2020-20 Northview High School Program of Studies



VIEW



NTINGTON



IEW WILDCATS

NORT



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

Mark Pugh Gracy Hinojosa-Lloyd

Libby McIlwain

Chris Irwin

Guidance 419-824-8715

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

Principal

Assistant Principal Teaching & Learning

Assistant Principal Student Services

Athletic Director

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

Jane SpurgeonSuperintendentLisa ShanksTreasurerKeith LimesAsst. Superintendant of OperationsTim ZieroffAsst. Super. of Academic AffairsSheryl O'SheaDir. of Information TechnologyAlex ClarksonDirector of Teaching and Learning

Board of Education

Vicki Donovan-Lyle Greg Feller Julie Hoffman Rusian Slutsky 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 Mark Pugh

Assistant Principals Gracy Hinojosa-Lloyd Libby Mcllwain



Athletic Director Chris Irwin

Tuesday, November 26, 2019

Dear Students and Parents,

We are very excited about the 2020-2021 Sylvania Northview Program of Studies, as we are introducing several, exciting new courses, many of which will enhance your student's fine arts experience. First, students will have another engaging option in Social Studies: **American History through Film**. This course will provide an option outside the mainstream course of study and allow students to gain a greater understanding of American History through the medium of film. Additionally, we will be adding a few new science options including **Biochemistry and Honors Forensic Science**. Expanded opportunities for students to engage their creative and artistic side will also be available through **Crafts in Art and Digital Photography**. Finally, modern art will be highlighted in **Murals, Graffiti & Public Art**.

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 competence 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 and 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 to 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
- Mrs. Gracy Lloyd Curriculum & Instruction

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

Sincerely,

Mark Pugh Principal

Table of Contents

General Information	7
Statement of Compliance with Federal Laws	<u>7</u>
Guidance and Counseling Services	9
Special Programs	.16
Advanced Placement Courses	.16
Programs for Accelerated Students	.17
Special Information	.17
Athletic Eligibility	.18
Honor Roll	.18
Semester Exams	.18
Open Enrollment Policy	.18
College Credit Plus	.19
Grading Scale	
Career & Technical Education	
Program Information	21
Admissions and Enrollment Policy	.22
Career Pathways	
Arts & Communication	
Business & Management	.27
Environmental & Agricultural	.29
Health, Education & Human Services	.31
Engineering & Industrial Technologies	.33
Information Technology	35
Course Descriptions	.37
General Information	
Graduation Requirements	.39
Scheduling Procedures	.39
Schedule Changes	41
Freshman Course Offerings	42
Sophomore Course Offerings	<u>45</u>
Junior Course Offerings	<u>48</u>
Senior Course Offerings	<u>54</u>
Pathways	. <u>57</u>
Art Electives	
Arts & Communication Pathway	
Business & Management Pathway	
Communications Electives	
Engineering & Industrial Pathway	
Environmental & Agriculture Pathway	
Health, Education & Human Services Pathway	
Information Technology Pathway	
Music Electives	
Science Electives	
Social Studies Electives	
World Languages Electives	<u>72</u>
Four Year Plan	. <u>76</u>

General Information **2020-2021**



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

Career Technical Education Compliance Coordinator

Contact: Mr. Alex Clarkson Bradley J. Rieger Building 4747 N.Holland-Sylvania Rd. Phone: (419) 824-8578

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

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-Ei
Ms. Melanie Rogers	El-La
Mrs. Kate Henk	Le-Ro
Mrs. Stacie Wachowiak	Ru-Z
Mr. Brian Hede	A-Z

cburnworth@sylvaniaschools.org mrogers@sylvaniaschools.org khenk@sylvaniaschools.org swachowiak@sylvaniaschools.org 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 <u>http://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements</u>.

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 en- trance requirements and continue career exploration activities. Which courses in your high school curricu- lum 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 com- munity.
September - March of junior year	Think about your reasons for go- ing 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 pos- sible career options and degree level required.
January - March of junior year	Identify important factors in choos- ing a college. Two-year or four-year? Locations? Cost? Kind of atmo- sphere? 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 ad- ditional 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 initia- tive.

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/ WorkKeys ¹	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

1/24/17

1/2 unit physical education 1/2 unit health 1/2 unit in American history 1/2 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

Students will have to earn two of the following diploma seals, choose those that line up with goals and interests.

