of focus include: polynomials, rational, and radical relationships; modeling with functions; trigonometry; inferences and conclusions from data; and trigonometry of general triangles and trigonometric functions. **A TI-83 Plus or TI-84 Plus graphing calculator is required. Summer work is required for this course.**

3313 HONORS ALGEBRA II

Year **Credit 1** **Grade 10-11**

Prerequisite: Honors Geometry and teacher recommendation

The emphasis in Honors Algebra II is on application problems involving linear, exponential, logarithmic, quadratic, radical, polynomial, and rational functions. In addition, sequences and series, analytical geometry, and statistical topics are explored. **A student should be prepared to move at a rapid pace in the course. A TI-83 Plus or TI-84 Plus graphing calculator is required.**

SCIENCE CURRICULUM

See Science Course Flow Chart on p. 72

3413 BIOLOGY

Year **Credit 1** **Grade 10-12** **Est. Fee \$10**

Suggested reading: *Sand County Almanac*

Biology is an introductory course designed to acquaint the students with the history, techniques, and major concepts of the field, as well as to provide an overview of the field of biology. Biology not only provides the student with the opportunity to learn about and appreciate other organisms that live on earth, but also develops the background necessary to provide an understanding of the multitude of physical and physiological processes that are characteristic of the living condition. The laboratory experience is essential in this course and students receive experiences that parallel work done by scientists. Visual aids, explanations, and lectures are used to both reinforce and extend the course content and concepts.

3411 HONORS BIOLOGY

Year Credit 1 Grade 10-12 Est. Fee \$10

Prerequisites: Teacher recommendation

Required Readings: A summer homework assignment is required. A student selected for this class must see the instructor during the second semester exam week in order to obtain their summer assignment. Honors Biology is designed for highly motivated students with considerable interest in the sciences. Honors Biology is a laboratory-oriented course in which the students spend 25-30% of their time in the laboratory or laboratory-related activities. Lab investigations are designed to allow the students to collect data, analyze it and make inferences to basic biological concepts. Studies delve into biological concepts in areas of ecological relationships, cellular biochemistry, cell structure, classification, genetics and evolution. Tests are, in part, the problem solving type designed to measure the student's critical thinking and problem solving skills as they apply to particular biological concepts. During the year, several formal lab write-ups are required in addition to one special assignment each quarter. Summer assignments may also be found at the Northview website www.sylvanianorthview.org.

3444 AP SEMINAR

Year Credit 1 Grade 10-11

Prerequisite: Honors Science and Honors English or Teacher Approval
AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

SOCIAL STUDIES CURRICULUM

3204 AMERICAN HISTORY

Year Credit 1 Grade 10

This course completes the chronological study of the history of the United States begun in eighth grade. This study includes not only history from 1877 to the present, but integrates each of the other six social studies standards. As students study historic events, they consider the geographic setting, the cultural perspectives, the economic implications and the role of the government. They develop a deeper understanding of their role as citizens and continue to expand their command of social studies skills and methods.

3207 AP UNITED STATES HISTORY

Year Credit 1 Grade 10

Prerequisites: Overall GPA of 3.0 or teacher recommendation.

This American History course is a survey offering which is more rigorous than regular American History. The course is designed to provide upper level achievers with the analytic skills and factual knowledge to deal critically with the problems and materials in American History. Extensive individual reading will be required.

32201 AP ECONOMICS

Year Credit 1.0 Grade(s) 10-12

Prerequisite: Algebra I

AP Economics is designed to teach students the basics of both Micro and Macroeconomics. The course is offered in one year; however, it is broken up into two separate units that are tested separately. Each test is the equivalent to a college semester course. The course begins with basic economic concepts before moving into more specific information. The course typically begins with Microeconomics and focuses on the personal and business level decisions that all of us must make in our lives. Once students have a proper understanding of economics at the smaller scale, the course moves to Macroeconomics, where the focus is on the large scale aggregate of all the decisions made at the Micro level. Macroeconomics also examines how countries make the economic decisions that they do, and how governmental policies can impact the nation and the entire world.

HEALTH / PHYSICAL ED.

3500 PHYSICAL EDUCATION

Semester Credit 1/4 Grade 9-10

Physical Education classes meet every day for one semester. Appropriate clothing is required for participation. The course includes instruction covering the six state standards including knowledge content and physical activity. Activities may include: tennis, volleyball, badminton, aerobic conditioning, fitness testing, swimming, basketball, group games and other activities. Emphasis is placed on active participation, effort, knowledge and responsible personal and social behavior in a physical activity setting.

SOPHOMORE: Electives

ARTS & COMMUNICATION

- 3739** Art Appreciation: *Semester; .5 credit*
- 3740** Art Foundations: *Year; 1 credit*
- 3743** 2D Design: *Year; 1 credit*
- 3741** 3D Design: *Year; 1 credit*
- 3742** AP Art History: *Year; 1 credit*
- 3113** Drama: *Semester; .5 credit*
- 3114** Theater Workshop *Semester; .5 credit*
- 3117** Public Speaking: *Semester; .5 credit*
- 3171** Debate, *Semester; .5 credit*
- 3120** Intro to Journalism *Semester; .5 credit*
- 3128** Journalism: *Year; 1 credit*
- 3129** Yearbook: *Year; 1 credit*
- 4760** Art of Photojournalism: *Semester; .5 credit*

Music

- 3758** Symphonic Band: *Year; 1 credit*
- 3756** Concert Band: *Year; 1 credit*
- 3750** Band Auxiliary: *Quarter; .25 credit*
- 3751** Concert Orchestra: *Year; 1 credit*
- 3752** Wind Ensemble: *Year; 1 credit*
- 3762** Chamber Orchestra: *Year; 1 credit*
- 3759** Symphonic Choir: *Year; 1 credit*
- 3764** A Cappella Choir: *Year; 1 credit*
- 3769** Harmony Road Show: *Year; 1 credit*
- 3776** Women's Chorus: *Year; 1 credit*
- 3767** AP Music Theory: *Year; 1 credit*

BUSINESS & MANAGEMENT

- 8310** Business Foundations: *Semester; .5 credit*
- 8313** Intro to Marketing: *Semester; .5 credit*
- 8408** Financial Accounting: *Year; 1 credit*

ENGINEERING & INDUSTRIAL

- 8392** Engineering Design: *Semester; .5 credit*
- 83921** 3D Modelling & Prototyping: *Year; 1 credit*
- 8394** Engineering Applications: *Semester; .5 credit*
- 8396** Introduction to Alternative Energy:
Semester; .5 credit
- 8398** Computer Aided Design: *Semester; .5 credit*

ENVIRONMENTAL & AGRICULTURE

- 8441** Agriculture & Environmental Systems (SV):
Year; 1 credit
- 8442** Plant and Horticulture (SV): *Year; 1 credit*

HEALTH, EDUCATION & HUMAN SERVICES

- 8376** Personal Wellness and Development:
Semester; .5 credits
- 8377** Principles of Nutrition and Wellness:
Semester; .5 credit
- 8380** Principles of Food: *Semester; .5 credit*
- 8360** Introduction to Education: *Semester; .5 credit*
- 8330** Health Careers Foundations: *Semester; .5 credit*
- 8351** Cosmetology Foundations: *Semester; .5 credit*

INFORMATION TECHNOLOGIES

- 8309** Today's Technology: *Semester; .5 credit*
- 8415** Intro to Computer Programming: *Semester; .5 credit*
- 8545** 2D Game Design, *Semester; .5 credits*
- 8598** Intro to Visual Technology: *Semester; .5 credits*

SCIENCE

- 3430** Anatomy: *Year; 1 credit*
- 3426** AP Physics 1: *Year; 1 credit*
- 3444** AP Seminar, AP Research: *Year; 1 credit*

SOCIAL STUDIES

- 3228** Geography: *Semester; .5 credit*
- 3220** AP Economics: *Year; 1 credit*

WORLD LANGUAGES

- 3700** French I: *Year; 1 credit*
- 3701** French II: *Year; 1 credit*
- 3702** Honors French III: *Year; 1 credit*
- 3730** Spanish I: *Year; 1 credit*
- 3731** Spanish II: *Year; 1 credit*
- 3732** Honors Spanish III: *Year; 1 credit*
- 3720** German I (SV) : *Year; 1 credit*
- 3721** German II (SV): *Year; 1 credit*
- 3726** Chinese I: *Year; 1 credit*
- 3727** Chinese II, *Year; 1 credit*
- 3728** Honors Chinese III, *Year; .5 credit*
- 3160** Test Preparation, *Semester; .5 credit*

JUNIOR: Course Offerings

It is strongly recommended that students review the **Career Pathways** schedules and Pathway Electives online before beginning the scheduling process. Refer to the following course descriptions to finalize course selections.

A junior schedule should include the required courses listed below plus a minimum of 1.5 electives.

Required Courses: *American Literature, Math, Science.*

The following course descriptions are designed to assist in scheduling the junior year. Northview has a nine-period day. It is recommended that juniors take five courses with a lunch and study hall each semester. Open periods will be filled with an additional study hall.

Note: The school reserves the right to limit or cancel course offerings.

ENGLISH CURRICULUM

3124 AMERICAN LITERATURE

Year **Credit 1** **Grade 11** **Est Fee: \$40 (Required Novels)**

Prerequisite: English 9 & 10

American Literature is a study of well-known American authors with an emphasis on the historical context and American ideals presented in the literature of America. Major literary genres include both fiction and nonfiction through study of journals, essays, diaries, sermons, poems, plays, novels, documents, speeches, and articles. Critical and analytical terminology to discuss and respond to literature is emphasized. Writing skills are developed through expository and analytical compositions. Supplemental texts are required and must be purchased or supplied by the student. A summer reading, located on the Northview website at www.sylvanianorthview.org is required for this course.

3125 JUNIOR HUMANITIES

Year **Credit 1** **Grade 11** **Est. Fee \$40 (Required Novels)**

Junior Humanities analyzes how diverse American communities create the American culture. Literature analysis and discussion will include the cultural heritage in which the works were created - such as the religion, philosophy, economics, and social issues of race and gender of that period - as well as the universal concerns shared by all cultures. Students will explore various texts, such as 17th, 18th, and 19th century nonfiction and 19th, 20th, 21st century fiction. Diligent active reading strategies and ongoing literary analysis will be introduced and reinforced. Writing assignments are primarily expository, and provide an opportunity for analysis and critical skills that connect the literature with experiences and the field of humanities. Supplemental texts are required and must be purchased or supplied by the student. A summer reading, located on the Northview website at www.sylvanianorthview.org, is required for this course.

3126 AP ENGLISH LANGUAGE & COMPOSITION

Year **Credit** **Grade 11** **Est Fee: \$50 (Required Novels)**

Prerequisite: English 9 & 10 and 10th grade teacher's recommendation.

Students in Advanced Placement English Language & Composition pursue studies equivalent to a college level study of American literature primarily through the exploration of fiction and nonfiction works, including novels, plays, essays, poems, and short stories. Emphasis is placed on critical reading and writing about expository, argumentative, and analytical prose, as well as completion of research projects to prepare students for the English Language and Composition Exam administered in May. Supplemental texts are required and must be purchased or supplied by the student. A summer reading, located on the Northview website at www.sylvanianorthview.org, is required for this course.

3135 AP ENGLISH LITERATURE & COMPOSITION

Year **Credit 1** **Grade 12** **Est Fee: \$30 (Required Novels)**

Prerequisite: English 9 & 10 and 10th grade teacher's recommendation.

Students in Advanced Placement English Language & Composition pursue studies equivalent to a college level study in literature and composition. Classic literature from a variety of genres, time periods, disciplines, types and rhetorical contexts will be studied with an emphasis on critical and analytical techniques used to evaluate literature. A heavy emphasis on written composition allows students to sharpen their critical writing skills and analyze the strengths and weaknesses of their personal writing style. The course serves as preparation for the Advanced Placement English Literature and Composition Test that is administered in May. Supplemental texts are required and must be purchased or supplied by the student. A summer reading, located on the Northview website at www.sylvanianorthview.org, is required for this course.

MATH CURRICULUM

****See Math Course Flow Chart pg 70**

3308 GEOMETRY

Year **Credit 1** **Grade 9-12**

Prerequisite: Algebra I or Algebra I (2B)

This course discusses the properties of plane and space figures, including parallel and perpendicular lines, triangles (including right triangles and trigonometry), parallelograms, trapezoids, and circles. It also teaches the concepts of congruence, similarity, and parallelism, and uses these concepts to develop logical reasoning skills so that proof-reading skills are developed. Students will calculate the area and volume of various polygons and three-dimensional figures. Students will study examples of geometry in the physical world and how to use geometric concepts to solve problems. **A TI-83 Plus or TI-84 Plus graphing calculator is required. Summer work is required for this course, please see instructor.**

3300 INTERMEDIATE ALGEBRA

Year **Credit 1** **Grade 11-12**

Prerequisite: Algebra I and Geometry and teacher recommendation.

Intermediate Algebra reviews topics from Algebra I and extends these topics to prepare students for Algebra II. Specific topics include: solving linear equations and inequalities; solving quadratic equations using factoring, completing the square, quadratic formula and graphical technique; not only linear functions, but quadratic, absolute value, radical, and exponential functions; applications; writing equations of lines based on given information or data collection; extensions of simplifying techniques of exponents and polynomials. This course will include many applications and use of technology (graphing calculators, motion detectors, and internet research) and more project based learning, which will include writing samples. **A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3312 ALGEBRA II

Year **Credit 1** **Grade 10-12**

Prerequisite: Geometry or Intermediate Algebra

Algebra II studies the problems of Algebra I in greater depth and is a more sophisticated treatment of those problems. In addition, the concept of function is developed through the use of linear, quadratic, exponential, logarithmic, and radical functions. Critical areas of focus include: polynomials, rational, and radical relationships; modeling with functions; trigonometry; inferences and conclusions from data; and trigonometry of general triangles and trigonometric functions. **A TI-83 Plus or TI-84 Plus graphing calculator is required. Summer work is required for this course.**

3313 HONORS ALGEBRA II

Year **Credit 1** **Grade 10-11**

Prerequisite: Honors Geometry and teacher recommendation

The emphasis in Honors Algebra II is on application problems involving linear, exponential, logarithmic, quadratic, radical, polynomial, and rational functions. In addition, sequences and series, analytical geometry, and statistical topics are explored. **A student should be prepared to move at a rapid pace in the course. A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3315 STATISTICS

Year Credit 1 Grade 11-12

Prerequisite: Algebra II

Statistics is a course that offers a change from a traditional math course. Although proficiency in algebra skills is needed, students will also learn to analyze and represent their answers graphically. Students will use real-world data (collected or given) to explore these specific topics: sampling techniques, probability, measures of central tendency, visual data descriptions using technology, hypothesis testing, and correlation and regression. Students will complete several writing and technology projects to reinforce the analysis of these real-world situations. Statistics may be taken as a student's lone math course or concurrently with any course after Algebra II. Concurrent credit may be available to those students who qualify through Lourdes College. See page 15 for details. **A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3325 AP STATISTICS

Year Credit 1 Grade 11-12

Prerequisite: Algebra II

This college level course is for the student who desires all the knowledge of statistics above and beyond the general statistics class. The course provides instruction on four broad conceptual themes – Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference. Students will draw connections between all aspects of the statistical process, including design, analysis, and conclusions. Students will learn how to communicate methods, results, and interpretations using the vocabulary of statistics and how to use graphing calculators and computers to enhance the development of statistical understanding. AP Statistics is for high achieving math students and may be taken as a student's lone math course or concurrently with any course after Algebra II. **A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3321 PRE-CALCULUS

Year Credit 1 Grade 11-12

Prerequisite: Algebra II

Pre-calculus introduces the student to the trigonometric functions, polynomial functions, rational functions, logarithmic and exponential functions. The behavior of these functions and their inverses is studied in depth. The approach to the course is based on the study of analytical geometry. Application problems using these functions are studied. **A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3320 HONORS PRE-CALCULUS

Year Credit 1 Grade 11-12

Prerequisite: Algebra II H and teacher recommendation

The emphasis in Honors Pre-calculus is on applications of the material being studied. The course content comprises polynomial, rational, exponential, logarithmic, trigonometric functions and their applications. In addition, the polar coordinate system, vectors, and analytic geometry are explored. Students will also learn introductory calculus topics such as limits, basic derivatives, and area underneath curves in preparation for calculus. A student should be prepared to move at a rapid pace and should be able to advance beyond memorization to application of knowledge. Summer work is required. **A TI-83 Plus or TI-84 Plus graphing calculator is required for this course.**

SCIENCE CURRICULUM

See Science Course Flow Chart on p. 72

3421 AP BIOLOGY

Year Credit 1 Grade 11-12 Est. Fee \$10

7 periods or equivalent

Prerequisite: Teacher recommendation, Biology or Honors Biology, Chemistry or Honors Chemistry or being taken concurrently

A course for highly motivated/interested students, AP Biology gives in-depth treatment to cell structure and function, taxonomy, evolution, ecology, biosynthesis, genetics, protein synthesis, plant and animal physiology, applied botany, biogenergetics, history of biology, homeostatic mechanisms, behavior, gene action, and more. Laboratory experiences provide opportunities for the student to further develop observational and analytical skills and are an integral component of the program. These serve to extend concepts covered in class and in the text. Students will employ a variety of techniques to investigate macromolecule structure, photosynthetic rates, enzyme function parameters, transformation in bacteria, plant and animal morphology and histology, microbial activity and identification and electrophoresis as well as other laboratory topics. Tests emphasize both the course content and its concepts. **A summer assignment of outside readings and selected text chapters is required. Students electing to take AP Biology should see the instructor before the end of second semester exams to sign out a text. Summer assignments may also be found at the Northview website www.sylvanianorthview.org. The course is recognized by colleges as a laboratory credit course. It is expected that students will take the AP Exam.**

3435 ENVIRONMENTAL SCIENCE I

Semester Credit 1/2 Grade 11-12 Est. Fee \$5

Prerequisites: Biology or Honors Biology

Environmental Science I is an elective science course involving the study of soil science, water quality, the Great Lakes, animals of Ohio: birds, reptiles, amphibians, fish, and mammals. These topics will be discussed in the context of current environmental issues in the world around us. Class will consist of hands-on, projects based activities, lab investigations inside and outside the classroom, research project and presentations. Students also have the opportunity to participate in the area wide, Student Watershed Watch Program.

3436 ENVIRONMENTAL SCIENCE II

Semester Credit 1/2 Grade 11-12 Est. Fee \$5

Environmental Science II is an extension of Environmental Science I; it will address current issues of energy use, fossil fuels, alternative energy, global warming, and what impact they have on the topics covered in Environmental I. Also addressed will be pollution, recycling and waste management. Additional topics covered will be plant science, basic forestry, GPS technology and natural resources management. Research projects, presentations, outdoor and indoor lab activities, and classroom activities will facilitate the learning of material in this program. Students have the opportunity to participate in statewide Envirothon Program.