Ohio Means Jobs Readiness Seal Industry-Recognized Credential Seal College-Ready Seal Military Enlistment Seal Citizenship Seal Science Seal Honors Diploma Seal Seal of Biliteracy Technology Seal Community Service Seal Fine and Performing Arts Seal Student Engagement Seal

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:

<u>English</u>

English 9 Honors English 9 English 10 Honors 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** Macroeconomics **AP** Microeconomics AP US History Contemporary Law Geography **Global Studies Capstone AP** Economics Psychology I **AP** Psychology Sociology World Studies Honors World Studies

Mathematics Algebra I Honors 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

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

Honors Anatomy Anatomy Astronomy I Astronomy II Biology **Biology AP** Biochemistry Chemistry Chemistry AP Environmental Science I Environmental Science II Environmental Science AP Geology Zoology I Zoology II Physics I Physics II Physics I AP Honors Physics Honors Physical Science 9 **AP** Seminar **AP** Research Forensic Science Honors Forensics

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 clear-inghouse 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	US Government & Politics
English Language & Composition	Statistics
European History (SV)	Calculus AB
World History (NV)	Calculus BC
US History	Chemistry
Psychology	Biology
Macroeconomics	Environmental Science
Microeconomics	Physics I

French Language & Culture Spanish Language & Culture Art History Music Theory Computer Science Principles Computer Science A Seminar Research

(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.

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 9 & 10

211811011 > 1

<u>Science</u>

Physical Science Biology Chemistry Anatomy Forensics Physics (SV) World Language Spanish III Spanish IV French III French IV German III German IV

<u>Art</u>

Senior Studio 2D Design Senior Studio 3D Design

Social Studies World Studies

<u>Music</u>

Band/Orchestra/Choir

<u>Math</u>

Modern Geometry Algebra I 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 Honor4.0 or betterHonor Roll3.5 - 3.99Merit Roll3.0 - 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 <u>http://www.sylvaniaschools.org/CreditFlex.aspx</u> 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 x 2) + (91 x 2) + 91 = 471/5 = 94.2 = A

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

Grade	Grade Range	Conversion Equivalent	Honors Conversion Equivalent	Advanced Placement Conversion Equivalent
A+	98-100	4.0	4.5	5.0
Α	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
В	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
С	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

Grading Scale & Conversion Chart

- 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 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 English2 credits Math2 credits Science1 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 2020-2021

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 25 Business & Management – page 27 Environmental & Agriculture – page 29 Health, Education & Human Service – page 31 Engineering & Industrial – page 33 Information Technology – page 35

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.

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

Overview of the Student Success Plan Outline

Getting Started

Complete <u>The Student Success Plan</u>, 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.

iired

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?

Etchers & Engravers

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.

<u>Career Opportunities by Educational Level</u>

Four Years of College and bey	ond	
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 Designer	s Make-up Artists (Theatrical Performances)	Proofreaders
Computer Systems Analysts	Musical Instrument Repairs	Web Developers
Film & Video Editors		Telecommunications Line Installers
Graphic Designers		& Repairers
High School		
Copy Writers	Film Lab Technicians	Job Printers
Craft Artist	Floral Designers	Stock Clerk, Sales Floor

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	v 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 cours the cluster.	
9	English Math Science World Studies	Health & Physical Education	World Language	Career Based Elective		•Art Foundations •Drama I •Theater Workshop •Dance Foundations •Public Speaking •Photojournalism (NV) •Introduction to Journalism (NV)	•Orchestra(s) •Band(s) •Choir(s) •Computer Graphic Design I •Intro to Visual Technology •Journalism Writing & Design (SV)
10	English Math Science American History	Physical Education	World Language	Elective	Elective	•2D or 3D Design •Art Appreciation •Drama I •Theater Workshop • Dance Foundations •Public Speaking •Photojournalism (NV) •Introduction to Journalism •Yearbook	•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	•Intermediate 2D or 3D Design •AP Art History •Journalism •Yearbook •AP Music Theory •Theatrical Performing Arts I	•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	•Honors Senior Studio 2D or 3D Design •AP Art History •Journalism •Yearbook •AP Music Theory •Theatrical Performing Arts II	•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 Accountants Actuaries Advertising & Promotions Managers Budget Analysts Computer Hardware Engineers Computer Systems Analysts

1 – 2 Years Training/Education

Bookkeeping, Accounting, Auditing Clerks Budget Analysts Communication Equipment Mechanics, Installers, Repairers Computer Programmers Computer, Automated Teller, and Office Machine Repairs

High School

Assessors Bill & Account Collectors Brokerage Clerks Computer Operators Customer Service Representatives Data Entry Keyers Energy Brokers Credit Analysts Financial Examiners Financial Managers Human Resources Specialists Insurance Underwriters Loan Officers

Court Reporters First-line Supervisors Food Service Managers Insurance Adjusters Job Analysis Specialists Marketing Managers Purchasing Managers Sales Agents Statisticians Treasurers, Controllers Chief Financial Officers Management Analysts

Lodging Managers Medical Transcriptionist Operations Research Analysts Real Estate Brokers Sales Representatives Technical Writers Travel Agents Wholesale and Retail Buyers

Insurance Claims Clerks Insurance Sales Agent Loan Interviewers and Clerks Meter Readers, Utilities Office Clerks, General Payroll & Timekeeping Clerks Postal Service Mail Carriers Reservation & Transportation Ticket Agents Retail Salespersons Tellers

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	 Software Applications Business Foundations Intro to Marketing 	•Public Speaking (NV)	
10	English Math Science American History	Physical Education	World Language	Intro to Marketing	Elective	 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 Te	Business Technology I Elec		 Software Applications Intro to Marketing Financial Accounting (NV) Money Management 	•Business Technology I* •Financial Management I*	
12	Senior English Math Science American Government	Business Te	echnology II	Elective	Elective	 Software Applications, Intro to Marketing Financial Accounting (NV) Money Management 	•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.

*Dual enrollment, honors credits, or "Career-technical track" is interpreted as a minimum of one credit or one articulated college credits may be awarded year in coursework representing coherent sequential career-technical content. 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

Forest Fire Inspectors & Prevention

Landscaping & Groundskeeping

Floral Designers

Specialists

Workers

Foresters

1-2 Years Training/Education

Animal Breeders Animal Scientists Animal Trainers Biological Technicians Bus & Truck Mechanics Farmers & Ranchers Fish & Game Wardens

High School

Agricultural Equipment Operators Animal Trainers Butchers & Meat Cutters Farmers & Ranchers Food Batchmakers Forest & Conservation Workers General Farm Workers Landscaping & Grounds Keeping Workers Materials Inspectors

Nursery Workers Pesticide Handlers Pest Control Workers Retail Salespersons Welder-Fitters

Nursery & Greenhouse Managers

Laboratory Animal Caretakers

Veterinary Technologists &

Pest Control Workers

Veterinary Assistants

Technicians

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.

	Rec	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	 Horticulture Leadership and Management Introduction to Alternative Energy Engineering Applications Engineering Design CAD 	 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		
	Credential Oppor redit required. One cre			track may se	rve as a fir	e arts credit.		
	chnical track" is interpr irsework representing						lated college credits may be 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 leal 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

<u>1-2 Years Training/Education</u>

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

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.

	Rec	ommended S	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 •Health 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	
Education Medical Te Cosmetol								

"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. **PAGE 32**

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
Aeronautical Engineer	Cost Estimators	& Safety Specialists
Quality Control Engineer		Remote Sensing Technologists
Civil Engineer		Sales Engineers

1 – 2 Years Training/Education

Auto body Repairer Aircraft Mechanics Architectural drafters Avionics Technicians **Civil Engineer Tech** Computer Service Tech **Construction Carpenters** Cost estimators Electro-Mechanical Technicians **Engineering Technicians** Mechanical Drafters

Power generating Plant Operators **Production Inspectors** Production, Planning, and Expediting Clerks Surveyors **Quality Control Analysts**

High School

Aircraft Structure Assemblers **Appliance Services** Construction Laborers Conveyor Operators & Tenders Drywall Installers Electricians Assistance **Electrical Powerline Installers**

Energy Auditors First Line Supervisors of Construction Trades Heating & Air Conditioning Mechanics Elevator Installers & repairers

Industrial Machinery Mechanics Operating Engineers Purchasing Agents Roofers Stationary Engineers & Boiler Operators Tool &n Die Makers 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		quirements may l some colleges. S for information	See your co		Refer to course descriptions for further information about these electives or consecutive courses in the cluster.		
				ı.		Northview	Southview	
9	English Math Science World Studies	Health & Physical Education	World Language	Elective	Elective	•Engineering Applications •Engineering Design •CAD •Intro to Alternative Energy •3D Design	 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	•Engineering Applications •Engineering Design •CAD •Intro to Alternative Energy •3D Design	•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*	•Construction Technology I* •Engineering & Fabrication Tech I*	
12	Senior English Math Science American Government	Elective	Elective	Elective	Elective	•Engineering Tech II*	•Construction Technology II' •Engineering & Fabrication Tech II*	
American Government 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	Office Clerks, General	Sound Engineering Technicians
Specialists	Photoengravers	Visual Artists
Computer Operators	Photographers Assistants	Sound Engineering Technicians
Data Entry Keyers	Receptionists & Information	Telemarketer
Job Printers	Clerks	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.