3432 ZOOLOGY I

Semester Credit 1/2 Grade 11-12 Est. Fee: \$7

Prerequisite: Biology

Zoology is an elective science course involving the study of invertebrate and vertebrate animals. Specific studies in this course consist of taxonomic, anatomical, and physiological examinations of selected organisms and groups of organisms. Zoology I includes topics such as evolution and animal diversity, animal ecology, and the study of the following Phyla: Protozoa, Porifera, Cnidaria, Annelida, Mollusca, Arthropoda, and Echinodermata, in other words, anything from single-celled animals to sponges, to spiders, to starfish. The class will consist of lab investigations, research projects and presentations, field work, lectures, and a variety of dissections. **Summer assignments may also be found at the Northview website www.sylvanianorthview.org.**

3433 ZOOLOGY II

Semester Credit 1/2 Grade 11-12 Est. Fee: \$7

Prerequisite: Biology

Zoology is an elective science course involving the study of invertebrate and vertebrate animals. Specific studies in this course consist of taxonomic, anatomical, and physiological examinations of selected organisms and groups of organisms. Zoology II includes topics such as the classification and evolution of the Phylum Chordata. We will study, in depth, the following Classes: Fishes, Amphibians, Reptiles, Birds, and Mammals. Current issues in biodiversity and threats to animal species will also be researched and discussed. The class will consist of lab investigations, research projects and presentations, field work, lectures, and a variety of dissections.

3434 ASTRONOMY I

Semester Credit 1/2 Grade 11-12

Prerequisites: Algebra I and Biology or H Biology

Astronomy I is a general survey course first introducing the students to the night sky, its many constellations, brighter stars and motions. The historical development of astronomical thought and our place in the Universe is the second major topic of study. The course concludes with a study of the moon, lunar exploration, planets, and other bodies in our solar system. The manned and unmanned exploration of the planets will also be discussed.

3437 ASTRONOMY II (NV)

Semester Credit 1/2 Grades 10-12

Prerequisite: Science 9 (C and P)

Corequisite: Algebra II

Student must have a non-programmable scientific calculator.

This course in Astronomy takes an in-depth look at the Universe outside our solar system. Students will be introduced to the use of telescopes and satellites as a tool of research in Astronomy. Because our knowledge of the Universe depends on gathering various forms electromagnetic waves an understanding of the properties of light will be investigated. The majority of the course will explore the origin, formation and evolution of stars. Lab work in this course will make extensive use of computer software and the Internet.

3416 FORENSIC SCIENCE

Year Credit 1 Grade 11-12 Estimated Fee: \$10

Prerequisite: Physical Science 9 and Biology

Forensics is the rigorous application of science in the processing of physical evidence during criminal investigations. The field of forensic science uses analytical and empirical evidence to help support the legal system in its prosecution of the perpetrators of a crime. You will study the various principles and methods used in the sciences to evaluate evidence at a crime scene, ultimately using the evidence and your deductive reasoning skills to solve the crime. Sciences used in forensics include any discipline that can aid in the collection, preservation and analysis of evidence, such as chemistry, physics, or biology.

3422 CHEMISTRY

Year Credit 1 Grade 10-12 Est. Fee \$10

Prereq: Phys. Science or H. Phys. Science, Biology and Algebra I.

7 Periods or equivalent.

Chemistry is a lecture-laboratory course that focuses on methods and techniques of measurements and problem solving as pertaining to atoms and chemical reactions. To better understand the invisible world of atoms mathematical problem solving skills are used throughout the year in chemistry. The most frequently used method of problem solving are factor-label unit conversions, solving formulas for variables (basic algebra) and stoichiometry. Concepts of atomic structure and the organization of the periodic table serve as a basis for the understanding of the periodicity of matter and predicting chemical activity. Laboratory experiments are used to further emphasize the concepts which are taught and further develop skills of observation and data analysis. Due to the challenging nature of the subject material, students taking this course are required to attend a mandatory make up/ review session on alternating Fridays during commons.

3431 HONORS CHEMISTRY

Year Credit 1 Grade 10-12 Est. Fee \$10

7 periods or equivalent

Prerequisites: Algebra I & Physical Science or Honors Physical Science with B or better grades; teacher recommendation.

Honors Chemistry covers the same general topics as Chemistry, but in greater depth and at an accelerated pace. We will also cover topics including equilibrium, reaction kinetics, and acids and bases that are not covered in regular Chemistry. The course would be most appropriate for the study with definite future goals in chemistry, engineering, pre-med, etc. With permission, sophomores could take Biology and Chemistry concurrently on Honors Biology and Honors Chemistry. Due to the challenging nature of the subject material, students are required to attend a mandatory lab make-up/ review/help session on alternating Fridays during commons.

A summer assignment of selected text chapters is required. Those students selecting Honors Chemistry must see the instructor before the end of second semester. Summer assignments may also be found at the Northview website www.sylvanianorthview.org.

3423 AP CHEMISTRY

Year Credit 1 Grade 11-12 Est. Fee \$20

7 periods or equivalent

Prerequisites: Algebra II, Chemistry with a GPA of "B" or better, and teacher recommendation

A course for the advanced college-bound science student, AP Chemistry emphasizes the quantitative, experimental aspects of Chemistry. Some of the early work in the course will serve as a review of Chemistry, including topics such as periodicity of matter and chemical reactions, bonding, formula writing, and balancing equations. To further the skills of the above concepts there will be a greater emphasis on the chemical and mathematical formulation of these principles. Additional topics studied in-depth are thermochemistry, acid-based theory, chemical equilibrium, rates of reaction, chemical thermodynamics, and electrochemistry. With the availability of analytic balances, pH meters, and CBI probes, students will be able to further their understanding of chemistry through weekly laboratory work. AP Chemistry is equivalent to a college freshman course and is recognized as a laboratory credit course. Due to the challenging nature of the subject material, students are required to attend a mandatory lab make-up/review/help session on alternating Fridays during commons. It is expected that students will take the AP exam. **A summer assignment of selected text chapters is required. Those students selecting AP Chemistry must see the instructor before the end of second semester. Summer assignments may also be found at the Northview website www.sylvanianorthview.org.**

3425 PHYSICS

Year Credit 1 Grade 11-12 Est. Fee \$10

7 periods or equivalent

Prerequisites: Algebra II or permission of instructor
It is recommended pre-calculus be taken concurrently.

This course covers a broad spectrum of topics generally considered to be included in an introductory course in Physics. Emphasis is on the understanding of general principles and models and on the nature of scientific inquiry. The level of mathematical sophistication will extend to simple trigonometry but rarely beyond. The historical development of science is considered along with the role of science in contemporary society. Students who are going to major in physical science or engineering should consider taking AP Physics. Due to the challenging nature of the subject material, students taking this course are required to attend a mandatory lab make-up/review/help session on alternating Fridays during their commons.

3429 HONORS PHYSICS (SV)

Year Credit 1 Grades 10-12 Est. Fee: \$10

7 periods per week

Prerequisites: Science 9 (C and P), Algebra II, teacher recommendation

Corequisite: Pre-calculus or Calculus

Student must have a non-programmable scientific calculator.

This first year course in Physics is designed for the student who is planning on pursuing a career in a science, engineering or medical related field of study in college. Students who enroll in those programs of study are generally required to take a Physics course. Honors Physics would be the course to take in high school to prepare you for college physics. Coursework in Honors Physics will include the mechanics of motion, waves, sound, optics, and electricity. Extensive lab work, data analysis and problem solving are the main foci of the course.

3426 AP PHYSICS 1

Year **Credit 1** **Grade 10-12** **Est. Fee \$10**
7 periods or equivalent

Prerequisites: Geometry and/or teacher recommendation

AP Physics 1 is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. Students taking this course are required to attend a mandatory lab make-up/review session on alternating Fridays during their commons. **Summer work is required, please see the instructor. Summer work is required, please see the instructor.**

3430 ANATOMY

Year **Credit 1** **Grade 11-12** **Est. Fee \$10**

Prerequisite: Biology, Honors Biology, Teacher recommendation, Chemistry or Honors Chemistry or taken concurrently highly recommended. One of the above required.

Students selecting Anatomy should have a minimum GPA of "B" in Biology.

Anatomy and Physiology is a rigorous, advanced life-science course designed to educate the student about the human body. This course follows a lecture-laboratory format, and is based on the understanding of human functions through a complete examination of human structures. To enhance this understanding, both normal and abnormal aspects of human functions will be investigated by comparing the physiological concepts of homeostasis and disease. The course begins with a review of the principles of biochemistry and cell biology (both previously developed and learned in Biology and/or Chemistry). It continues with a thorough examination of human primary tissues and concludes with a study of each of the body's systems. Anatomy and Physiology is supplemented with numerous lab activities throughout the year including an extensive vertebrate (cat) dissection. A number of other lab skills and techniques will be developed including: microscopy, tissue staining, blood typing principles, measuring, and data analysis. This course is recommended for those students interested in any medically related career or who are otherwise highly motivated to learn about the human body.

3445 HONORS ANATOMY AND PHYSIOLOGY

Year **Credit 1** **Grade 11-12** **Est. Fee: \$25**

Prerequisites: Physical Science, Biology, Chemistry and teacher recommendation

Students must have a non-programmable scientific calculator.

Honors Anatomy and Physiology covers the same general topics as Anatomy and Physiology, but at an accelerated pace and in greater depth. It is the study of human structure and function. The course encompasses the structure, biochemical, and biophysical processes of cells, primary tissues, and the eleven body systems with associated organs. This course requires reading, writing, and oral expression, with an emphasis on higher level critical thinking skills. All students wanting to take CCP Anatomy and Physiology must enroll in this honors section. for grades 11-12

34461 GEOLOGY

Year **Credit 1.0** **Grade(s) 11-12** **Est. Fee \$5.00**

Prerequisite: physical science, biology

Physical Geology is an advanced science course offering college credit for students who are not necessarily looking to pursue a college degree in a science field. Most colleges require students to take at least one science lab course as a part of their general education requirements. CCP Physical Geology offered through Owens Community College would satisfy this requirement. This course would provide students with 4 college credit hours for the Owens Community College Course GEO 111 (3 lecture, 1 lab) as well as an advanced science elective credit for graduation.

This course is aimed at the population of students who are college-bound but may not be AP or honors students in science. The course will certainly be challenging but will not come with the math demands that other advanced science courses have. The class will also be more flexible to schedule than other advanced science courses as it does not require a double-blocked lab period. The content standards addressed by this course are outlined in the Ohio Science Standards for Physical Geology plus additional topics required to meet CCP requirements to be discussed with Owens Community College faculty.

3444 AP SEMINAR

Year **Credit 1** **Grade 10-11**

Prerequisite: Honors Science 9 and Honors English 9 or Teacher Approval
AP Seminar is a requirement for the APCapstone™ diploma. AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision to craft and communicate evidence-based arguments. All AP Seminar students are required to participate in the AP Seminar Exam. Required summer assignments posted on the Northview website.

3444 AP RESEARCH

Year **Credit 1** **Grade 11-12**

Prerequisites: AP Seminar and teacher recommendation

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

SOCIAL STUDIES CURRICULUM

3210 PSYCHOLOGY

Semester **Credit 1/2** **Grade 11-12**

This is a survey class that offers an overview of major themes in Psychology. Topics include; research methods and history, abnormal behavior, states of consciousness, learning, memory, personality and development. Students explore topics through outside research, reports and class presentations. The course requires both written and oral expression with an emphasis on higher level critical thinking skills.

3212 AP PSYCHOLOGY

Year **Credit 1** **Grade 11-12**

Prerequisites: Overall GPA of 3.0 and/or teacher recommendation.

AP Psychology is designed to prepare students for the AP National Psychology Exam. It is equivalent to an introductory college course in psychology. The course receives honors credit. Students who successfully complete the national exam may receive and advance placement and/or waiving of course work at the university level. All areas of psychology are covered. This includes but is not limited to; history and methodology, biological basis of behavior, states of consciousness, learning and cognition, memory, personality, sensation and perceptions, motivation, social psychology abnormal psychology and child development. Students are expected to complete a considerable amount of reading in the text and supplemental materials. This course requires students to synthesize and evaluate all material presented through both oral and written format. There is a heavy emphasis on study skills and genuine class participation in activities and discussion.

3217 CONTEMPORARY LAW

Semester **Credit 1/2** **Grade 11-12**

Contemporary Law is a semester practicum in law-related education. Students will be provided with useful information and problem solving opportunities that develop their knowledge and skills necessary for survival in our society. Students will be involved in mock trials, case studies, small group exercises, and visual analysis activities.

3205 SOCIOLOGY

Semester Credit 1/2 Grade 11-12

This course will study the causes and effects of social problems on our society with an emphasis on discussion and research. Students will investigate deviance, prejudice, poverty, the family, aging, and crime as they relate to social problems, have an opportunity to design and conduct sociological research.

3228 GEOGRAPHY

Semester Credit 1/2 Grade 9-12

Geography is a social studies offering for all grades. The course will include in-depth examination of the cultural, economic, physical, and historic factors which have influenced the development of the world's peoples. A major objective of the offering is to become familiar with basic geography, as well as an understanding of recent history and current events.

3222 GLOBAL STUDIES CAPSTONE

Semester Credit 1/2 Grades 11-12

Prerequisite: Completion of first 2 Global Studies Diploma badges

The Global Studies Capstone course provides support and guidance to students completing the capstone portion of the Global Studies Diploma program. Students will work with an advisor to apply their accumulated skills and knowledge from participation in the Global Studies Diploma program in a constructive and positive way. Capstone projects will be designed by students based on their interests and will help students complete the "Action" badge of the Global Studies Diploma.

32201 AP ECONOMICS

Year Credit 1.0 Grade(s) 10-12

Prerequisite: Algebra I

AP Economics is designed to teach students the basics of both Micro and Macroeconomics. The course is offered in one year; however, it is broken up into two separate units that are tested separately. Each test is the equivalent to a college semester course. The course begins with basic economic concepts before moving into more specific information. The course typically begins with Microeconomics and focuses on the personal and business level decisions that all of us must make in our lives. Once students have a proper understanding of economics at the smaller scale, the course moves to Macroeconomics, where the focus is on the large scale aggregate of all the decisions made at the Micro level. Macroeconomics also examines how countries make the economic decisions that they do, and how governmental policies can impact the nation and the entire world.

JUNIOR: Electives

ARTS & COMMUNICATION

- 3740** Art Foundations: Year; 1 credit
- 3743** 2D Design: Year; 1 credit
- 3741** 3D Design: Year; 1 credit
- 3742** AP Art History: Year; 1 credit
- 3745** Intermediate 2D Design: Year; 1 credit
- 3744** Intermediate 3D Design: Year; 1 credit
- 8607** Visual Communications Design I: Year; 2 credits
- 3113** Drama: Semester; .5 credit
- 3114** Theater Workshop Semester .5 credit
- 8213** Theatrical Performing Arts, Year; 2 credits
- 3117** Public Speaking: Semester; .5 credit
- 3171** Debate, Semester; .5 credit
- 3120** Intro to Journalism Semester .5 credit
- 3128** Journalism: Year; 1 credit
- 3129** Yearbook: Year; 1 credit
- 3137** Creative Writing: Semester; .5 credit
- 4760** Art of Photojournalism: Semester; .5 credit

Music

- 3758** Symphonic Band: Year; 1 credit
- 3756** Concert Band: Year; 1 credit
- 3750** Band Auxiliary: Quarter; .25 credit
- 3751** Concert Orchestra: Year; 1 credit
- 3752** Wind Ensemble: Year; 1 credit
- 3762** Chamber Orchestra: Year; 1 credit
- 3764** A Cappella Choir: Year; 1 credit
- 3769** Harmony Road Show: Year; 1 credit
- 3768** Popular Music: Semester; .5 credit
- 3776** Women's Chorus: Year; 1 credit
- 3767** AP Music Theory: Year; 1 credit

JUNIOR: Electives (continued):

BUSINESS & MANAGEMENT

- 8313** Intro to Marketing: *Semester, .5 credit*
- 8408** Financial Accounting: *Year, 1 credit*
- 8319** Money Management: *Semester, .5 credit*
- 8314** Business Technology I: *Year, 2 credits*
- 8610** Financial Management I: *Year, 2 credits*

ENVIRONMENTAL & AGRICULTURE

- 8433** Horticulture I: *Year, 2 credits*

ENGINEERING & INDUSTRIAL

- 8396** Introduction to Alternative Energy:
Semester, .5 credit
- 8385** Engineering I: *Year, 2 credits*
- 8489** Construction I: *Year, 3 credits*
- 8398** Computer Aided Design: *Semester, .5 credit*
- 8392** Engineering Design: *Semester, .5 credit*
- 83921** 3D Modelling & Prototyping: *Year, 1 credit*
- 8394** Engineering Applications: *Semester, .5 credit*

HEALTH, EDUCATION & HUMAN SERVICES

- 8364** Education & Training I: *Year, 3 credits*
- 8351** Cosmetology I: *Year, 4 credits*
- 8331** Medical Technology I: *Year, 2 credits*
- 8376** Personal Wellness and Development:
Semester, .5 credits
- 8377** Principles of Nutrition & Wellness: *Semester, .5 credit*
- 8379** Culinary Arts Fundamentals: *Year, 1 credit*

INFORMATION TECHNOLOGIES

- 8309** Today's Technology: *Semester, .5 credit*
- 8545** 2D Game Design, *Semester, .5 credits*
- 8505** Interactive Media I: *Year, 2 credit*
- 8541** Honors Computer Programming I (SV):
Year, 2 Credits
- 8546** Honors Computer Programming I (NV):
Year, 2 Credits

SCIENCE

- 3422** Chemistry: *Year, 1 credit*
- 3431** Honors Chemistry: *Year, 1 credit*
- 3423** AP Chemistry: *Year, 1 credit*
- 3421** AP Biology: *Year, 1 credit*
- 3435** Environmental Science: *Semester, .5 credit*
- 3419** AP Environmental Science *Year, 1 credit*
- 3425** Physics: *Year, 1 credit*
- 3426** AP Physics 1: *Year, 1 credit*
- 3444** AP Seminar: *Year, 1 credit*
- 3444** AP Research: *Year, 1 credit*
- 3430** Anatomy and Physiology: *Year, 1 credit*
- 3445** Honors Anatomy and Physiology: *Year, 1 credit*
- 3416** Forensic Science: *Year, 1 credit*
- 3446** Geology: *Year, 1 credit*
- 3432** Zoology: *Year, 1 credit*

SOCIAL STUDIES

- 3210** Psychology: *Semester, .5 credit*
- 3212** AP Psychology: *Year, 1 credit*
- 3217** Contemporary Law: *Semester, .5 credit*
- 3205** Sociology: *Semester, .5 credit*
- 3228** Geography: *Semester, .5 credit*
- 3222** Global Studies Capstone: *Semester, .5 credit*
- 3220** AP Economics: *Year, 1 credit*

WORLD LANGUAGES

- 3700** French I: *Year, 1 credit*
- 3701** French II: *Year, 1 credit*
- 3702** Honors French III: *Year, 1 credit*
- 3705** Honors French IV: *Year, 1 credit*
- 3730** Spanish I: *Year, 1 credit*
- 3731** Spanish II: *Year, 1 credit*
- 3732** Honors Spanish III: *Year, 1 credit*
- 3735** Honors Spanish IV: *Year, 1 credit*
- 3720** German I (SV) : *Year, 1 credit*
- 3721** German II (SV): *Year, 1 credit*
- 3722** Honors German III (SV): *Year, 1 credit*
- 3726** Chinese I: *Year, 1 credit*
- 3727** Chinese II, *Year, 1 credit*
- 3728** Honors Chinese III, *Year, .5 credit*

- 3160** Test Preparation, *Semester, .5 credit*

SENIOR: Course Offerings

It is strongly recommended that students review the **Career Pathways** schedules and Pathway Electives online before beginning the scheduling process. Refer to the course descriptions below to finalize course selections.

A senior schedule should include the required courses listed below plus electives.

Required Courses: Full-year courses in English, Math, and Government.

The following course descriptions are designed to assist in scheduling the senior year. Northview has a nine-period day. It is recommended that Seniors take five courses with a lunch and study hall each semester. Open periods will be filled with an additional study hall.

Note: The school reserves the right to limit or cancel course offerings.

ENGLISH CURRICULUM

3131 SENIOR COMPOSITION & LITERATURE

Year Credit 1 Est Fee: \$40 (Required Novels)

Prerequisite: English 9, 10 & 11

**Concurrent College Credit may be available to those that qualify.*

See page 15 for details.

Senior Composition & Literature is a survey course that emphasizes critical analysis of a variety of literature (with a concentration on British literature) including short stories, poems, plays, novels, and prose essays. Writing experiences for this course will extend to expository and persuasive essays, as well research projects. Supplemental texts are required and must be purchased or supplied by the student. A summer reading assignment, located on the Northview website at www.sylvanianorthview.org, is required for this course.

3126 AP ENGLISH LANGUAGE & COMPOSITION

Year Credit 1 Est Fee: \$50 (Required Novels)

Prerequisite: English 9, 10 & 11 and 11th grade teacher's recommendation.

Students in Advanced Placement English Language & Composition pursue studies equivalent to a college level study of American literature primarily through the exploration of fiction and nonfiction works, including novels, plays, essays, poems, and short stories. Emphasis is placed on critical reading and writing about expository, argumentative, and analytical prose, as well as completion of research projects to prepare students for the English Language and Composition Exam administered in May. Supplemental texts are required and must be purchased or supplied by the student. A summer reading, located on the Northview website at www.sylvanianorthview.org, is required for this course.

3135 AP ENGLISH LITERATURE & COMPOSITION

Year Credit 1 Est Fee: \$50 (Required Novels)

Prerequisite: English 9, 10 & 11 and 11th grade teacher's recommendation.

Students in Advanced Placement English Literature & Composition pursue studies equivalent to a college level study in literature and composition. Classic literature from a variety of genres, time periods, disciplines, types and rhetorical contexts will be studied with an emphasis on critical and analytical techniques used to evaluate literature. A heavy emphasis on written composition allows students to sharpen their critical writing skills and analyze the strengths and weaknesses of their personal writing style. The course serves as preparation for the Advanced Placement English Literature and Composition Test that is administered in May. Supplemental texts are required and must be purchased or supplied by the student. A summer reading, located on the Northview website at www.sylvanianorthview.org, is required for this course.

3151 SENIOR HUMANITIES

Year Credit 1 Est Fee: \$50 (Required Novels)

Prerequisite: English 9, 10 & 11

Senior Humanities is a college preparatory class that explores the connections between literature, philosophy, history, visual and musical arts. Critical and analytical skills will be employed to evaluate the effects of Eastern and Western thought, culture, and tradition on society and the world. Writing experiences for this course will connect literature to the humanities through exposition, research and persuasive essays. Supplemental texts are required and must be purchased or supplied by the student. A summer reading assignment, located on the Northview website at www.sylvanianorthview.org is required for this course.

MATH CURRICULUM

**See Math Course Flow Chart pg 70

3312 ALGEBRA II

Year Credit 1 Grade 10-12

Prerequisite: Geometry or Intermediate Algebra

Algebra II studies the problems of Algebra I in greater depth and is a more sophisticated treatment of those problems. In addition, the concept of function is developed through the use of linear, quadratic, exponential, logarithmic, and radical functions. Critical areas of focus include: polynomials, rational, and radical relationships; modeling with functions; trigonometry; inferences and conclusions from data; and trigonometry of general triangles and trigonometric functions. A TI-83 Plus or TI-84 Plus graphing calculator is required. Summer work is required for this course.

3314 COLLEGE PREP MATH

Year Credit 1 Grade 12

Prerequisite: Algebra II, and teacher recommendation

This course is designed primarily for those seniors who feel they are not ready to take precalculus. Topics include a review of algebra, logarithms, and matrices and an introduction to calculus, statistics, and trigonometry. All seniors who expect to go to college and who do not take precalculus should take this course. Although this course is not an alternative to pre-calculus, it is not an algebra review course. A TI-83 Plus or TI-84 Plus graphing calculator is required.

3315 STATISTICS

Year Credit 1 Grade 11-12

Prerequisite: Algebra II

Statistics is a course that offers a change from a traditional math course. Although proficiency in algebra skills is needed, students will also learn to analyze and represent their answers graphically. Students will use real-world data (collected or given) to explore these specific topics: sampling techniques, probability, measures of central tendency, visual data descriptions using technology, hypothesis testing, and correlation and regression. Students will complete several writing and technology projects to reinforce the analysis of these real-world situations. Statistics may be taken as a student's lone math course or concurrently with any course after Algebra II. Concurrent credit may be available to those students who qualify through Lourdes College. See page 15 for details. A TI-83 Plus or TI-84 Plus graphing calculator is required.

3325 AP STATISTICS

Year Credit 1 Grade 11-12

Prerequisite: Algebra II

This college level course is for the student who desires all the knowledge of statistics above and beyond the general statistics class. The course provides instruction on four broad conceptual themes – Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference. Students will draw connections between all aspects of the statistical process, including design, analysis, and conclusions. Students will learn how to communicate methods, results, and interpretations using the vocabulary of statistics and how to use graphing calculators and computers to enhance the development of statistical understanding. AP Statistics is for high achieving math students and may be taken as a student's lone math course or concurrently with any course after Algebra II. A TI-83 Plus or TI-84 Plus graphing calculator is required.

3321 PRE-CALCULUS

Year Credit 1 Grade 11-12

Prerequisite: Algebra II

Pre-calculus introduces the student to the trigonometric functions, polynomial functions, rational functions, logarithmic and exponential functions. The behavior of these functions and their inverses is studied in depth. The approach to the course is based on the study of analytical geometry. Application problems using these functions are studied. **A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3320 HONORS PRE-CALCULUS

Year Credit 1 Grade 11-12

Prerequisite: Algebra II H and teacher recommendation

The emphasis in Honors Pre-calculus is on applications of the material being studied. The course content comprises polynomial, rational, exponential, logarithmic, and trigonometric functions. In addition, the polar coordinate system, vectors, and analytic geometry are explored. A student should be prepared to move at a rapid pace and should be able to advance beyond memorization to application of knowledge. **A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3324 HONORS CALCULUS

Year Credit 1 Grade 12

Prerequisite: Pre-calculus and teacher recommendation

This course is for the student willing to work hard to gain knowledge of calculus prior to entering college but without the pressure and time constraints placed on the AP course. Topics include a brief review of pre-calculus, limits, differentiation, and integration of polynomial, rational, radical, and trigonometric functions. Applications of these concepts will also be explored. Students should be confident in their knowledge of algebra and trigonometry. **A graphing calculator is required.** Concurrent credit may be available to those students who qualify through Lourdes College. See page 12 for more details. **A TI-83 Plus or TI-84 Plus graphing calculator is required.**

3317 AP CALCULUS AB

Year Credit 1 Grade 12

Prerequisite: Honors or Regular Pre-Calculus and teacher recommendation

This course prepares students to take the AP Test in May. This test covers college material equivalent to Calculus I and the majority of Calculus II, at a rapid pace. Calculus topics include limits, functions, differentiation, integration, and the application of these concepts. It is recommended that a person have at least a 3.0 average in all previous math courses before attempting AP Calculus. **The student must have an AP approved graphing calculator. Summer work is required for this course, please see instructor.**

3323 AP CALCULUS BC

Year Credit 1 Grade 12

Prerequisite: Honors Precalculus with teacher recommendation

AP Calculus BC includes the concepts listed for AP Calculus AB, but because students are required to have taken Honors Precalculus (which includes some introductory calculus concepts), BC can cover additional topics that are not part of the AB course. These topics include: differentiation and integration of parametric, polar, and vector functions; simple partial fractions; improper integrals; solving logistic differential equations; polynomial approximations and series; and additional applications of derivatives and integrals. AP Calculus BC is not designed to follow AB as approximately 60% of the BC curriculum is covered in AB. **Students must have an AP approved graphing calculator. Summer work is required for this course.**

SOCIAL STUDIES CURRICULUM

3215 AMERICAN GOVERNMENT

Year Credit 1 Grade 12

American Government is meant to give students a broad overview of the politics of local, state, and national government in the United States. Another purpose of the course is to make participants in the course aware of entry possibilities into the political system and to encourage them to explore these possibilities into the political system. Areas of study include executive and legislative relationships at all levels, state and national judiciaries, political parties, elections and propaganda.

3216 AP UNITED STATES GOVERNMENT AND POLITICS

Year Credit 1 Grade 12

Prerequisites: AP American History and an overall student GPA of 3.0

The Advanced Placement course in American Government is designed to give students a critical perspective on politics and government. This course involves both the study of general concepts used to interpret United States government and comparative government review to promote greater depth of comprehension. Active political participation will be encouraged to instill familiarity with the various institutions, groups, beliefs and ideas that make up the American political reality. At the conclusion of the course, students will have the opportunity to take the Advanced Placement Examination with the goal of qualifying for college credit.

3222 GLOBAL STUDIES CAPSTONE

Semester Credit 1/2 Grades 11-12

Prerequisite: Completion of first 2 Global Studies Diploma badges

The Global Studies Capstone course provides support and guidance to students completing the capstone portion of the Global Studies Diploma program. Students will work with an advisor to apply their accumulated skills and knowledge from participation in the Global Studies Diploma program in a constructive and positive way. Capstone projects will be designed by students based on their interests and will help students complete the "Action" badge of the Global Studies Diploma.

SENIOR: Electives:

ARTS & COMMUNICATION

- 3740** Art Foundations: *Year, 1 credit*
- 3743** 2D Design: *Year, 1 credit*
- 3741** 3D Design: *Year, 1 credit*
- 3742** AP Art History: *Year, 1 credit*
- 3745** Intermediate 2D Design: *Year, 1 credit*
- 3744** Intermediate 3D Design: *Year, 1 credit*
- 3747** Honors Senior Studio 2D Design: *Grade 12*
- 3746** Honors Senior Studio 3D Design: *Grade 12*
- 8608** Visual Communications Design II: *Year, 2 credits*
- 3113** Drama: *Semester, .5 credit*
- 3114** Theater Workshop *Semester .5 credit*
- 8213** Theatrical Performing Arts, *Year, 2 credits*
- 3117** Public Speaking: *Semester, .5 credit*
- 3171** Debate, *Semester, .5 credit*
- 3120** Intro to Journalism *Semester .5 credit*
- 3128** Journalism: *Year, 1 credit*
- 3129** Yearbook: *Year, 1 credit*
- 3137** Creative Writing: *Semester, .5 credit*
- 4760** Art of Photojournalism: *Semester, .5 credit*

Music

- 3758** Symphonic Band: *Year, 1 credit*
- 3756** Concert Band: *Year, 1 credit*
- 3750** Band Auxiliary: *Quarter, .25 credit*
- 3751** Concert Orchestra: *Year, 1 credit*
- 3752** Wind Ensemble: *Year, 1 credit*
- 3762** Chamber Orchestra: *Year, 1 credit*
- 3764** A Cappella Choir: *Year, 1 credit*
- 3769** Harmony Road Show: *Year, 1 credit*
- 3768** Popular Music: *Semester, .5 credit*
- 3776** Women's Chorus: *Year, 1 credit*
- 3767** AP Music Theory: *Year, 1 credit*

BUSINESS & MANAGEMENT

- 8313** Intro to Marketing: *Semester, .5 credit*
- 8408** Financial Accounting: *Year, 1 credit*
- 8315** Business Technology II: *Year, 2 credits*
- 8611** Financial Management II: *Year, 2 credits*
- 8319** Money Management: *Semester, .5 credit*

ENGINEERING & INDUSTRIAL

- 8388** Engineering II: *Year, 2 credits*
- 8490** Construction II: *Year, 3 credits*
- 8392** Engineering Design: *Semester, .5 credit*
- 83921** 3D Modelling & Prototyping: *Year, 1 credit*
- 8394** Engineering Applications: *Semester, .5 credit*
- 8396** Introduction to Alternative Energy: *Semester, .5 credit*
- 8398** Computer Aided Design *Semester, .5 credit*

ENVIRONMENTAL & AGRICULTURE

- 8434** Horticulture II: *Year, 2 credits*

HEALTH, EDUCATION & HUMAN SERVICES

- 8367** Education & Training II: *Year, 3 credits*
- 8355** Cosmetology II: *Year, 4 credits*
- 8335** Medical Technology II: *Year, 3 credits*
- 8376** Personal Wellness and Development: *Semester, .5 credits*
- 8377** Principles of Nutrition and Wellness: *Semester, .5 credit*
- 8379** Culinary Arts Fundamentals *Year, 1 credit*
- 8472** Child Development: *Semester, .5 credit*

INFORMATION TECHNOLOGIES

- 8545** 2D Game Design, *Semester, .5 credits*
- 8506** Interactive Media II: *Year, 2 credit*
- 8309** Today's Technology *Semester, .5 credit*
- 8543** Honors Computer Programming II (SV): *Year, 2 Credits*
- 8548** Honors Computer Programming II (NV): *Year, 2 Credits*

SCIENCE

- 3422** Chemistry: *Year, 1 credit*
- 3431** Honors Chemistry: *Year, 1 credit*
- 3423** AP Chemistry: *Year, 1 credit*
- 3421** AP Biology: *Year, 1 credit*
- 3435** Environmental Science: *Semester, .5 credit*
- 3419** AP Environmental Science *Year, 1 credit*
- 3425** Physics: *Year, 1 credit*
- 3426** AP Physics 1: *Year, 1 credit*
- 3444** AP Research: *Year, 1 credit*
- 3430** Anatomy: *Year, 1 credit*
- 3445** Honors Anatomy and Physiology: *Year, 1 credit*
- 3434** Astronomy: *Semester, .5 credit*
- 3416** Forensic Science: *Year, 1 credit*
- 3446** Geology: *Year, 1 credit*
- 3432** Zoology: *Year, 1 credit*

SOCIAL STUDIES

- 3210** Psychology: *Semester, .5 credit*
- 3212** AP Psychology: *Year, 1 credit*
- 3217** Contemporary Law: *Semester, .5 credit*
- 3205** Sociology: *Semester, .5 credit*
- 3328** Geography: *Semester, .5 credit*
- 3222** Global Studies Capstone: *Semester, .5 credit*

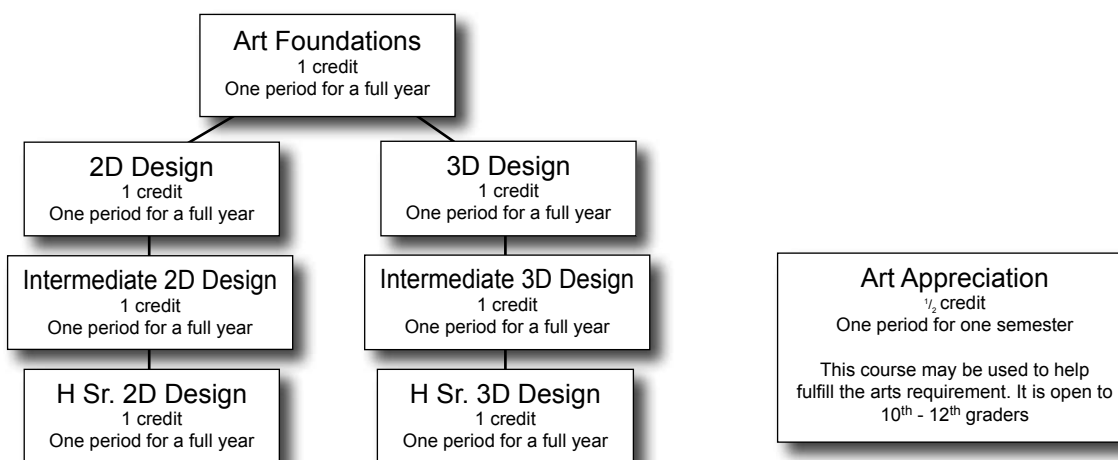
SENIOR: Electives (continued):

WORLD LANGUAGES

3700 French I: Year, 1 credit
3701 French II: Year, 1 credit
3702 Honors French III: Year, 1 credit
3705 Honors French IV: Year, 1 credit
3706 AP French V: Year, 1 credit
3730 Spanish I: Year, 1 credit
3731 Spanish II: Year, 1 credit
3732 Honors Spanish III: Year, 1 credit

3735 Honors Spanish IV: Year, 1 credit
3736 AP Spanish V: Year, 1 credit
3720 German I (SV) : Year, 1 credit
3721 German II (SV): Year, 1 credit
3722 Honors German III (SV): Year, 1 credit
3723 Honors German IV (SV): Year, 1 credit
3726 Chinese I: Year, 1 credit
3727 Chinese II, Year, 1 credit
3728 Honors Chinese III, Year, .5 credit

Northview Art Department



ART

3740 ART FOUNDATIONS

Year **Credit 1** **Grades 9-12** **Est. Fee \$27**
 This course is an introduction to the various materials and techniques used in art. The elements and principles of art will be introduced; the foundation for all art. Projects will include drawing, painting, clay, sculpture, printmaking, design and many more. This class is a must for most future art classes.
[Return to course offering page: 9, 10, 11, 12](#)

3743 2D DESIGN

Year **Credit 1** **Grade 10-12** **Est. Fee \$33**
Prerequisite: Art Foundations
 The goal of this course is to continue to develop skills for personal expression by exploring a new variety of 2-dimensional media. Students will be challenged to stretch their imagination to create drawings, paintings, and prints that go beyond a literal or realistic representation of the subject matter. Problem-solving pertaining to 2-dimensional design issues will be stressed. Regular outside assignments will reinforce concepts presented in class and/or serve as preliminary work for major studio pieces.
[Return to course offering page: 10, 11, 12](#)

3741 3D DESIGN

Year **Credit 1** **Grade 10-12** **Est. Fee \$35**
Prerequisite: Art Foundations
 The focus of this course is to develop skills for personal expression by exploring sculpture, handbuilt and wheel-thrown ceramics, and metals. This class will also cover the firing process using the kiln. Students will be challenged to stretch their imagination to create 3-dimensional works that go beyond a literal or realistic representation of subject matter. Problem-solving pertaining to 3-dimensional design issues will be stressed. Regular outside drawing assignments will reinforce concepts presented in class and/or serve as preliminary work for major studio pieces.
[Return to course offering page: 10, 11, 12](#)

3745 INTERMEDIATE 2D DESIGN

Year **Credit 1** **Grade 11-12** **Est. Fee \$33**
Prerequisite: 2D Design
 Students enrolled in this course need to be self-motivated, self-directed learners and able to plan, manage, and focus their time efficiently and productively. This course is designed for students who have an above average interest and ability in art and are serious about continuing to improve their art skills as well as develop a personal style. More advanced techniques in drawing, painting, printmaking, and design will be introduced. Students will begin to look at opportunities available in art-related careers and the training required for those careers. Appropriate methods for matting/displaying work and stretching canvas will be presented. Regular outside drawing and writing assignments will enrich the classroom experience as well as contribute to the student's portfolio of work.
[Return to course offering page: 11, 12](#)

3744 INTERMEDIATE 3D DESIGN

Year **Credit 1** **Grade 11-12** **Est. Fee \$35**
Prerequisite: 3D Design
 Students enrolled in this course need to be self-motivated, self-directed learners and able to plan, manage, and focus their time efficiently and productively. This course is designed for students who have an above average interest and ability in art and are serious about continuing to improve their art skills as well as develop a personal style. More sophisticated techniques in sculpture, metals, and ceramics will be introduced. Students will explore clay construction, decorative processes, throwing wheels, alternative firing processes, and much more. Regular outside drawing and writing assignments will enrich the classroom experience as well as contribute to the student's portfolio of work.
[Return to course offering page: 11, 12](#)

3747 HONORS SENIOR STUDIO 2D DESIGN

Year Credit 1 Grade 12 Est. Fee \$33

Prerequisite: Earn a C or better in Intermediate 2D Design

Students enrolled in this course need to be self-motivated, self-directed learners and able to plan, manage, and focus their time efficiently and productively. The development of skills in advanced drawing, painting, and printmaking as well as personal expression will be continued. Much emphasis is on the creation of a high quality, intellectual body of work. Students have the option of producing a portfolio that meets the standards of the Advanced Placement Program. Those standards are generally equal to college-level work and require much time in addition to scheduled classes.