	Reco	ommended S	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	•Information Technology Foundation •Today's Technology (NV)	•Computer Graphics Foundation •2D Game Design	
10	English Math Science American History	Physical Education	World Language	Elective	Elective	•Software Applications (NV) •Intro to Programming •Today's Technology (NV)	•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	 Interactive Media I* (NV) 	 Visual Communications Design I* (SV) Computer Science I* (NV) Honors Programming I* (SV) 	
12	Senior English Math Science American Government	Elective	Elective	Elective	Elective	•Interactive Media II* (NV)	•Visual Communications Design II* (SV) •Computer Science II* (NV) •Honors Programming II* (SV)	
Industry	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.



www.sylvanianorthview.org

Telephone Numbers

S	vlvania Northview Higl	n School	

Administration

Mark Pugh, Principal	x5101
Leslie Wakeland, Secretary	
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 - Ei Guidance Counselor	. 419.824.8711
Melanie Rogers, El - La Guidance Counselor	419.824.8709
Kate Henk, Le - 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



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-todate 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.

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.

Sylvania Requirement	Credits
English	4
Social Studies ¹	3
Science	3
Math ²	4
Health/Physical Education	1
Fine Arts ³	1
Electives ⁴	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.sylvanian-orthview.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.

HONORS ALGEBRA I

Credit 1

Grade 9-10

This course is for selected students who want a more rigorous study of the algebraic concepts taught in Algebra 1. The students need to have the ability to reason abstractly, a mastery of all basic math skills, and successful completion of the advanced 8th grade course prior to enrollment in this class. The current 8th grade math teacher's recommendation is required. 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. The application of these concepts will be emphasized throughout the course. Summer work is required for this course. A scientific calculator is required (TI-30XIIS). Alternately a TI-83+ or TI-84+ graphing calculator may be used but graphing concepts will be taught using Desmos on the Chromebooks.

Year

3308 GEOMETRY

YearCredit 1GradPrerequisite: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.

Grades 9-12

3309 HONORS GEOMETRY

Year Credit 1 Grade 9-10

Prerequisite: Teacher recommendation and Algebra I

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

Grade 9 Est. Fee: \$6

Year Credit 1 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

Credit 1 Grade 9 Est. Fee \$6 Year 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

Credit 1 Grade 9 Year

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 Credit 1 Grade 9 Year

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. 3218 AP WORLD HISTORY

Grade 9 Year Credit 1 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 9-12

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.

FRESHMAN: Electives ARTS & COMMUNICATION

37401 Art Foundations: Year, 1 credit 3740 Crafts in Art (even years only): Semester, .5 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 **37421** AP Art History: Year, 1 credit (odd years only) **3140** Broadcasting: Year, 1 credit Music 3750 Band Auxiliary: Quarter, .25 credit 3756 Concert Band: Year, 1 credit 3758 Symphonic Band: Year, 1 credit 3752 Wind Ensemble: Year, 1 credit 3751 Concert Orchestra: Year, 1 credit 37513 Academy Orchestra: Year, 1 credit 3762 Chamber Orchestra: Year, 1 credit 3759 Symphonic Choir: 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

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: Year, 1 credit 3721 German II: Year, 1 credit

OPHOMORE: 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 Credit 1

Year

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

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

HONORS ALGEBRA I Year Credit 1

Grade 9-10

This course is for selected students who want a more rigorous study of the algebraic concepts taught in Algebra 1. The students need to have the ability to reason abstractly, a mastery of all basic math skills, and successful completion of the advanced 8th grade course prior to enrollment in this class. The current 8th grade math teacher's recommendation is required. 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. The application of these concepts will be emphasized throughout the course. Summer work is required for this course. A scientific calculator is required (TI-30XIIS). Alternately a TI-83+ or TI-84+ graphing calculator may be used but graphing concepts will be taught using Desmos on the Chromebooks.