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3746 HONORS SENIOR STUDIO 3D DESIGN

Year Credit 1 Grade 12 Est. Fee \$35

Prerequisite: Earn a C or better in Intermediate 3D Design

Students enrolled in this course need to be self-motivated, self-directed learners and able to plan, manage, and focus their time efficiently and productively. The development of skills in advanced sculpture, ceramics, and metals as well as personal expression will be continued. Much emphasis is on the creation of a high quality, intellectual body of work. Students have the option of producing a portfolio that meets the standards of the Advanced Placement Program. Those standards are generally equal to college-level work and require much time in addition to scheduled classes.

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3741 ART APPRECIATION

Semester Credit: .5 Grades: 9-12 Est Fee \$16

Art appreciation is an introduction to contemporary art created for students to explore art for one semester. This class is a combination of art history, theory and criticism for the past century and art making using various styles and techniques of the past century. Students will write and talk about art as well as create art. Using elements and principles of art students will work individually and collaboratively to make interesting and thoughtful artwork. Projects will include (in part) collaboration, digital exploration, sculpture, painting, mixed media, history and theory. This class is open to all students and can be taken as a stepping stone to art foundations or as an extra art class at any time.

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3742 AP ART HISTORY

Year Credit 1 Grades 9-12

This course gives students the opportunity to study art history through the ages. Students will use critical thinking to examine and analyze major forms of artistic expression from diverse cultures and understand their contributions to the arts. A variety of art media and styles will be studied as the students look at architecture, manuscripts, painting, drawing, printmaking and sculpture, as a reflection of a given civilization and time period. This course uses a combination of materials such as, selected readings, visual presentations, research papers, educational videos, and museum visits. Students' active participation and discussions related to reading assignments and slide show lectures are required for the class. Students learn to write about art using a specialized vocabulary to describe and critically analyze works of art.

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ARTS & COMMUNICATIONS PATHWAY

VISUAL COMMUNICATION DESIGN I (SV)

COLLEGE TECH PREP

Year Credit 2 Grade 11 Est. Fee \$40

2 periods per day

The job market for Visual Communication Design is one of the largest growing job markets in the United States and Europe. Key competencies that are learned are the basic design principles, type and image as information and communication, visual hierarchy, computer technology and process, presentation skills, and professionalism. Software packages learned include Adobe Photoshop, Illustrator, Premiere, Autodesk Maya and Mudbox. These software packages are commonly utilized by professionals in the 2D and 3D design industry today.

Students will have the opportunity to design a wide variety of 2D projects such as: logos, posters, packaging, magazine layouts, etc., and 3D projects such as: architecture, vehicles, humanoids, landscapes and more. Video creation with Adobe Premiere will constitute the last major project of the course. Career opportunities for Visual Communication Design are wide ranged, including: Graphic Designers, Multimedia Specialists, Game Designers, CGI Artists, 3D Animators and more.

Honors Option:

In addition to completing the course requirements above, honors students will be required to refine all finished course projects until they meet the 2D and 3D design standards of entry-level college portfolios.

8601 VCD I: Digital Print & Design

8604 VCD I: Advertising & Communication

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VISUAL COMMUNICATION DESIGN II (SV)

COLLEGE TECH PREP

Year Credit 2 Grade 12 Est. Fee \$50

Prerequisite: Visual Communication Design I

Students will have the opportunity to design portfolio pieces using industry standard software. The course will also include a variety of print media design for the advanced VCD students in the second year of study. All students will have the opportunity to create their own portfolio for presenting their work for college entrance and post-secondary opportunities.

8605 VCD II: Digital Image Editing

8608 VCD II: Visual Creation

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THEATRICAL PERFORMING ARTS (SV)

Year Credit 2 Grade(s) 11-12 Est. Fee \$35

2 periods per day

Prerequisite: Application

This course is part of a two-year program. Students involved in this program will be eligible to earn transcribed college credit. The program provides students with the opportunity to explore the professional dimensions of theatrical performing arts, including the dimensions of history, math and science, business and economics, technology, physical movement, language, literature, and more. Through the study and production of theatre, students communicate visually as well as verbally. To create performances, students must learn to innovate and collaborate. Theatre students develop strong communication skills and the ability to work with a diverse group of people and learn creative problem solving.

The Theatrical Performing Arts program is a two-year program starting for the first time in 2019-2020. In this first year, the program is available for junior and senior enrollment with junior priority. Seniors may apply as well, but will only be enrolled if space allows. The program will complete two double-block courses in 2019-2020: Acting and Dance. Future years will provide other courses as detailed below.

Honors options are available for all program courses.

8217 DANCE

In this course, students develop technical strength, preciseness, musicality, expression, and sequence retention while learning terminology for dance movement and for the industry. Through solo, ensemble, and improvisational movement, they interpret and communicate stories and feelings. Self-discipline, including emotional and nutritional health, are reinforced.

8213 ACTING

This course focuses on maximizing an actor's physical and emotional expression, vocal intonation, memorization, and imagination to convey stories and feelings. Other topics include material selection, developing a score of action for a role, sustaining a character and self and peer criticism. Students will also research major theatre genres and influences, breaking down a script to discover objectives, obstacles, tactics, and character development. Students will create a script with scenes, plot points and characters and will be expected to perform a role from an original or established piece of work as a class at an out of school performance.

8222 STAGECRAFT

Creating the set, balancing the lights, projecting video and engineering the sound all help to accentuate the script and characters in a show. Students learn the skills of stagecraft through research, critique and hands-on experience. They use technology, background design, makeup and costuming to enhance overall production with a focus on the script and director vision.

8219 MUSICAL THEATRE

The troupe member with abilities in music, dance, and acting has "triple threat" value in musical theatre. They analyze historical and current-day exemplary models of musical theatre for storyline, musical arrangement and audience appeal. Students will participate in the development, rehearsal, and presentation of a musical production.

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BUSINESS & MANAGEMENT PATHWAY

8310 BUSINESS FOUNDATIONS

Semester	Credit 1/2	Grade 9-10	Est. Fee \$10
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This class is the introductory course for the Business Administration pathway. Students will have the opportunity to investigate a variety of business fields while developing communication, critical-thinking, problem-solving, and life-long learning skills. Students will actively participate in multimedia instruction while exploring the following areas: introduction to business, marketing, economics and personal finance, business law, accounting, management, international business, human resources, and entrepreneurship.

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8313 INTRO TO MARKETING

Semester	Credit 1/2	Grade 9-12	Est. Fee \$10
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This course introduces students to the specializations offered in marketing. Students will obtain fundamental knowledge and skills in marketing communications, marketing management, marketing research, merchandising, and professional selling. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, economic principles, and international business. Technology, leadership, and communications will be incorporated in classroom activities.

[Return to course offering page: 9, 10, 11, 12](#)

8408 FINANCIAL ACCOUNTING

Year	Credit 1	Grades 10-12	Est. Fee \$43
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Students will track, record, summarize, and report a business's financial transactions. They will develop financial documents, project future income and expenses, and evaluate the accuracy of a business's financial information. Students will also apply tools, strategies, and systems to evaluate a company's financial performance and monitor the use of financial resources. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

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8319 MONEY MANAGEMENT

Semester	Credit 1/2	Grade 10-12	Est. Fee \$10
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As students prepare to engage with and contribute to the "real-world," they need to make wise and informed financial decisions, become conscience and effective consumers, maximize their earning potential, and ultimately gain control of their current resources to make the most of their financial future. Example topics explored through this course may include, but are not limited to: budgeting and goal setting, consumer awareness, checking and banking services, saving and investing, understanding your taxes, managing credit and debt, buying and selling a car, housing choices and alternatives, purchasing insurance, and career choices.

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BUSINESS TECHNOLOGY I COLLEGE TECH PREP

Year	Credit 2	Grades 11	Est. Fee \$30
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Prerequisite: Application

It is expected that all Tech Prep students will successfully complete Algebra II before graduating.

This Tech Prep course is for the career- or college-bound student who is interested in pursuing a career in business. Students will be utilizing the popular software program Microsoft Office 2013. Students will develop an understanding of business practices that are needed by everyone to excel in a business field. Areas of emphasis are: accounting, finance, management, marketing, entrepreneurship, business communications, business economics, international business, technology, and career development in business. Business Technology students will acquire critical-thinking, decision-making, and business ethics skills. As members of Business Professionals of America, students will have the chance to participate in regional, state, and national competition. **These courses may be taken for honors credit. See the instructor for additional requirements.**

83143 BUSINESS TECH I:

Strategic Entrepreneurship

Students will use innovation skills to generate ideas for new products and services, evaluate the feasibility of ideas, and develop a strategy for commercialization. They will use technology to select target markets, profile target markets, define the venture's mission, and create business plans. Students will take initial steps to establish a business. Students will calculate and forecast costs, break-even analysis, and sales. Establishing brand, setting prices, promoting products, and managing customer relationships will be emphasized. Students apply classroom learning segments to the successful operation of the school store, as well as various job shadowing experiences. Students are members of the student organization, Business Professionals of America. This class qualifies for three college credits with successful enrollment and completion of all College Credit Plus Program requirements.

83144 BUSINESS TECH I:

Business Administration Marketing

This is the first course in the Marketing career field. It introduces students to the specializations offered in Marketing. Students will obtain fundamental knowledge and skills in marketing communications, marketing management, marketing research, merchandising and professional selling. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, economic principles and international business. Technology, leadership and communications will be incorporated in classroom activities. Students are members of the student organization, Business Professionals of America. This class qualifies for three college credits with successful enrollment and completion of all College Credit Plus Program requirements.

83146 HONORS BUSINESS TECH I:

Strategic Entrepreneurship & Business Administration Marketing

Explores the same content covered in Business Tech I, but with higher level analysis of actual business and marketing processes. Students describe, research, synthesize, analyze, and apply entrepreneurial and marketing concepts to various case studies, writing assignments, research papers and professional presentations. Students are expected to pursue leadership roles in school store operations and student organizations. This class qualifies for three college credits with successful enrollment and completion of all College Credit Plus Program requirements.

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BUSINESS TECHNOLOGY II COLLEGE TECH PREP

Year	Credit 2	Grade 12	Est. Fee \$40
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Prerequisite: Business Technology I

This senior level program is for students who wish to continue gaining valuable business skills. Instructional emphasis will include professional development and networking, business law, human resource management, general administrative functions, accounting, business communications and technology. During second semester, students will be released during this class to take part in a part-time business internship experience with an area business. Students will become a member of Business Professionals of America and may compete at regional, state, and national competition. All Tech Prep students will be required to complete a senior project. Students may receive college credits through dual enrollment. **These courses may be taken for honors credit. See the instructor for additional requirements.**

83153 BUSINESS TECH II: Management Principles

Students will apply management and motivation theories to plan, organize and direct staff toward goal achievement. They will learn to manage a workforce, lead change, and build relationships with employees and customers. Students will use technology to analyze the internal and external business environment, determine trends impacting business, and examine risks threatening organizational success. Ethical challenges, project management and strategic planning will also be addressed. Students apply classroom learning segments to the successful completion of a second-semester internship. Students are members of the student organization, Business Professionals of America. This class qualifies for three college credits with successful enrollment and completion of all College Credit Plus Program requirements.

83154 BUSINESS TECH II: Human Resources Management

Students will develop human resources strategies to prepare job search portfolios as well as the skills necessary to obtain, retain, and effectively use talent throughout the organization. Students will utilize technology to create job applications, job descriptions, and job profiles to support the talent acquisition process. They will learn to recruit applicants, administer employment assessments, conduct background investigations, and make and communicate hiring decisions. Students will also develop employee handbooks and establish performance improvement processes. Rewards and recognition practices, relationship management and compliance will be addressed. Students will also participate in internship opportunities second semester of this course. Students apply classroom learning segments to the successful completion of a capstone job portfolio and second-semester internship experience. Students are members of the student organization, Business Professionals of America. This class qualifies for three college credits with successful enrollment and completion of all College Credit Plus Program requirements.

83155 HONORS BUSINESS TECH II: Management Principles & Human Resources Management

Explores the same content covered in Business Tech II, but with higher level analysis of actual management and human resource processes. Students describe, research, synthesize, analyze, and apply entrepreneurial and marketing concepts to various case studies, writing assignments, research papers and professional presentations. Honors students are required to network and engage with the business community through the completion of interviews, case studies, and research papers. Students are expected to pursue leadership roles in student organizations. All honors students are required to complete a Capstone senior project prior to internship involvement. This class qualifies for three college credits with successful enrollment and completion of all College Credit Plus Program requirements.

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FINANCIAL MANAGEMENT I (SV) COLLEGE TECH PREP

Year	Credit 2	Grade 11	Est. Fee \$65
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The Financial Management courses are for the career- or college-bound student who is interested in pursuing a career in business management. Career and academic skills are integrated and will grant you the opportunity to gain practical knowledge associated with real-world business situations. An emphasis is placed on critical thinking skills as they relate to financial management, money, investments, banking and credit, financial planning, professional development and networking. Special activities will introduce you to careers and professionals in the financial management industry. Members of the local business community will be utilized to bring experience and real-life application to the classroom. You will become a member of Business Professionals of America and may compete at regional, state, and national competitions. During second semester of senior year, you will internship at a local business to provide experiences to further prepare you for your business future.

86103 FINANCIAL MANAGEMENT I: Fundamentals of Financial Services

Students will develop knowledge and skills needed in the banking, insurance and investment industries. They will analyze banking products and services, determine ways in which insurance reduces risk, and calculate insurable losses. Students will also learn to sell financial products and build positive relationships with clients and colleagues. They will use financial ratios to evaluate company performance and select profitable investments for clients. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

Honors Option:

Students will be required to interview a local business leader, complete a research report and discuss the local business leader's philosophy in a formal presentation. Additional requirements include 8 hours of community service. This may be accomplished through volunteering in the local community or at the high school (approval required).

86104 FINANCIAL MANAGEMENT I: Financial Accounting

Students will track, record, summarize, and report a business's financial transactions. They will develop financial documents, project future income and expenses, and evaluate the accuracy of a business's financial information. Students will also apply tools, strategies, and systems to evaluate a company's financial performance and monitor the use of financial resources. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

Honors Option:

In addition to completing the requirements above, students will complete additional accounting "Challenge" problems. Also, students will be required to complete a research report and discuss a business leader's philosophy in a formal classroom presentation.

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FINANCIAL MANAGEMENT II (SV) COLLEGE TECH PREP

Year	Credit 2	Grade 12	Est. Fee \$22
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Prerequisite: Financial Management I

This senior level program is for students who wish to continue gaining valuable business management knowledge and skills. You will understand and apply various financial management techniques. During second semester, you will internship at a local business to provide experiences to further prepare you for your business future. You may become a member of Business Professionals of America and compete at regional, state, and national competitions. All Tech Prep students will be required to complete a senior project. Upon successful completion of this two-year program, you can earn transferable college credits.

86113 FINANCIAL MANAGEMENT II:

Corporate Finance

Students will manage policy and strategy for corporate budgeting, investment, and financial planning. They will calculate profitability, predict business success and the likelihood of failure, and compare business performance within and across industries. Students will also develop and track the achievement of financial goals. They will determine how to balance risk with return and select strategies for recovering from risky situations and disasters. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

Honors Option:

Explores the same content covered in Corporate Finance, but with higher level analysis of actual business and operations procedures. Students will research, analyze, and apply financial concepts to various case studies, writing assignments, research papers and professional presentations. Students are expected to pursue leadership roles in the classroom and student organization (BPA).

86114 FINANCIAL MANAGEMENT II:

Management Principles

Students will apply management and motivation theories to plan, organize and direct staff toward goal achievement. They will learn to manage a workforce, lead change, and build relationships with employees and customers. Students will use technology to analyze the internal and external business environment, determine trends impacting business, and examine risks threatening organizational success. Ethical challenges, project management and strategic planning will also be addressed. Students may also earn college credit through "College Credit Plus".

Honors Option:

Students are required to complete a Capstone senior project prior to internship involvement. The project may involve additional research and community activities. Students may also earn college credit through "College Credit Plus".

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COMMUNICATIONS

3113 DRAMA

Semester **Credit 1/2** **Grades 9-12**

Drama is a semester course surveying the basic elements of acting. Students will explore pantomime, voice, improvisation, stage direction, movement and character creation. Students will perform a variety of short scenes throughout the semester. With instructor approval, this course may be taken for honors credit.

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3114 THEATER WORKSHOP

Semester **Credit 1/2** **Grades 9-12** **Est. Fee: \$25 (for supplies)**

Theatre Workshop is a semester course introducing the basic elements of stagecraft and technical theatre. Students will explore the "behind the scenes" aspects of design and production including properties, scenery construction, make-up, costumes, lighting, sound, publicity and theatre business culminating in the creation of a personal technical theatre portfolio. With instructor approval, this course may be taken for honors credit.

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3117 PUBLIC SPEAKING

Semester **Credit 1/2** **Grade 9-12**

Public Speaking is a semester course that introduces students to speech communication and provides a safe platform to experiment with and grow their abilities in a variety of speaking formats. Speaking opportunities will include informative, demonstration, impromptu, and persuasive speeches as well as debate utilizing parliamentary procedure. With instructor approval, this course may be taken for honors credit.

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3171 DEBATE

Semester **Credit 0.5** **Grade(s) 9-12**

This course introduces students to the research, writing, and speaking skills necessary to compete in formal debate. Students will analyze topical issues and resolutions, analyze debate theory and practice, and apply critical listening and speaking skills to their arguments.

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3137 CREATIVE WRITING

Semester **Credit 1/2** **Grades 11-12** **Est. Fee: \$25**

The main objective of this course is to provide a foundation for students in creative writing. It will challenge students in a new way and provide an outlet for their own unique, creative approach to writing. The course will primarily focus on all forms of poetry and short story writing, while allowing students to bring their individual perspectives into the classroom. This course will also feature more creative pieces of literature to assist in the exploration of style, form and genre. Some supplemental materials may be required and must be purchased or supplied by the student

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4760 ART OF PHOTOJOURNALISM

Semester **Credit 1/2** **Grade 9-12** **Est. Fee \$10**

Preference given to 9th and 10th graders.