3308 GEOMETRY Year

Grade 9-12 Credit 1 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 Credit 1 Year

Grade 9-10 Prerequisite: Teacher recommendation and Algebra I

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: Teacher recommendation and Honors Geometry 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

Grade 10-12 Year Credit 1 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

Prerequisites: Teacher recommendation

Grade 10-12 Est. Fee \$10

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

Grade 10 Year Credit 1

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.

Grade(s) 10-12

32201 AP ECONOMICS

Credit 1.0 Year

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 9-12

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 (odd years only) 37401 Art Foundations: Year, 1 credit 3740 Crafts in Art (even years only): Semester, .5 credit 3743 2D Design: Year, 1 credit 3741 3D Design: Year, 1 credit **37421** AP Art History: Year, 1 credit (odd years only) 3742 Digital Photography Semester, .5 credit 3738 Murals, Graffiti & Public Art, (even years only): Semester, .5 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 3140 Broadcasting: Year, 1 credit Music 3750 Band Auxiliary: Quarter, .25 credit 3756 Concert Band: Year, 1 credit 3758 Symphonic Band: Year, 1 credit 3752 Wind Ensemble: Year: 1 credit 3751 Concert Orchestra: Year: 1 credit 37513 Academy Orchestra: Year, 1 credit 3762 Chamber Orchestra: Year, 1 credit 3759 Symphonic Choir: Year, 1 credit 3776 Women's Chorus: Year: 1 credit 3764 A Cappella Choir: Year, 1 credit 3769 Harmony Road Show: 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

<u>SCIENCE</u>

- **3422** Chemistry: Year, 1 credit
- 3431 Honors Chemistry: Year, 1 credit
- 3430 Anatomy: Year, 1 credit
- 3426 AP Physics 1: Year, 1 credit
- 3444 AP Seminar: 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: Year, 1 credit
- 3721 German II: Year; 1 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

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

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

Grade 11-12 Est Fee: \$50 (Required Novels) Credit Vear 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 11-12 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 threedimensional 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

Grade 11-12 Year Credit 1 Prerequisite: Algebra I and Geometry and teacher recommendation. Intermediate Algebra reviews topics form 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

Grade 10-11 Credit 1 Year

Prerequisite: Teacher recommendation and Honors Geometry 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 Prerequisite: Algebra II

Grade 11-12

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 Credit 1 Year

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

Credit 1

Year Prerequisite: Algebra II Grade 11-12

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: Teacher recommendation and Algebra II H 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, APBiology 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. 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

Credit 1/2 Semester 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.

Grade 11-12

3432 ZOOLOGY I

Semester Credit ¹/₂

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.

3420 BIOCHEMISTRY

Credit 1 Grades 11-12 Est. Fee: \$10 Year Student must have a non-programmable scientific calculator. **Prerequisite:** Physical Science

Biochemistry is an integrated course combining chemistry and biology with the major emphasis on chemistry. It is designed for the 11th or 12th grade student who does not have the math prerequisite for Chem I. Topics include bio/medical applications, environmental technology, and engineering technology. It is an applications based course.

Est. Fee: \$7

3433 ZOOLOGY II

Semester Credit 1/2 Prereauisite: Biology

Grade 11-12 Est. Fee: \$7

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

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

34163 HONORS FORENSIC SCIENCE

Credit 1 Grades 11-12 Year Est. Fee: \$10 Prerequisite: Physical Science and Biology. Teacher recommendation required.

Honors Forensic Science covers the same general topics as Forensic Science but at an accelerated pace and greater depth. Students in Honors Forensic Science must complete a summer packet. This is due at the start of the course in the fall. Each student should pick up a welcome letter from the instructor detailing the work required.

3422 CHEMISTRY

Year		Credit		
	 D.I	<i>a</i> .		

1 Grade 10-12 Est. Fee \$10 Prerequisite: 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 RAGE: 50ng Fridays during commons.

3431 HONORS CHEMISTRY

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

Grade 11-12 Year Credit 1 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

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.

Est. Fee \$10

Est. Fee: \$10

3429 HONORS PHYSICS (SV)

Year Credit 1 7 periods per week

Grades 10-12

Prerequisites: Science, 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

7 periods or equivalent

Credit 1

Year

Grade 10-12 Est. Fee \$10

Prerequisites: Geometry and/or teacher recommendation

AP Physics 1 is the equivalent to a first-semester college course in algebrabased 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 Vear 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 and 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: Physical Science and Honors English 9 or Teacher Approval AP Seminar is a requirement for the AP Capstone[™] 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

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. 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

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.