Students will learn the basics of digital photography including composition, camera basics and Photoshop skills. Each class is limited to 21 students. Students enrolled in the class can use their own digital camera or one of the school supplied cameras. Additional equipment, while helpful, is not necessary. This course fulfills half of the required Fine Arts credit.

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3120 INTRO TO JOURNALISM

Semester **Credit 1/2** **Grade 9-12**

Preferred pre-requisite class for newspaper staff.

The students will learn the basics of working on the newspaper and yearbook staff. This course will require the students to practice various types of writing including: news, sports, editorials, columns, reviews, and features. Students are taught interviewing, news gathering skills, and copyediting techniques. Students will also learn about design using computers in media production as well as infographics, headlines, caption writing and design.

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3128 JOURNALISM

Year **Credit 1** **Grades 10-12**

PERMISSION OF THE INSTRUCTOR IS REQUIRED.

Members of the Journalism Staff produce the Student Prints school newspaper. It is expected that Journalism students will provide continuity to the newspaper program and generally provide the leadership on the paper. It is also expected that each Journalism student will help in the production, planning, advertising campaign, research, writing, photography and design of the newspaper. The work involved in this class demands that extra time be spent beyond the regularly assigned publications period. Staffers often spend evenings completing deadlines. Staff selections are made through application and appointment in December and January.

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3129 YEARBOOK

Year **Credit 1** **Grades 10-12**

PERMISSION OF THE INSTRUCTOR IS REQUIRED.

*A Pay-to-Participate fee is associated with this class.

Photojournalism or Photo Portfolio required for photographers to apply for staff position. Members of the yearbook staff produce the Wyandotte yearbook. Staff members are given specific year long assignments such as writing, editing, photography, art, business and page design or layout. Every staff member is encouraged to sell a quota of advertising for the yearbook. The work involved in this class demands that extra time be spent beyond the regularly assigned publications period. Staffers often spend evenings completing deadlines. Although there are no prerequisites, Introduction to Journalism or a solid background in other English courses is recommended for most staff positions. Staff selections are made through application and appointment in December and January.

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ENGINEERING & INDUSTRIAL PATHWAY

8394 ENGINEERING APPLICATION

Semester	Credit ½	Grades 9-12	Est. Fee \$10
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Engineering Applications is designed for students who are interested in pursuing a career in engineering and/or design. Students involved should have an interest in math and sciences. Students will interact with each other and will be challenged to break through normal thinking skills with project-based learning. Students will also explore the following areas: electrical engineering, mechanical engineering, and structural engineering through design and prototyping of projects completed in class. Students completing two ½ credits or 1 full credit in this pathway will fulfill the Fine Arts requirement for graduation.

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8392 ENGINEERING DESIGN

Semester	Credit .5	Grades 9-12	Est. Fee \$10
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This course is designed to be a prerequisite to Computer Aided Design and an introduction to technical sketching and drawing. Emphasis will be on the fundamentals of mechanical, pictorial, and architectural drawing. Students will be expected to sketch and draw every day. Additional topics include geometric design, multi-views, section views, and auxiliary views. Students will complete a hands-on, problem solving activity by the end of the course. Students completing two ½ credits or 1 full credit in this pathway will fulfill the Fine Arts requirement for graduation.

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83921 3D MODELLING & PROTOTYPING

Year	Credit 1	Grade 9-12	Est. Fee \$10
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This course will give student an in depth view of Computer Aided Design and is recommended as the second or third course in the Engineering Pathway. This course will introduce the 3D Solidworks software package and students will learn how to use a 3D printer to create solid models. Three dimensional scanning technology will also be incorporated into the classroom which will be utilized to digitize real objects. This course will also require students to complete problem solving projects relating to course material. Students enrolled should have an interest in math and sciences. Students completing two ½ credits or 1 full credit in this pathway will fulfill the Fine Arts requirement for graduation.

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8396 INTRODUCTION TO ALTERNATIVE ENERGY

Semester	Credit .5	Grades 9-12	Est. Fee \$20
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This course is designed for students who are interested in pursuing a career in engineering. One major objective of this course is for students to learn about and explore innovative ways to power our society. As our world changes, the need for individuals who are trained in this growing field are in high demand. "Green" concepts, energy trends, and potential ways to cut energy costs will be discussed. Particular areas of interest will include solar, wind, hydro, and geothermal energy. Basic electrical concepts will be introduced with lab activities. Students will also learn about fossil fuels, nuclear energy, biofuels, fuel cells, and biomass-energy. Students completing two ½ credits or 1 full credit in this pathway will fulfill the Fine Arts requirement for graduation.

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8398 COMPUTER AIDED DESIGN (CAD)

Semester	Credit .5	Grades 9-12	Est. Fee \$10
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This course is an introduction to the field of two dimensional Computer Aided Design and is recommended as the second or third course in the Engineering Pathway. This course will introduce the first software package from the CAD ACADEMY curriculum as well as a wide variety of technologies relating to engineering, product design, and development. Classroom activities will be focused around geometric design as students learn how to operate basic functions of the software. This course will also require students to complete problem solving projects relating to course material. Students enrolled should have an interest in math and sciences. Students completing two ½ credits or 1 full credit in this pathway will fulfill the Fine Arts requirement for graduation.

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ENGINEERING I COLLEGE TECH PREP

Year	Credit 2	Grade 11	Est. Fee \$57
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2 periods per day
Prerequisite: Application
Corequisite: Physics
This is a two year program consisting of four courses. Students enrolled are expected to complete Aerospace Engineering and Manufacturing Operations during the junior year. In the senior year students will complete AC/DC Electrical and Robotics. Combined these four courses will be a great opportunity for students who are interested in pursuing a college degree in engineering.

8475 ENGINEERING TECH PREP I: Aerospace Engineering

This course will introduce students to the evolution of flight, navigation and control, flight fundamentals, aerospace materials, propulsion, space travel, and orbital mechanics. Students will learn and apply principles of aerospace design and construction to aircraft, rockets and spacecraft. In this course engineering standards will be reinforced along with employability skills. Unique problem solving projects such as those sponsored by NASA will be used as a tool to instruct classroom activities. Students may also have the opportunity to tour local colleges and companies. Students completing two ½ credits or 1 full credit in this pathway will fulfill the Fine Arts requirement for graduation.

8477 Honors Aerospace Engineering

Students interested in the Honors Aerospace option will be required to attempt a Level 1 Rocketry Certification and participate in the Team America Rocketry Challenge. Classroom activities will involve more rigorous academic structure and projects completed will require significant attention.

8481 ENGINEERING TECH PREP I: Manufacturing Operations

Students will learn about different processes found on a production line in a manufacturing setting and learn how these technologies overlap to create automated systems to mass produce products found in local manufacturing facilities. Using self-paced hands-on trainers, students will learn about Basic Electrical Concepts, Computer Aided Design, Robotics, Quality Control, Pneumatic Systems, Injection Molding Systems and Mechanical Systems. Students will demonstrate their knowledge through Powerpoint presentations.

8484 Honors Manufacturing Operations

Students will learn about different advanced processes found on a production line in a manufacturing setting and learn how these technologies overlap to create automated systems to mass produce products found across in manufacturing facilities. Honors students will be expected to use advanced self-paced trainers in the classroom. The advanced trainers are more rigorous, and will require extra effort. Areas covered will be Programmable Logic Controllers, Motor Control, Mechanical Drive, Fluid Power Systems, Materials Engineering, CAD/Solidworks, Electrical Control, Thermodynamics. Students in the honors Manufacturing Operations course will also be required to demonstrate their knowledge through Powerpoint presentations.

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ENGINEERING II COLLEGE TECH PREP

Year Credit 2 Grade 12 Est. Fee \$57

Prerequisite: Engineering Tech Prep I

This course is the second and final part of the Engineering program. Upon Completion, students will be fully prepared for their first year of an Associate's or Bachelor's degree in Engineering. Internships will be utilized to provide an opportunity to visit and work beside local engineers who will assist students through a Mentorship/Job shadowing experience during the last semester.

8485 ENGINEERING TECH PREP II:

DC & AC Electronic Circuits

Students will learn the fundamental principles of electricity with emphasis on DC (direct current) circuits and an introduction to AC (alternating current) circuits. They will use concepts of Ohm's Law, the Power Formula, and Kirchoff's Laws with series, parallel, and series-parallel circuit applications. The relationship between electricity and magnetism and motor theory will also be introduced. The students will use and maintain digital multimeters and oscilloscopes.

8482 ENGINEERING TECH PREP II: Robotics

Students will apply the knowledge and skills necessary to program and operate robots, using the teach pendant as the main interface point. The students will learn robotic operations and system configurations. Students will code, compile, and debug programs using the robotic programming language.

8486/8487 Senior Honors Engineering

Students participating in Honors Engineering during the senior year will be expected to work as a highly functional engineering team during and after school to accomplish a task proposed by the team, and approved by professional governing organization (NASA, Tripoli, NAR) and the instructor. Students on this team will be expected to dedicate a specific amount of time outside of the classroom based on the chosen task.

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CONSTRUCTION I (SV) COLLEGE TECH PREP

Year Credit 3 Grade 11 Est. Fee \$65
3 periods per day Tech Prep Program

Prerequisite: Application

Construction Technology is designed to offer students a well-rounded foundation and preparation for entry into the always-expanding construction industry. Students will learn about AC/DC circuits, residential wiring, controls wiring, heating/air conditioning & applied thermal science, rigging systems, and structural design through the use of self-directed modules. The principles learned will be tested through lab and field experiences. The students will learn carpentry skills and use tools that the professionals use. Qualifying students will be placed with a local employer for paid work experience and training during the second semester of senior year. Are you ready to work toward a high paying career in the construction industry?

84893 CONSTRUCTION I: Core & Sustainable Construction

Students will learn principles in basic safety (10-hr OSHA), construction math, hand and power tool use and operation, blueprint reading, material handling, communication and employability skills. An emphasis will be placed on safe and green construction practices.

84895 CONSTRUCTION I: Structural Systems

Students will learn procedures and techniques required for layout and framing of walls and ceilings, including roughing-in door and window openings, constructing corners and partitions; bracing walls and ceilings; and applying sheathing. Students will learn methods of roof, cold formed steel, and wood stair framing. Students will learn site and personal safety, material properties, design procedures, and code requirements for structural systems.

84897 CONSTRUCTION I LAB

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CONSTRUCTION II (SV) COLLEGE TECH PREP

Year Credit 3 Grade 12 Est. Fee \$56

3 periods per day Tech Prep Program

Prerequisite: Construction Technology I

84903 CONSTRUCTION II:

Carpentry & Masonry

This course will introduce to students the materials, methods, and equipment used in carpentry and masonry. Students will organize a project work sequence by interpreting plans and diagrams within a construction drawing set. They will layout and install basic wall, floor and roof applications. Students will perform introductory concrete applications including formwork, reinforcement, mixing, and finishing. Current advancements in technology, safety, applicable code requirements and correct practices are learned.

84905 CONSTRUCTION II:

Structural Coverings and Finishes

This course will address applications of interior and exterior finish work. Students will identify material properties and select for appropriate application. Students will install thermal and moisture protection including roofing, siding, fascia and soffits, gutters, and louvers. Students will install drywall; trim-joinery and molding and apply wall, floor and ceiling coverings and finishes. Throughout the course, the safe handling of materials, personal safety, prevention of accidents and the mitigation of hazards are emphasized.

84907 CONSTRUCTION II LAB

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ENVIRONMENTAL & AGRICULTURE PATHWAY

8441 HORTICULTURE LEADERSHIP AND MANAGEMENT (SV)

Year Credit 1 Grade 9-10 Est. Fee \$17

This first course in the career field is an introduction to Agricultural and Environmental Systems. Students will be introduced to the scope of the Agricultural and Environmental Systems career field. They will examine principles of food science, natural resource management, animal science & management, plant & horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Throughout the course, students will develop communication, leadership and business skills essential to the agriculture industry.

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8442 PLANT & HORTICULTURE SCIENCE (SV)

Year Credit 1 Grade 9-10 Est. Fee \$17

This first course in the pathway focuses on the knowledge and skills required to research, develop, produce and market agricultural, horticultural, and native plants and plant products. Students will apply principles of plant physiology and anatomy, plant protection and health, reproductive biology in plants, plant nutrition and disorders to the management of soils and plants. Throughout the course, students will learn communication, leadership, and business management skills reflective of the industry.

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HORTICULTURE I (SV) COLLEGE TECH PREP

Year Credit 2 Grade 11 Est. Fee \$55

The focus of the Horticulture program is to prepare individuals for and to assist them in obtaining a career in the agricultural field in conjunction with a purposeful education. The Horticulture program is designed to give students the opportunity to participate in a multifaceted and cooperative program by providing internships or work experiences in the specific area of the student's interest. The primary emphasis of the program is classroom instruction with hands-on projects.

8433 HORTICULTURE I:

Parks & Recreation

Students will design facilities, develop educational programs and manage resources for use in public recreation. Students will maintain and operate equipment for maintaining wildlife habitat and supporting a variety of public recreational activities and facilities. Throughout the course, students will develop marketing and programming skills for park development, apply management practices to park operations and learn the systems required to maintain public safety. Students will understand different ecosystems and handle animals that are closely lived in our park system.

8434 HORTICULTURE I:

Greenhouse & Nursery Management

Students will learn the operational practices needed for the successful growth of nursery stock and/or greenhouse plants. They will learn essential greenhouse practices including water and fertilizer distribution, lighting, ventilation and temperature control. Students will learn pest and disease identification and control along with bio-security practices. Students will demonstrate knowledge of propagation methods, plant health, nutrition, and growth stimulation. Throughout this course, business and employability skills will be emphasized.

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HORTICULTURE II (SV) COLLEGE TECH PREP

Year	Credit 2	Grade 12	Est. Fee \$45
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8437 HORTICULTURE II: Landscape Systems Management

Students will learn methods for establishing and managing landscapes to promote growth and balance. The classification and care of woody and herbaceous landscape plants will be learned. Students will learn to optimize growing conditions, balance nutrients, and manage pests and disease. They will apply proper planting, fertilizing, and pruning techniques while safely operating well maintained specialized equipment. Throughout the course, students will assess implications of landscape installation on the environment, and employ communication, business, and management strategies.

8439 HORTICULTURE II: Business Management

Students will examine elements of business, identify organizational structures and apply management skills while developing business plans, financial reports and strategic goals for new ventures or existing businesses. Learners will use marketing concepts to evaluate the marketing environment and develop a marketing plan with marketing channels, product approaches, promotion and pricing strategies. Throughout the course, students will apply concepts of ethics and professionalism while implications of business regulations will be identified.

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HEALTH, EDUCATION & HUMAN SERVICES PATHWAY

8330 HEALTH CAREERS FOUNDATIONS

Semester	Credit 1/2	Grade 9-10
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This course is designed to give students with an interest in pursuing a medical or health-related career overview of the numerous health occupations. In addition to providing an introduction to the various health professions, students will learn occupational skills needed for those professions. The students will gather information about selected health care careers through participation in a series of hands-on projects. A broad concept of how health care is organized and delivered will be studied. Students will explore developing their own necessary abilities to assure success in the medical field. Building professional attitudes, ethical behavior, and communication skills are a few of the areas that will be discussed.

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8377 PRINCIPLES OF NUTRITION & WELLNESS

Semester	Credit 1/2	Grade 9-12	Est. Fee \$25
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In this course, students will use principles of nutrition to ensure a healthy body throughout the life cycle. An emphasis will be placed on planning and preparing meals with an understanding of nutrients and their benefits, portion control and dietary needs. Additional information will include steroid and supplemental use, body weight and management and the implementation of physical activity to maintain a healthy lifestyle.

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8379 CULINARY ARTS FUNDAMENTALS

Year	Credit 1	Grade 11-12	Est. Fee \$40
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In this course, students will apply fundamental culinary techniques, such as knife handling skills and the recognition, selection, and proper use of tools and equipment. An emphasis will be placed on mise en place, the management of time, ingredients, and equipment. Students will apply standard recipe conversions using proper scaling and measurement techniques. Basic nutrition, and food safety and sanitation will be aligned to hospitality standards.

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8376 PERSONAL WELLNESS & DEVELOPMENT

Semester	Credit 1/2	Grade 9-12
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In this course, students will analyze personal physical, emotional, social and intellectual growth for a healthy lifestyle. An emphasis will be placed on lifespan wellness by managing stress through relaxation, physical activity and sleep. Additional topics will include human growth development, mental health management, personal hygiene and preparing for emergency medical situations. This course may serve as the Health credit.

8380 PRINCIPLES OF FOOD

Semester,	Credit 1/2,	Grade 9-10,	Est. Fee \$10
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In this course, students will gain knowledge in food selection criteria and apply preparation methods to promote a healthy lifestyle. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. Throughout the course, basic food safety and sanitation techniques will be emphasized.

8360 INTRODUCTION TO EDUCATION

Semester	Credit 1/2	Grades 9-10
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This class is for students who are exploring career options in the field of education. Students will learn about early education, elementary education, special education, and secondary education. Related fields in school counseling and administration are also introduced. This is primarily a project based class that incorporates 'hands-on' activities, class discussions, presentations and various types of classroom practice. By completing this foundation course, students will have a greater understanding of opportunities available to them in the education field. If a student has continued interest in pursuing a career in education, they may explore other education options offered in the junior and senior years.

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EDUCATION & TRAINING I

Year	Credit 3	Grade 11	Est. Fee \$75
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83811 CURRICULUM AND INSTRUCTION

Students will develop age-appropriate learning experiences and curriculum to engage young children. They will determine curricular goals, create lesson plans, and employ observation and assessment strategies to evaluate children's growth and development. Application of foundational principles of reading, writing, speaking, and listening skills to enhance the learner's application of literacy will be emphasized.

83815 OBSERVATION AND ASSESSMENT

Students will formally and informally observe young children to determine learners' growth, personalities and required interventions. They will analyze children's behavior, record and categorize learner progress, and use observation to diagnose problems. The role of assessment data in developing suitable teaching responses and strategies will be examined.

EDUCATION & TRAINING II

Year Credit 3 Grade 12 Est. Fee \$80

83821 PRINCIPLES: HISTORY AND PHILOSOPHY

Students will examine the history and philosophy of early childhood education, types of early childhood programs, and the roles, rights and responsibilities of learners and stakeholders in early childhood education. Students will assess developmental appropriate practices; legal, ethical and organizational issues; and the challenge of teaching and caring for young children with diverse needs. Career planning and professionalism will also be emphasized throughout the course.

83825 HEALTH, SAFETY, AND NUTRITION

Students will establish and maintain a physically and emotionally safe and healthful environment for young children. They will learn skills in first aid and CPR, identify signs and symptoms of common health issues and diseases, and develop meal and snack menus appropriate for young children of different ages and stages of development. The effects of nutrients on children's growth and development will also be emphasized.

83835 CAPSTONE

Students apply Education and Training program knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others. These can take the form of mentorship employment, cooperative education, apprenticeships and internships.

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8351 COSMETOLOGY FOUNDATIONS

Year Credit 10 Grade(s) 9-10 Est. Fee: \$25 for manicure kits

This course is highly recommended for students who may be interested in pursuing a career in cosmetology. This course is designed to cultivate a proper attitude and behavior patterns needed to become a successful cosmetologist. Content topics explored include: History and Career Opportunities, Life Skills, Communication, Hair Disorders and Diseases, Braiding, Facial Make-up, Nail Disorders and Diseases, Nail Art, and Exploring Industry Professionals.

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COSMETOLOGY I COLLEGE TECH PREP

Year Credit 4 Grade 11 Est. Fee \$350

4 periods Cosmetology per day plus 1 additional period of Anatomy.

Cosmetology is a two-year program that studies in depth the beauty industry. Junior students will automatically be scheduled into Anatomy for one period per day and will work in both a lab and classroom setting four periods per day. Cosmetology is a \$52 billion a year industry that is growing. It is an industry with zero unemployment. It offers unlimited growth potential for those who set their own goals. Possible career choices for Cosmetology are Hair Stylist, Nail Technician, Make-up Artist, Esthetician, Salon Owner, Salon Manager, and more.

83501 COSMETOLOGY I: Trichology

Students will learn the anatomy of the head and scalp, structure of the hair and various techniques and procedures for analyzing hair, scalp disorders and diseases. Students will be able to determine hair porosity, elasticity, density, texture and growth patterns as well as conduct chemical tests for treated hair and ability to recommend corrective scalp treatment.

83503 COSMETOLOGY I: Fundamentals of Hair Cutting & Styling

Students will learn basic shampooing, conditioning and hair-cutting including trimming, wet styling and thermal styling techniques when working with natural and synthetic hair. Students will also learn infection control and safety along with the science of ergonomics. and ability to recommend corrective scalp treatment.

83505 COSMETOLOGY I: Fundamentals of Chemical Services

Students will apply basic skills, knowledge, and safety practices when giving permanent/chemical waves, curl re-forming, chemical relaxers and hair color techniques to include tinting, highlighting, bleaching and foiling.

83507 COSMETOLOGY I: Hand & Foot Treatments

Students will learn the knowledge and skills to perform both manicures and pedicures. They will learn how to maintain personal hygiene and infection control. Students will give plain/oil manicures, pedicures, and hand/harm and foot/leg massages. Enhanced hand and foot treatments using specialized products and techniques will be performed.

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8355 COSMETOLOGY II

Year Credit 4 Grade 12 Est. Fee \$150

Prerequisite: Cosmetology I

This is the second year program for Cosmetology. Senior Cosmetology students can provide services for clientele, intern in an area salon, and practice for the upcoming licensing exam. Upon passing the exam, the student can be licensed by the State of Ohio as a professional Cosmetologist.

83511 COSMETOLOGY II: Advanced Hair Cutting & Styling

Students will learn advanced cutting and formal styling using specialized equipment and techniques. This course offers enhanced training in current trends and razor techniques.

83513 COSMETOLOGY II: Advanced Chemical Services

Students will learn advanced chemical services using specialized products and techniques. Students will do advanced coloring, dimensional coloring, corrective techniques, texturizing, and advanced chemical wave wrapping techniques.

83515 COSMETOLOGY II: Skin Care Fundamentals

Students will apply the principles of anatomy, skin analysis, infection control and safety to safe hair removal, skincare treatments, and facial massage. Students will use electrical and manipulative facial treatments including masks, packs, and make-up techniques. Students will also learn advanced skin care treatments, targeted massage, and enhancement applications using specialized products and techniques.

83517 COSMETOLOGY II: Salon Operations

Students will learn the fundamentals of managing a cosmetology salon. Students will learn about employment and customer liability, insurance, leases, record keeping, communication and sales.

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MEDICAL TECHNOLOGY I COLLEGE TECH PREP

8333 ANATOMY

Year Credit 3 Grades 11 Est. Fee: \$175

2 periods per day Med. Tech

Est. Anat. Fee \$10

1 period per day Anat.

College Tech Prep

Prerequisite: Application

83311 MED TECH I: Medical Terminology

This course explores the root words, suffixes and prefixes of the vocabulary used in medical offices, hospitals and other health settings. Students review the nervous, skeletal, cardiovascular, muscle and other major systems of the human body, and they discuss terms related to physiology, anatomy and pathological conditions. Students learn to spell, define and pronounce common medical terms.

3 College Credits

83351 Med Tech I: Principles of Allied Health

Students will be trained as emergency responders and instructed in basic management of emergency medical/pre-hospital care of the sick and injured. Emergency responders are trained to reach patients, find out what is wrong and provide emergency care. Students will receive the following certificates: American Heart Association Basic Life Support (BLS), CPR/AED and First Aid. Also covered: preventing disease transmission, diseases and disorders, ethics, communications, and vital signs. "Real-world" experience will be acquired through professional guest speakers, health care field trips and victim/patient care skills. All Med Tech students are required to take Anatomy & Physiology which will be automatically scheduled upon enrollment in this program.

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83353 HONORS MEDICAL TECHNOLOGY I

Honors students will have additional assignments related to pathophysiology, infection control, and case studies. Assignments will involve an understanding of both normal and abnormal body processes, critical thinking skills, and application skills. Students will be assigned to research patient case histories, current news reports, and pathology, and they will complete more complex writing assignments and deliver presentations. Students will work in collaboration with the instructor to become a master of specific topics to instruct their peers and individuals in our community. Students must demonstrate leadership inside and outside the classroom through HOSA (Health Occupation Skills of America), the classroom personnel system, and community service projects. Additional assignments, in-class experiences, and out of class experiences will be expected of the students who select honors.

MEDICAL TECHNOLOGY II COLLEGE TECH PREP

Year	Credit 4	Grade 12	Est. Med. Fee \$131
3 periods per day Med Tech			Est. Chem. Fee \$10
7 periods per week Chemistry			College Tech Prep

Prerequisite: Medical Technology I

83383 Med Tech II: Patient Care & Diagnostics

Med Tech II will help shape your future in the dynamic field of health care by exploring various professional health career options. You will gain knowledge in the Career Pathways of Medicine, physical therapy/sports medicine, nursing, pharmacy, laboratory, diagnostic services

83355 MED TECH II: Patient-Centered Care

Students will learn medical skills in the lab that are required to meet patients' needs such as: safety and infection control, body mechanics, patient mobility, vital signs, phlebotomy, electrocardiography, nutrition, basic lab procedures, wound care and sterile technique. Students meeting all requirements will be eligible to take part in Patient Care Clinical at Toledo Hospital and the State of Ohio Nurse Assisting Testing (STNA). This will prepare you for college and or immediate employment in the health care field.

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83340 MED TECH II: PATHOPHYSIOLOGY

In this course, students will identify the causes, processes, and changes in body organs and tissues that occur with human illness. Topics include identification of clinical characteristics and effects of diseases, mechanisms causing alterations in cellular activity, maintenance of cellular tissue oxygenation, fluid and electrolyte balance, neuroendocrine control of the body, and diagnostic methodology. Students will interpret and use clinical data and patient health history to assemble a comprehensive health assessment.

83371 MED TECH II LAB: Capstone

The capstone course provides opportunities for students to apply knowledge, attitudes and skills in a more comprehensive and authentic way. Capstones include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including 50+ hours of shadowing, Health Occupation Students of America (HOSA) professional club membership, The Senior Project, community service projects, HOSA competition and travel.

83385 HONORS MEDICAL TECHNOLOGY II

This course will cover similar material as Medical Technology II, but students will complete additional writings and presentations in anatomy/physiology/pathophysiology, medical mathematics, patient case histories, medical terminology, and health care topics in the news. Students will be expected to take on leadership roles in the classroom personnel system, community service projects (including the blood drive) and the Health Occupations Students of America (HOSA) professional organization.

INFORMATION TECHNOLOGIES PATHWAY

8311 SOFTWARE APPLICATIONS

Semester	Credit 1/2	Grade: 9-12	Est. Fee \$10
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The emphasis of this course is to extend your knowledge of Microsoft Office 2016 (Word, Excel and PowerPoint). Microsoft Access and Publisher will be introduced. You will use this proper procedures and techniques to create more advanced documents, workbooks, and presentations suitable for course work, professional purposes, and personal use. You will also learn how to use Publisher to produce advanced documents, workbooks, brochures, flyers, and presentations.

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8309 TODAY'S TECHNOLOGY

Semester	Credit 1/2	Grade 9-12	Est. Fee \$5
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This course is designed to improve students' proficiency in the use of digital technologies. Using communication and networking tools as well as social networks appropriately to access, manage, integrate, evaluate and create information. Through a hands-on approach this course enables students to actively explore web 2.0 applications. Areas of concentration may include digital citizenship, determining internet and research trustworthiness, presentation and collaboration tools, research, organization, and concept mapping tools, and other widgets in order to better complete academic, professional, and personal endeavors to successfully function in today's technologically driven society.

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8415 INTRO TO COMPUTER PROGRAMMING

Semester	Credit 1/2	Grade 9-10
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This course will introduce students to computer programming. Students will learn how to program in a variety of languages that are being used in many career fields. Emphasis will be placed on learning how to logically process a problem and design a solution as well as how to create and manipulate objects, classes, and structures. Some time may be devoted to designing apps. Included in the year are projects that enhance the learning of each programming language and foster creativity and innovation.

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8545 2D GAME DESIGN

Semester Credit: ½ Grades: 9-12 Est. fee: \$10

The 2D Game Design course is designed to be an introduction to the rapidly expanding market of game creation. Students will learn to design and program games using GameSalad Development Environment. They will learn industry standard programming constructs while creating a wide variety of two-dimensional games. Students will learn input method handling, animation, collision detection, game physics and basic artificial intelligence. Creative problem solving will be key as students plan the logic for contests that will challenge audiences of different ages. Graphic design and storyboarding will be used in conjunction with GameSalad to create applications that can be deployed in both the Apple and Android markets while also publishing online using HTML. After successfully completing this course, students will have the knowledge to create custom games from their original idea to final testing.

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HONORS PROGRAMMING I (SV) COLLEGE TECH PREP

Year Credit 2 Grade 11 Est. Fee \$50

Honors Programming I is part of a two-year college tech prep program. The first year of this program includes the courses Honors Object Oriented Programming and Honors Visual Programming. In Honors Programming I students learn and practice key computer science concepts by designing and developing new applications. Students will learn object-oriented principles that will apply to some of the most highly demanded industry languages while concentrating on Java. Honors Programming I focuses on the problem solving side of software development while covering basic programming principles and the effective use of appropriate syntax. Students will learn to create and test their own programs while preparing for a lucrative career in one of the best job markets in the country. **Students completing Honors Programming I will fulfill the Ohio Fine Arts requirement for graduation.**

8541 HONORS PROGRAMMING I Object Oriented Programming

This course is one part of Honors Programming I and must be taken in conjunction with Honors Visual Programming. Honors Object Oriented Programming presents a conceptual and practical introduction to object oriented programming, exemplified by Java while providing a foundation for the Java programming language. The course will cover basic programming principles in structured and object oriented frameworks. The course should enable students to develop programs that have the capacity to test and observe particular algorithms.

8540 HONORS PROGRAMMING I Visual Programming

This course is one part of Honors Programming I and must be taken in conjunction with Honors Object Oriented Programming. Honors Visual Programming provides a foundation for the design and implementation of programs that utilize a visual user-interface. Topics covered will include: designing the interface; the message/event driven programming model; logical structure of programs; control containers such as graphics, dialogs, and forms; and controls, including buttons, sliders, mouse motion, and edit boxes. After this course, students will be able to design and create applications with a working Graphical User Interface.

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HONORS PROGRAMMING II (SV) COLLEGE TECH PREP

Year Credit 2 Grade 12 Est. Fee \$60

Honors Programming II is part of a two-year college tech prep program. The second year of this program includes the courses AP Computer Science A and Honors Computer and Mobile Applications. In Honors Programming II students learn and practice key computer science concepts by designing and developing new computer and mobile applications. Students will continue to develop object-oriented programs while focusing on mobile apps. Students will design, create, install, test, and modify their own mobile apps on different devices and operating systems. Honors Programming II provides preparation for the AP Computer Science A examination while also providing a solid background for students pursuing a career in the lucrative and rapidly expanding world of computer programming and mobile app development.

8543 HONORS PROGRAMMING II: AP Computer Science A

This course is one part of Honors Programming II and must be taken in conjunction with Honors Computer and Mobile Applications. AP Computer Science A includes items covered in most college entry-level computer science courses. The curriculum follows the outline for AP Computer Science A developed by the College Board. Topics covered include problem solving using logic, programming methodology, procedural abstraction, and the use of algorithms and data structures. Students will gain familiarity with basic syntax, classes, objects, and data types focusing on, but not limited to, the Java programming language.

8542 HONORS PROGRAMMING II: Computer and Mobile Applications

This course is one part of Honors Programming II and must be taken in conjunction with AP Computer Science A. Honors Computer and Mobile Applications provides the training for students to create applications for mobile devices using commercial and open source software. Students will write code for mobile apps that will be compatible with millions of Android and iOS devices. Students will design and create applications, install these apps on mobile devices for testing, modify them, and develop the skills needed to handle user issues. Programming concepts will be taught with product life cycle and sustainability in mind so students learn to create updatable apps that can progress with the needs of clients.

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8546 HONORS COMPUTER PROGRAMMING I (NV) College Tech Prep

Year Credit 2 Grade 11 Est. Fee \$35

Honors Programming I is part of a two-year college tech prep program. The first year of this program includes two courses focused on teaching basic computer programming principles through problem solving. Specifically, students will learn data base management and other programming applications within the business field. Students will learn to create and test their own programs while preparing for a lucrative career in one of the best job markets in the country. Students completing Honors Computer Programming I will fulfill the Ohio Fine Arts requirement for graduation.

8546 HONORS COMPUTER PROGRAMMING I: Systems Analysis & Design

Students will learn the theory and practice of software testing and develop an understanding of the analysis and design phases of software development. Students will effectively use appropriate programming languages and software patterns to improve software development. A variety of commercial and open source programs, applications, and tools will be used.

8543 HONORS COMPUTER PROGRAMMING I: AP Computer Science A

This course is one part of Honors Programming I and must be taken in conjunction with Honors Systems Analysis & Design. AP Computer Science A includes items covered in most college entry-level computer science courses. The curriculum follows the outline for AP Computer Science A developed by the College Board. Topics covered include problem solving using logic, programming methodology, procedural abstraction, and the use of algorithms and data structures. Students will gain familiarity with basic syntax, classes, objects, and data types focusing on, but not limited to, the Java programming language.

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HONORS COMPUTER PROGRAMMING II (NV) COLLEGE TECH PREP

Year Credit 2 Grade 12 Est. Fee \$25

Honors Computer Programming II is part of a two-year college tech prep program. The second year of this program includes the courses Honors Database Administration and Honors Web Development.

8548 HONORS COMPUTER PROGRAMMING II: Database Administration

Students will learn about user rights and responsibilities, concurrency security, reliability, backup and recovery to perform tasks involved in the administration and management of a database system. Students will design, extract and transform data ensuring data quality. Knowledge and skills relating to reporting systems, data warehouses, and data mining will be developed.

8549 HONORS COMPUTER PROGRAMMING II: Web Development

Students will learn the dynamics of the Web environment while pursuing an in-depth study of both Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Web based protocols such as FTP, TCP/IP, and HTTP will be addressed. Students will create a website with tag text elements, special characters, lines, graphics, hypertext links, and graphical tables.

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8598 INTRO TO VISUAL TECHNOLOGY

Semester **Credit ½** **Year 9-10**

In IVT you can learn the basic art and design skills it takes to go into the field of Computer Graphics and Visual Communications. In this introductory class, you can create and print images that focus on each of the Elements of Art and Principles of Design, all on a computer running state of the art software. Introduction to Visual Technology is a class designed for technically-minded students who wish to develop the skills needed in today's visual driven world. Students also study art history and aesthetics to further develop their understanding and appreciation of visual media.

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INTERACTIVE MEDIA I COLLEGE TECH PREP

Year **Credit 2** **Grade: 11** **Est. Fee \$35**

This is a four course program. Students take two courses junior year and two courses senior year. Over two years in interactive media students will study design techniques, creating and editing digital images, web design, and video and sound.

Software

Apple computers and the Adobe Master Suite of programs are utilized. Programs include but are not limited to: Photoshop, Illustrator, InDesign, Dreamweaver, Flash, Premiere Pro, and After Effects.

8512 INTERACTIVE MEDIA I: DESIGN TECHNIQUES

Students will learn techniques for transforming photographic images, through use of digital cameras, computers, and mobile devices. To accomplish this, they will learn software photo editing techniques including layering, color correction, masking, and special effects using current commercial and open source programs and applications.

8511 HONORS INTERACTIVE MEDIA I: DESIGN TECHNIQUES

In addition to the requirements for Interactive Media I: Design Techniques, students will demonstrate more complex Photoshop skills, learn professional photo retouching, and complete other higher-level thinking and real-world projects.

8510 INTERACTIVE MEDIA I: WEB DESIGN

Students will learn the dynamics of the Web environment while pursuing an in-depth study of both Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Web based protocols such as FTP, TCP/IP, and HTTP will be addressed. Students will create a website with tag text elements, special characters, lines, graphics, hypertext links, and graphical tables.

8514 HONORS INTERACTIVE MEDIA I: WEB DESIGN

In addition to the requirements for Interactive Media I: Web Design, students will apply their skills to real-world projects, such as re-designing the Northview Website or creating a website for a client.

INTERACTIVE MEDIA II COLLEGE TECH PREP

Year **Credit 2** **Grade: 12** **Est. Fee \$35**
2 periods per day **College Tech Prep**

85111 INTERACTIVE MEDIA II: CREATING AND EDITING DIGITAL IMAGES

Students will learn to design, develop, and produce interactive media projects, web sites, and social media contexts. Students will demonstrate methods of creating professional quality media using commercial and open source software.

85113 HONORS INTERACTIVE MEDIA II: CREATING AND EDITING DIGITAL IMAGES

In addition to the requirements for Interactive Media II: Creating and Editing Digital Images, students will complete additional projects. These projects might include competing in Business Professionals of America contests, creating advanced After Effects work, completing work for local businesses, running the social media for sports and clubs, or completing an internship.

8513 INTERACTIVE MEDIA II: VIDEO AND SOUND

Students will create professional video and audio productions for distribution in traditional and new media channels. Students will plan, produce, edit, and launch media products. Students will develop scripts and storyboards, compose shots and operate cameras, capture sounds using microphone hardware, apply special effect techniques, and edit to achieve the final product. Students will be able to use animation and graphic design for video.

85133 HONORS INTERACTIVE MEDIA II: VIDEO AND SOUND'

In addition to the requirements for Interactive Media II: Video and Sound, students will complete additional projects. These projects might include filming and editing news broadcasts, starting your own video blog, or completing an internship.

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MUSIC

Instrumental Music

BAND

Year **Credit 1**

Prerequisites: A minimum of one year of band experience or permission of the band director.

The Northview Band program provides the student with a wide variety of musical experiences. All students enrolled in band perform with the marching band during the first quarter of the school year. At the conclusion of the fall marching season the band will be divided into three concert bands. Students will be placed in one of the three concert bands based on an audition held in January or February of the previous year. The concert bands will present a number of formal concerts each year as well as participate in Ohio Music Education Association Adjudicated Events. Students are also provided the opportunity for small ensemble and solo performances. All band students also perform at winter sport events as a member of the pep band. The pep band provides spirit and support for Northview winter sports teams. The pep band performs at several home boys and girls basketball games, and one hockey game. The pep band also performs at pep assemblies throughout the year. All band members must perform at a minimum of 4 games.

Band is a continuing program. A student cannot drop out and then rejoin without special permission of the director.

**A Pay to Participate fee is required for this class*

MARCHING BAND

The marching band is an integral part of the pageantry and excitement generated at Northview varsity football games in the fall. The band will provide entertainment during the pre-game and half-time activities, as well as provide spirit and support for the Northview team and fans. The band also participates in a number of parades, including the Fall Festival parade and the Memorial Day parade in the spring. The band may also participate in a limited number of special events, such as band festivals or competitions. A band camp is held at Northview in August, two weeks before the first week in which classes are scheduled to begin. These very important rehearsals are where we learn the marching fundamentals and musical skills needed to present our fall schedule of performances. Attendance at band camp is **MANDATORY! Attendance is also required at all scheduled performances.**

HONORS OPTION

The Honors Option will be available to students who are enrolled in the Wind Ensemble, Chamber Orchestra or A Cappella Choir. The Honors Option in Music will focus on the development and application of critical thinking skills - analysis, synthesis, evaluation and problem solving. Students must demonstrate an appreciation of the aesthetics and an understanding of the creative process in music. Student responsibility, intrinsic motivation, independent study and research will be emphasized. Because of the performance emphasis of these classes, the already rigorous course expectations and the time consuming schedule students encounter in music, interested students need carefully evaluate their total responsibilities to school and home before committing themselves to the Honors Option in music. A decision to enroll should be discussed with and supported by your teacher and parents/guardian. **Students must receive written permission from the teacher prior to scheduling classes.**

3752 WIND ENSEMBLE

3761 HONORS WIND ENSEMBLE

The Wind Ensemble will consist of mostly upperclassmen and the most experienced players. The emphasis will be on the more advanced techniques of performance and the literature covered will be of the highest level. **Attendance is required at all scheduled performances.**

**A Pay to Participate fee is required for this class*

3758 SYMPHONIC BAND

The Symphonic Band will consist of mostly upperclassmen and experienced players. The emphasis will be on developing more advanced techniques of performance and the literature covered will be of a higher level. **Attendance is required at all scheduled performances.**

**A Pay to Participate fee is required for this class*

3756 CONCERT BAND

The Concert Band will consist of mostly underclassmen and less experienced players. Basic musicianship and fundamental skills will be stressed. **Attendance is required at all scheduled performances.**

**A Pay to Participate fee is required for this class*

3750 BAND AUXILIARY

Quarter Credit 1/4 Grade 9-12

Prerequisite: Acceptance is based on the tryout

The band auxiliary consists of the Northview flag corps and majorettes. Tryouts are held in the spring of each year. This course is for those students who do not play a band instrument. **Attendance at scheduled performances is mandatory.**

**A Pay to Participate fee is required for this class*

3751 CONCERT ORCHESTRA

Year Credit 1 Grade 9-12

Prerequisite: A minimum of one year of orchestra experience or permission of the orchestra director

The Northview Concert Orchestra is comprised of all freshman and less experienced upperclassmen. The primary goal of the orchestra is to cultivate an enjoyment and higher understanding of orchestral music by studying music of various styles, music theory, and technical drills. Emphasis in this ensemble is devoted to specific orchestral techniques, and the orchestra performs standard educational string literature. Highlights of the year are the December concert, State Orchestra Adjudicated Event, and the May Pops Concert. There are many opportunities for additional enrichment and service, such as Solo and Ensemble contest and select orchestras at the district, regional, and state levels. **Attendance at all scheduled performances is mandatory.**

**A Pay to Participate fee is required for this class*

3762 CHAMBER ORCHESTRA

3760 HONORS CHAMBER ORCHESTRA

Year Credit 1 Grade 9-12

Prerequisite: A minimum of one year of orchestra experience or permission of the orchestra director

The Chamber Orchestra is Northview's most select orchestra. It is comprised of all seniors, and open to audition for sophomores and juniors. Members of the Chamber Orchestra must demonstrate advanced proficiency on their instrument. The primary goal of the chamber orchestra is to cultivate an enjoyment and higher understanding of orchestral music by studying music of various styles, music theory, and technical drills. Emphasis in this ensemble is on advanced techniques, and the literature covered will be of the highest level. Highlights of the year are the December concert, State Orchestra Adjudicated Event, and the May Pops Concert. There are many opportunities for additional enrichment and service, such as Solo and Ensemble contest and select orchestras at the district, regional, state, and national levels. **Attendance at all scheduled performances is mandatory.**

**A Pay to Participate fee is required for this class*

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3763 JAZZ BAND

Year Credit 1/4 Grade 9-12

Prerequisite: Enrollment in HS Band or by permission of director

The Jazz Band is a musical group organized to study and perform the various styles of jazz music, such as Big Band Dance Music, Pop and Rock, Ballads, the Blues, and small group jazz. A basic understanding of improvisational techniques is also given. The Jazz Band performs a number of times throughout the school year. Practices will be conducted after school hours. **Attendance at scheduled performances is mandatory.**

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Vocal Music

3764 A CAPPELLA CHOIR

3766 HONORS A CAPPELLA CHOIR

Year Credit 1 Grade 10-12

A Cappella Choir is Northview's most select mixed ensemble. The choir, in addition to concerts, performs in a concert tour for an average of four days every other year. During the years when the A Cappella Choir does not tour, they perform a Cabaret dinner for the Sylvania community. A wide variety of music performed includes some of the more demanding literature. Membership is by audition and requires that students sight sing and display their range through video-recorded exercises. While not required, it is recommended that a student wishing to become a member of the A Cappella Choir participate in another Northview chorus in preparation for this auditioned group. **Attendance at scheduled performances is required.** Note: The selection of choral music based upon its historic and music significance and at times will have religious text.

**A Pay to Participate fee is required for this class*

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3768 POPULAR MUSIC

Semester Credit 1/2 Grade 10-12

Jazz, Blues, Rock-n-Roll and all popular music from the 1910's to the present will be studied. The course involves a great deal of music listening in conjunction with defining what musical traits characterize each style of popular music. Each student will be able to classify and categorize popular music examples by artist and by the stylistic techniques used.

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3776 WOMEN'S CHORUS

Year Credit 1 Girls Grades 9-12

Northview Women's Chorus is a 9th-12th vocal group focused on developing the fundamental skills of voice production, sight-reading, tuning, blend, and balance. This women's chorus is primarily a skill building group for Northview's young female voices, but also open to upperclassman involvement and leadership. The Northview Women's chorus will perform at all Northview choral events, including OMEA District and State competitions. **Attendance at scheduled performances is required.**

* A Pay to Participate fee is required for this class

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3767 AP MUSIC THEORY

Year Credit 1 Grade 11-12 Est. Fee: \$93

Corequisite: A Cappella Choir, Chamber Orchestra, Wind Ensemble, or consent of the instructor.

AP Music Theory is for the student who has a serious interest in knowing how music is put together. It is for the highly motivated student who will learn most of the skills taught in a first level college music theory course. Students will learn about musical modes and rules of basic composition. While piano keyboard skills are not required, they are helpful. Aural skills will be learned and developed through the use of several music skills computer programs. Students will develop listening skills to enable them to hear and notate musical examples and heighten compositional skills. It is expected that students will take the AP exam.

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3769 THE HARMONY ROAD SHOW

Year Credit 1 Grade 10-12

Prerequisite: A Cappella Choir

Specializing in vocal jazz, Harmony Road Show ("HRS") is a mixed voice audition-only group of 16 singers. Students learn jazz performance techniques both on and off microphones. They are expected to learn about vocal sound technology and tech set-up of speakers and microphones in various performance venues. HRS performs by invitation at many community functions, at choir concerts, and with the Northview Jazz Band in the spring. The Harmony Roadshow has performed and workshoped with members of M-Pact, Up-in-the-Air, New York Voices, and vocal jazz/vocal pop professionals from around the world. **Attendance at scheduled performances is required.** Students are required to furnish their own formal uniforms in accordance with uniform guidelines. Members are encouraged to check out the BGSU New York Voices vocal jazz camp in August.

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SCIENCE

A full year of physical science, a full year of biological science and a full year of elective science are required for graduation.

3421 AP BIOLOGY

Year Credit 1 Grade 11-12 Est. Fee \$10
7 periods or equivalent

Prerequisite: Teacher recommendation, Biology or Honors Biology; Chemistry or Honors Chemistry or being taken concurrently

A course for highly motivated/interested students, AP Biology gives in-depth treatment to cell structure and function, taxonomy, evolution, ecology, biosynthesis, genetics, protein synthesis, plant and animal physiology, applied botany, bioenergetics, history of biology, homeostatic mechanisms, behavior, gene action, and more. Laboratory experiences provide opportunities for the student to further develop observational and analytical skills and are an integral component of the program. These serve to extend concepts covered in class and in the text. Students will employ a variety of techniques to investigate macromolecule structure, photosynthetic rates, enzyme function parameters, transformation in bacteria, plant and animal morphology and histology, microbial activity and identification and electrophoresis as well as other laboratory topics. Tests emphasize both the course content and its concepts. **A summer assignment of outside readings and selected text chapters is required. Students electing to take AP Biology should see the instructor before the end of second semester exams to sign out a text. The course is recognized by colleges as a laboratory credit course. Summer assignments may also be found at the Northview website www.sylvanianorthview.org. It is expected that students will take the AP Exam.**

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3435 ENVIRONMENTAL SCIENCE I

Semester Credit 1/2 Grade 11-12 Est. Fee: \$5

Prerequisite: Science 9 (C and P) and Biology

Environmental Science I is an elective science course involving the study of soil science, water quality, the Great Lakes, animals of Ohio: birds, reptiles, amphibians, fish, and mammals. These topics will be discussed in the context of current environmental issues in the world around us. Class will consist of hands-on, projects based activities, lab investigations inside and outside the classroom, research project and presentations. Students also have the opportunity to participate in the area wide, Student Watershed Watch Program.

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3436 ENVIRONMENTAL SCIENCE II

Semester Credit 1/2 Grade 11-12 Est. Fee: \$5

Prerequisite: Science 9 (C and P) and Biology and Environmental I

Environmental Science II is an extension of Environmental Science I; it will address current issues of energy use, fossil fuels, alternative energy, global warming, and what impact they have on the topics covered in Environmental I. Also addressed will be pollution, recycling and waste management. Additional topics covered will be plant science, basic forestry, GPS technology and natural resources management. Research projects, presentations, outdoor and indoor lab activities, and classroom activities will facilitate the learning of material in this program. Students have the opportunity to participate in statewide Envirothon Program.

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3419 AP ENVIRONMENTAL SCIENCE

Year Credit 1 Grade 11-12 Est. Fee \$20

Prerequisite: Biology, Chemistry is recommend, (strong math skills are needed).

AP Environmental Science is an elective course for students that have a strong desire to explore all aspects of their environment. The course is the equivalent to a university level semester course in the study of environmental science. This course will go beyond the introductory level of environmental science. The range of topics to be covered include: climate, weather, biomes, ecosystem dynamics, biodiversity, global warming, renewable and nonrenewable energies, solid waste, air pollution, water pollution, environmental ethics, populations dynamics, toxic hazardous and current event topics. Students will have the opportunity to explore through various methods such as; lab investigations, outdoor activities, group and individual projects, guest speakers and community events/presentations. As part of the curriculum students will choose from a wide variety of environmental community events to participate in, throughout the school year. A summer assignment outside of class is required. It is expected that all students will take the AP Exam. **Summer assignments may also be found at the Northview website www.sylvanianorthview.org.** Students electing to take AP Environmental Science should see the instructor before the end of second semester exams for the assignment.

3432 ZOOLOGY I

Semester Credit 1/2 Grade 11-12 Est. Fee: \$7

Prerequisite: Biology

Zoology is an elective science course involving the study of invertebrate and vertebrate animals. Specific studies in this course consist of taxonomic, anatomical, and physiological examinations of selected organisms and groups of organisms. Zoology I includes topics such as evolution and animal diversity, animal ecology, and the study of the following Phyla: Porifera, Cnidaria, Annelida, Mollusca, Arthropoda, and Echinodermata, in other words, anything from sponges, to spiders, to starfish. The class will consist of lab investigations, research projects and presentations, fieldwork, lectures, and a variety of dissections.

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3433 ZOOLOGY II

Semester Credit 1/2 Grade 11-12 Est. Fee: \$7

Prerequisite: Zoology I, Biology

Zoology is the study of both invertebrate and vertebrate animals. Specific studies include taxonomic, anatomical, and physiological examinations of selected organisms and groups of organisms. Zoology II topics includes classification and evolution of the Phylum Chordata. We will study, in depth, the following Classes: Fish, Amphibians, Reptiles, Birds, and Mammals. Current issues in biodiversity and threats to animal species will also be researched and discussed. The class includes lab investigations, research projects, presentations, field work, lectures, and dissections.

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3434 ASTRONOMY I

Semester Credit $\frac{1}{2}$ Grade 11-12

Prerequisites: Algebra I and Biology or H Biology

Astronomy I is a general survey course first introducing the students to the night sky, its many constellations, brighter stars and motions. The historical development of astronomical thought and our place in the Universe is the second major topic of study. The course concludes with a study of the moon, lunar exploration, planets, and other bodies in our solar system. The manned and unmanned exploration of the planets will also be discussed.

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3437 ASTRONOMY II

Semester Credit $\frac{1}{2}$ Grade 11-12

Prerequisites: Astronomy I, Algebra I, & Geometry

Astronomy II picks up where Astronomy I left off. In this class we will examine the life cycle of stars. This will culminate in the possible scenarios of the so-called death of a star. We will look at the theoretical aspects of the Universe, Black Holes, Neutron Stars, Dark Matter, and the possibility of other intelligent life forms somewhere in the cosmos. We will explore nearby galaxies and those that are so far away that they may not even exist at this moment due to the fact the light from them is billions of years old! We'll look at how the universe began as well as where we may end. You will need to open your mind because you will be asked to create a "Designer Alien." This Alien will have to come from its own planet from its own stellar system/Galaxy, so be prepared to include as many of the facts that you have learned in the past year in the creation of your "Being".

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3416 FORENSIC SCIENCE

Year Credit 1 Grade 11-12 Est. Fee: \$10

Prerequisite: Physical Science 9 and Biology

Forensics is the rigorous application of science in the processing of physical evidence during criminal investigations. The field of forensic science uses analytical and empirical evidence to help support the legal system in its prosecution of the perpetrators of a crime. You will study the various principles and methods used in the sciences to evaluate evidence at a crime scene, ultimately using the evidence and your deductive reasoning skills to solve the crime. Sciences used in forensics include any discipline that can aid in the collection, preservation, and analysis of evidence, such as chemistry, physics, or biology. Types of evidence analysis to be covered include crime scenes, prints & impressions, questioned documents, hairs & fibers, human remains, drugs & toxicology, blood, DNA, and ballistics. This class will consist of lab investigations, research projects, lectures, and examination of real-life case studies.

3422 CHEMISTRY

Year Credit 1 Grade 10-12 Est. Fee \$10

Prereq: Phys. Science or H. Phys. Science, Biology and Algebra I.

7 Periods or equivalent.

Chemistry is a lecture-laboratory course that focuses on methods and techniques of measurements and problem solving as pertaining to atoms and chemical reactions. To better understand the invisible world of atoms mathematical problem solving skills are used throughout the year in chemistry. The most frequently used method of problem solving are factor-label unit conversions, solving formulas for variables (basic algebra) and stoichiometry. Concepts of atomic structure and the organization of the periodic table serve as a basis for the understanding of the periodicity of matter and predicting chemical activity. Laboratory experiments are used to further emphasize the concepts which are taught and further develop skills of observation and data analysis. Due to the challenging nature of the subject material, students taking this course are required to attend a mandatory make up/ review session on alternating Fridays during commons.

3431 HONORS CHEMISTRY

Year Credit 1 Grade 10-12 Est. Fee \$10

7 periods or equivalent

Prerequisites: Algebra I & Physical Science or Honors Physical Science with B or better grades; teacher recommendation.

Honors Chemistry covers the same general topics as Chemistry, but in greater depth and at an accelerated pace. We will also cover topics including equilibrium, reaction kinetics, and acids and bases that are not covered in regular Chemistry. The course would be most appropriate for the study with definite future goals in chemistry, engineering, pre-med, etc. With permission, sophomores could take Biology and Chemistry concurrently on Honors Biology and Honors Chemistry. Due to the challenging nature of the subject material, students are required to attend a mandatory lab make-up/ review/help session on alternating Fridays during commons.

A summer assignment of selected text chapters is required. Those students selecting Honors Chemistry must see the instructor before the end of second semester. Summer assignments may also be found at the Northview website www.sylvanianorthview.org.

3423 AP CHEMISTRY

Year Credit 1 Grade 11-12 Est. Fee \$20

7 periods or equivalent

Prerequisites: Algebra II, Chemistry with a GPA of "B" or better, and teacher recommendation

A course for the advanced college-bound science student, AP Chemistry emphasizes the quantitative, experimental aspects of Chemistry. Some of the early work in the course will serve as a review of Chemistry, including topics such as periodicity of matter and chemical reactions, bonding, formula writing, and balancing equations. To further the skills of the above concepts there will be a greater emphasis on the chemical and mathematical formulation of these principles. Additional topics studied in-depth are thermochemistry, acid-base theory, chemical equilibrium, rates of reaction, chemical thermodynamics, and electrochemistry. With the availability of analytic balances, pH meters, and CBI probes, students will be able to further their understanding of chemistry through weekly laboratory work. AP Chemistry is equivalent to a college freshman course and is recognized as a laboratory credit course. Due to the challenging nature of the subject material, students are required to attend a mandatory lab make-up/review/help session on alternating Fridays during commons. It is expected that students will take the AP exam. **A summer assignment of selected text chapters is required. Those students selecting AP Chemistry must see the instructor before the end of second semester. Summer assignments may also be found at the Northview website www.sylvanianorthview.org.**

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3430 ANATOMY

Year Credit 1 Grade 11-12 Est. Fee \$10

Prerequisite: Biology, Honors Biology, Teacher recommendation, Chemistry or Honors Chemistry or taken concurrently highly recommended. One of the above required.

Students selecting Anatomy should have a minimum GPA of "B" in Biology.

Anatomy and Physiology is a rigorous, advanced life-science course designed to educate the student about the human body. This course follows a lecture-laboratory format, and is based on the understanding of human functions through a complete examination of human structures. To enhance this understanding, both normal and abnormal aspects of human functions will be investigated by comparing the physiological concepts of homeostasis and disease. The course begins with a review of the principles of biochemistry and cell biology (both previously developed and learned in Biology and/or Chemistry). It continues with a thorough examination of human primary tissues and concludes with a study of each of the body's systems. Anatomy and Physiology is supplemented with numerous lab activities throughout the year including an extensive vertebrate (cat) dissection. A number of other lab skills and techniques will be developed including: microscopy, tissue staining, blood typing principles, measuring, and data analysis. This course is recommended for those students interested in any medically related career or who are otherwise highly motivated to learn about the human body.

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3445 HONORS ANATOMY AND PHYSIOLOGY

Year Credit 1 Grade 11-12 Est. Fee: \$25
Prerequisites: Physical Science, Biology, Chemistry and teacher recommendation

Students must have a non-programmable scientific calculator.

Honors Anatomy and Physiology covers the same general topics as Anatomy and Physiology, but at an accelerated pace and in greater depth. It is the study of human structure and function. The course encompasses the structure, biochemical, and biophysical processes of cells, primary tissues, and the eleven body systems with associated organs. This course requires reading, writing, and oral expression, with an emphasis on higher level critical thinking skills. All students wanting to take CCP Anatomy and Physiology must enroll in this honors section. for grades 11-12

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3425 PHYSICS

Year Credit 1 Grade 11-12 Est. Fee \$10
7 periods or equivalent

*Prerequisites: Algebra II or permission of instructor
It is recommended pre-calculus be taken concurrently.*

This course covers a broad spectrum of topics generally considered to be included in an introductory course in Physics. Emphasis is on the understanding of general principles and models and on the nature of scientific inquiry. The level of mathematical sophistication will extend to simple trigonometry but rarely beyond. The historical development of science is considered along with the role of science in contemporary society. Students who are going to major in physical science or engineering should consider taking AP Physics. Due to the challenging nature of the subject material, students taking this course are required to attend a mandatory lab make-up/review/help session on alternating Fridays during their commons.

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3429 HONORS PHYSICS (SV)

Year Credit 1 Grades 11-12 Est. Fee: \$7
7 periods per week

*Prerequisites: Science 9 (C and P), Algebra II, teacher recommendation
Corequisite: Pre-calculus or Calculus*

This first year course in Physics is designed for the student who is planning on pursuing a career in a science, engineering or medical related field of study in college. Students who enroll in those programs of study are generally required to take a Physics course. Honors Physics would be the course to take in high school to prepare you for college physics. Coursework in Honors Physics will include the mechanics of motion, waves, sound, optics, and electricity. Extensive lab work, data analysis and problem solving are the main foci of the course.

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3426 AP PHYSICS B

Year Credit 1 Grade 11-12 Est. Fee \$10
7 periods or equivalent

Prerequisites: Pre-calculus (recommended that calculus be taken concurrently) and/or teacher recommendation.

The Advanced Placement course provides systematic introduction to the main principles of physics and emphasizes the development of problem solving ability. The student should be familiar with algebra and trigonometry; calculus is seldom used, although some theoretical developments may use basic concepts of calculus. Due to the challenging nature of the subject material, students taking this course are required to attend a mandatory lab make-up/review/help session on alternating Fridays during their commons.

A summer assignment is required. Students electing to take AP Physics B should see the instructor before the end of second semester exams to pick up an assignment. It is expected that students will take the AP exam.

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SOCIAL STUDIES

3210 PSYCHOLOGY

Semester Credit 1/2 Grade 11-12

This is a survey class that offers an overview of major themes in Psychology. Topics include; research methods and history, abnormal behavior, states of consciousness, learning, memory, personality and development. Students explore topics through outside research, reports and class presentations. The course requires both written and oral expression with an emphasis on higher level critical thinking skills.

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3212 AP PSYCHOLOGY

Year Credit 1 Grade 11-12

Prerequisites: Overall GPA of 3.0 and/or teacher recommendation.

AP Psychology is designed to prepare students for the AP National Psychology Exam. It is equivalent to an introductory college course in psychology. The course receives honors credit. Students who successfully complete the national exam may receive and advance placement and/or waiving of course work at the university level. All areas of psychology are covered. This includes but is not limited to; history and methodology, biological basis of behavior, states of consciousness, learning and cognition, memory, personality, sensation and perceptions, motivation, social psychology abnormal psychology and child development. Students are expected to complete a considerable amount of reading in the text and supplemental materials. This course requires students to synthesize and evaluate all material presented through both oral and written format. There is a heavy emphasis on study skills and genuine class participation in activities and discussion.

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3217 CONTEMPORARY LAW

Semester Credit 1/2 Grade 11-12

Contemporary Law is a semester practicum in law-related education. Students will be provided with useful information and problem solving opportunities that develop their knowledge and skills necessary for survival in our society. Students will be involved in mock trials, case studies, small group exercises, and visual analysis activities.

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3205 SOCIOLOGY

Semester Credit 1/2 Grade 11-12

This course will study the causes and effects of social problems on our society with an emphasis on discussion and research. Students will investigate deviance, prejudice, poverty, the family, aging, and crime as they relate to social problems, have an opportunity to design and conduct sociological research.

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3228 GEOGRAPHY

Semester Credit 1/2 Grade 9-12

Geography is a social studies offering for all grades. The course will include in-depth examination of the cultural, economic, physical, and historic factors which have influenced the development of the world's peoples. A major objective of the offering is to become familiar with basic geography, as well as an understanding of recent history and current events.

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WORLD LANGUAGES

Proficiency in a World Language is highly valued in the global marketplace as it empowers learners to be able to interact with a variety of different cultures. World Language students are encouraged to be active learners of the language they are studying and participate in cultural experiences offered such as: compiling work and reflecting in a Linguafolio, performing and participating in the annual World Language Fairs, being a member of the World Language and/or Chinese Culture Clubs, hosting exchange students, and traveling abroad. Those students traveling with The EF Tour Group have the opportunity to earn high school and/or college credit during their travels!

Many colleges now require a minimum of two years but recommend three or more years of a consecutive second language for admission to the college as well as require second language study upon admission for most majors. All levels will help prepare students to proficiently utilize their language skills outside of the classroom as well as on the Advanced Placement (AP) exam in level 5.

LEVEL 1
3726 CHINESE I
 Year Credit 1 Grade 9-12

3700 FRENCH I
 Year Credit 1 Grade 9-12 Est. Reading Fees \$10

3720 GERMAN I (SV)
 Year Credit 1 Grade 9-12 Est. Reading Fee \$15

3730 SPANISH I
 Year Credit 1 Grade 9-12 Est. Reading Fee \$10
 This course is designed around the Ohio World Language Standards and American Council of the Teaching of Foreign Language (ACTFL). Units will utilize 21st century skills and authentic resources to engage learners in relevant and meaningful use of the new language and exploration of the culture. Level 1 of the World Language class is designed to provide students the opportunity to communicate in the target language via reading, writing, listening and speaking skills. According to ACTFL, the proficiency goal for a level 1 French or Spanish student is Novice-Mid or the ability to identify with phrases, combine words and express ideas with simple phrases and expressions. The proficiency goal for a level 1 Chinese student is Novice-Low or the ability to understand isolated words and phrases and express memorized ideas.

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LEVEL 2
3727 CHINESE II
 Year Credit 1 Grade 9-12
Prerequisite: Chinese I

3701 FRENCH II
 Year Credit 1 Grade 9-12
Prerequisite: French I

3721 GERMAN II (SV)
 Year Credit 1 Grade 10-12 Est. Reading Fee \$8
Prerequisite: German I

3731 SPANISH II
 Year Credit 1 Grade 9-12 Est. Reading Fee \$10
Prerequisite: Spanish I

This course is designed around the Ohio World Language Standards and American Council of the Teaching of Foreign Language (ACTFL). Units will utilize 21st century skills and authentic resources to engage learners in relevant and meaningful use of the new language and exploration of the culture. Level 2 of the World Language class is designed to provide students the opportunity to further communication in the target language via reading, writing, listening and speaking skills. According to ACTFL, the proficiency goal for a level 2 student is Novice-High or the ability to describe with phrases and identify with short sentences in present time frame.

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LEVEL 3
3728 HONORS CHINESE III
 Year Credit 1 Grades 10-12 Est. Fee \$10

Prerequisite: Chinese II

Chinese III is designed around the Ohio World Language Standards and the World-Readiness Standards for Learning Languages by ACTFL. The course continues with the modes of communication in interpersonal conversations, presentational writing and speaking, and interpretive reading and listening skills. Units will utilize 21st century skills and authentic resources to engage learners in relevant and meaningful use of the new language and exploration of the culture. The targeted proficiency level for students at this level is Novice-High according to the ACTFL Proficiency Guidelines or the ability to describe with phrases and identify with short sentences.

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3702 HONORS FRENCH III
 Year Credit 1 Grade 10-12
Prerequisite: French II

3722 HONORS GERMAN III (SV)
 Year Credit 1 Grade 11-12 Est. Reading Fee \$8
Prerequisite: German II

3732 HONORS SPANISH III
 Year Credit 1 Grade 10-12 Est. Reading Fee \$10

Prerequisite: Spanish II

This course is designed around the Ohio World Language Standards and American Council of the Teaching of Foreign Language (ACTFL). Units will utilize 21st century skills and authentic resources to engage learners in relevant and meaningful use of the new language and exploration of the culture. Level 3 of the World Language class is designed to provide students the opportunity to further communication in the target language via reading, writing, listening and speaking skills. According to ACTFL, the proficiency goal for a level 3 student is Intermediate-Low or the ability to describe in strings of sentences and express personal thoughts in a single time frame.

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LEVEL 4
3705 HONORS FRENCH IV
 Year Credit 1 Grade 11-12
Prerequisite: French III

3723 HONORS GERMAN IV (SV)
 Year Credit 1 Grade 12 Est. Reading Fee \$8
Prerequisite: German III

3735 HONORS SPANISH IV
 Year Credit 1 Grade 11-12 Est. Reading Fee \$10
Prerequisite: Spanish III

This course is designed around the Ohio World Language Standards and American Council of the Teaching of Foreign Language (ACTFL). Units will utilize 21st century skills and authentic resources to engage learners in relevant and meaningful use of the new language and exploration of the culture. Level 4 of the World Language class is designed to provide students the opportunity to further communication in the target language via reading, writing, listening and speaking skills. According to ACTFL, the proficiency goal for a level 4 student is Intermediate-Mid or the ability to describe in strings of sentences and express personal thoughts in at least two time frames.

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LEVEL 5
3706 AP FRENCH LANGUAGE
 Year Credit 1 Grade 12 Estimated AP Workbook Fee: \$50
Prerequisite: French IV

3736 AP SPANISH LANGUAGE
 Year Credit 1 Grade 12 Fee of \$10 – 1 time for all AP classes
Prerequisite: Spanish IV

This course is designed around the Ohio World Language Standards and American Council of the Teaching of Foreign Language (ACTFL). Units will utilize 21st century skills and authentic resources to engage learners in relevant and meaningful use of the new language and exploration of the culture. Level 5 of the World Language class is designed to provide students the opportunity to further communication in the target language via reading, writing, listening and speaking skills. According to ACTFL, the proficiency goal for a level 5 student is Intermediate-Mid/High or the ability to describe in strings of sentences and express personal thoughts, opinions or debate in multiple time frames. Students are able to earn college credit by performing well on college placement tests and on the Advanced Placement (AP) exam for those universities accepting AP exam scores.

***See teacher for assigned summer activity.**

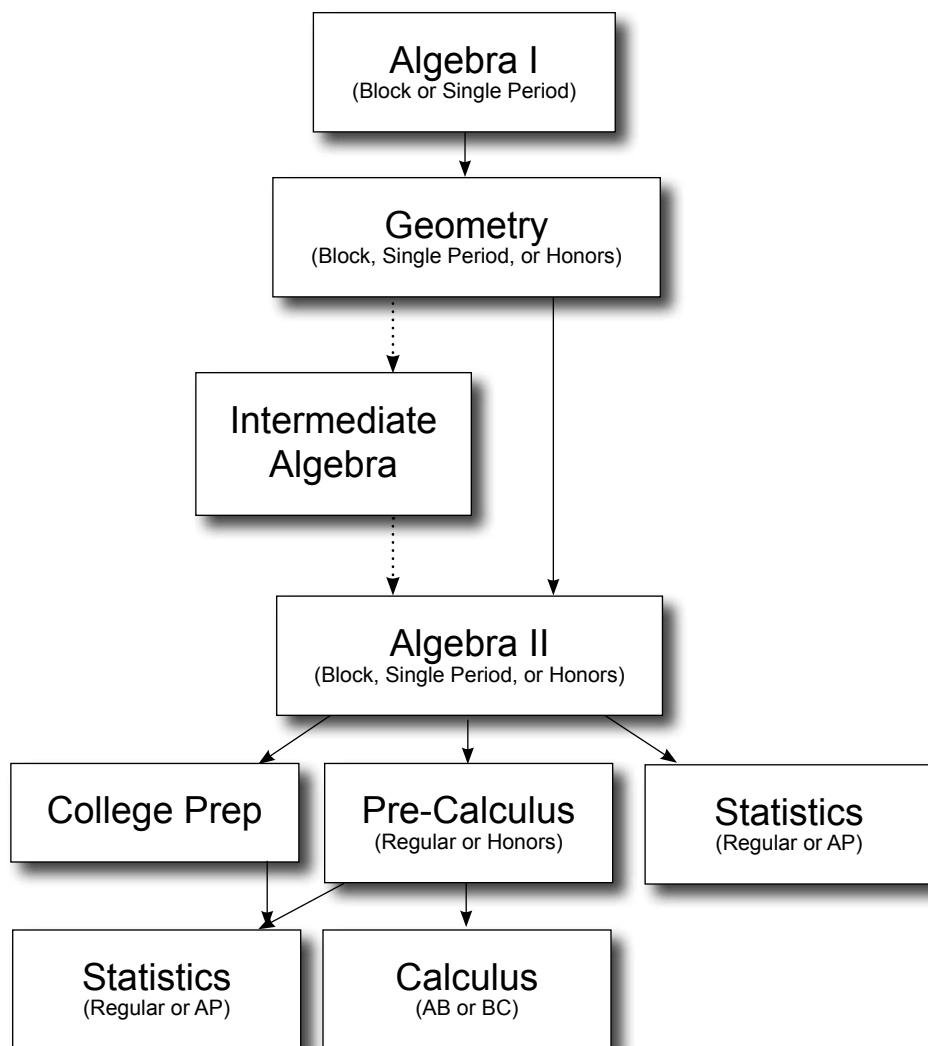
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OTHER
3160 TEST PREPARATION

Semester Credit 1/2 Grades 11-12 Est. Fee \$30

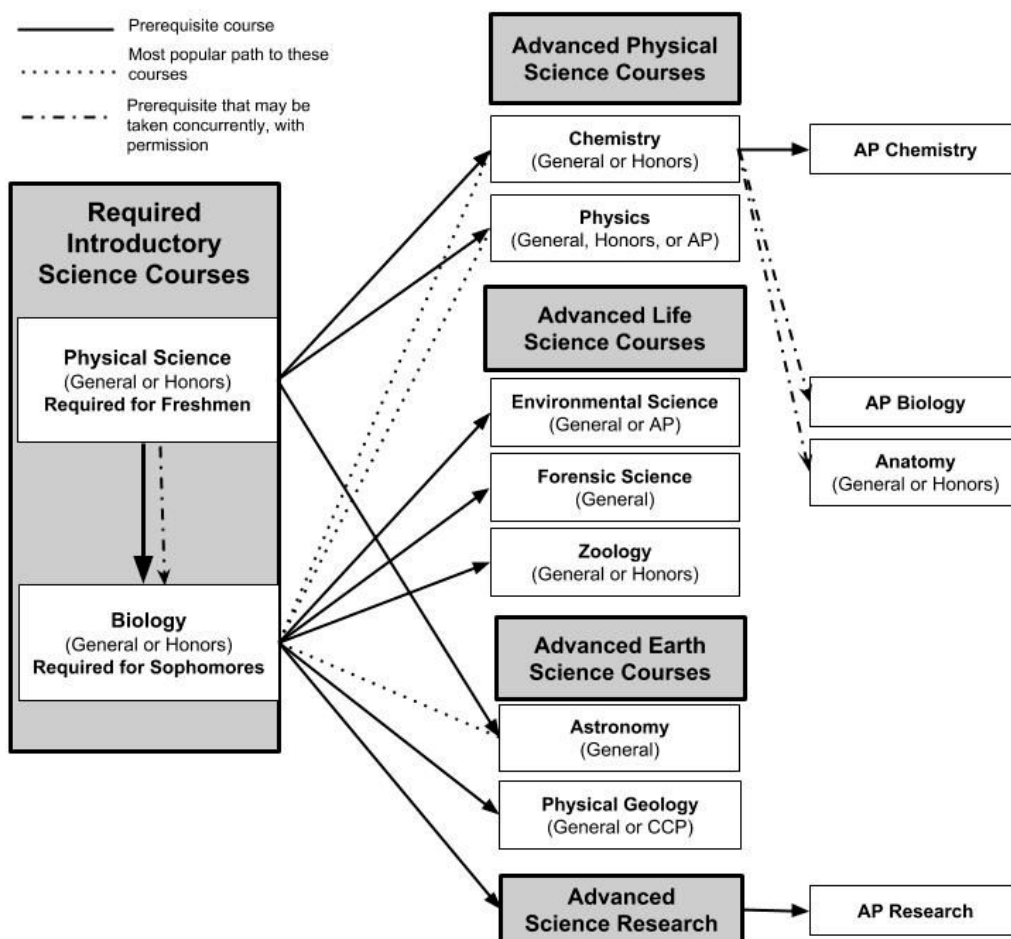
The Test Preparation class is designed to familiarize sophomores and juniors with the tests required for admission by many universities, including the following: PSAT, ACT, SAT, and AP. Well-prepared students are more likely to score higher on these tests, which may increase their chances of earning scholarships and opening more options when selecting a college. Students will learn test-taking strategies, review English, math, and science content, take practice tests and discover ways to reduce test anxiety. The course involves diagnostic assessments on test performance embracing a wide range of standards and testing approaches, followed by individualized coaching and skill-building, re-assessments, and summative assessments.

MATH COURSE FLOW CHART



1. Freshmen typically take Algebra I or Geometry, depending on their 8th grade math course and their teacher's recommendation.
2. Each course is a full year; it is not recommended to take more than one math course at a time with the exception of Statistics. Statistics may be taken concurrently with any course following Algebra II.
3. College Prep and Pre-Calculus are not equivalent; Pre-Calculus is the higher level course. Either may follow Algebra 2.
4. Statistics should not be taken as a stand-alone math course unless it is during a student's senior year.
5. It is uncommon for students to follow any path other than that outlined above.

SCIENCE COURSE FLOW CHART



1. To meet state graduation requirements, all students must complete physical science and biology, and at least one advanced science course. Many Northview students exceed the minimum Ohio graduation requirements.
2. Generally, freshmen take physical science, sophomores take biology, and juniors and seniors choose their preferred advanced science course(s). After the introductory course requirements are completed, students may choose courses based on their individual interests, goals and aptitudes. There is no "normal" science path after the introductory courses are completed.
3. Some students with particular interest and aptitude choose to "double up" on either physical science/biology in their freshman year, or biology/chemistry in their sophomore year in order to take more of the advanced science course offerings. "Doubling up" requires commitment and perseverance. Please discuss these options with your teachers and counselors prior to making any decisions.
4. All Honors and AP sections have prerequisite requirements (teacher recommendations, prior minimum grades, etc.). Please discuss these options with your counselor.

Create Your Four Year Plan

Name _____					
SUBJECT AREAS	GRADE 9 CLASSES/CREDIT	GRADE 10 CLASSES/CREDIT	GRADE 11 CLASSES/CREDIT	GRADE 12 CLASSES/CREDIT	TOTAL CREDITS
English	-----	-----	-----	-----	
Mathematics	-----	-----	-----	-----	
Science	-----	-----	-----	-----	
Social Studies	-----	-----	-----	-----	
World Languages	-----	-----	-----	-----	
Health	-----	-----	-----	-----	
Physical Education	-----	-----	-----	-----	
Fine Art	-----	-----	-----	-----	
Career Technical	-----	-----	-----	-----	
Elective:	-----	-----	-----	-----	
Elective:	-----	-----	-----	-----	
Elective:	-----	-----	-----	-----	
Elective:	-----	-----	-----	-----	
Total Credits					

See Page 37 for Graduation Requirements