Credit 1/2

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.

3231 AMERICAN HISTORY THROUGH FILM

Semester Credit 0.5 Grade(s) 11-12 Prerequisite: American History, AP US History, or Equivalent

This one-semester course leads students to critically examine the use of film in telling the history of the United States. In an ever more technology-driven society, many Americans use film dramatizations as their primary source of knowledge about our country's past. Sometimes, these films present a distorted view of the facts. This course will allow students to examine this phenomenon through both a chronological and thematic approach to determine historical accuracy. Each week will begin with activities to introduce the historical era on which the film is based. Two to four days will be spent viewing key scenes of the film. The viewing of each film will be followed with a weekly film analysis assignment. Each quarter will end with an independent research project that will allow students to examine themes from the films previously viewed. The second independent research project will serve as the final exam.

32201 AP ECONOMICS

Year Credit 1.0 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.

Grade(s) 10-12

JUNIOR: Electives

ARTS & COMMUNICATION

3739 Art Appreciation (odd years only): Semester, .5 credit 37401 Art Foundations: Year, 1 credit 3740 Crafts in Art (even years only): Semester, .5 credit 3743 2D Design: Year, 1 credit 3741 3D Design: Year, 1 credit 37421 AP Art History (odd years only): Year, 1 credit 3742 Digital Photography Semester, .5 credit 3738 Murals, Graffiti & Public Art, (even years only): Semester, .5 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 3140 Broadcasting: Year, 1 credit Music 3750 Band Auxiliary: Quarter, .25 credit 3756 Concert Band: Year, 1 credit 3758 Symphonic Band: Year, 1 credit 3752 Wind Ensemble: Year, 1 credit 3751 Concert Orchestra: Year, 1 credit 37513 Academy Orchestra: Year, 1 credit 3762 Chamber Orchestra: Year, 1 credit 3759 Symphonic Choir: Year, 1 credit 3776 Women's Chorus: Year, 1 credit 3764 A Cappella Choir: Year; 1 credit 3769 Harmony Road Show: Year, 1 credit 3768 Popular Music: Semester, .5 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
- 34163 Honors Forensic Science: Year, 1 credit
- 3446 Geology: Year, 1 credit
- 3432 Zoology: Year, 1 credit
- 3420 Biochemistry

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
- 3231 American History Through Film: Semester, .5 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: Year, 1 credit
3721 German II: Year, 1 credit
3722 Honors German III: Year, 1 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 Credit 1 Est Fee: \$40 (Required Novels)

Year

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

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

3151 SENIOR HUMANITIES

Year

Credit 1 Prerequisite: English 9, 10 & 11 Est Fee: \$50 (Required Novels)

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

Credit 1 Grade 10-12 Year 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: Teacher recommendation and Algebra II

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

Credit 1 Year Prerequisite: Algebra II

Grade 11-12

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 Prerequisite: Algebra II

Grade 11-12

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

Year Credit Prerequisite: Algebra II Grade 11-12

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: Teacher recommendation and Algebra II H 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: Teacher recommendation and Pre-calculus 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

Credit 1

Year

Grade 12

Prerequisite: Teacher recommendation and Honors or Regular Pre-Calculus 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: Teacher recommendation and Honors Precalculus 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.

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.

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

3739 Art Appreciation (odd years only): Semester, .5 credit 37401 Art Foundations: Year, 1 credit 3740 Crafts in Art (even years only): Semester, .5 credit 3743 2D Design: Year, 1 credit 3741 3D Design: Year, 1 credit 3742 AP Art History (odd years only): Year, 1 credit 3745 Intermediate 2D Design: Year, 1 credit 3744 Intermediate 3D Design: Year, 1 credit 3747 Honors Senior Studio 2D Design: Year, 1 credit 3746 Honors Senior Studio 3D Design: Year, 1 credit 3742 Digital Photography Semester, .5 credit 3738 Murals, Graffiti & Public Art, (even years only): Semester, .5 credit 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 3140 Broadcasting: Year, 1 credit Music 3750 Band Auxiliary: Quarter, .25 credit 3756 Concert Band: Year, 1 credit **3758** Symphonic Band: Year, 1 credit 3752 Wind Ensemble: Year, 1 credit 3751 Concert Orchestra: Year, 1 credit 37513 Academy Orchestra: Year, 1 credit 3762 Chamber Orchestra: Year; 1 credit 3759 Symphonic Choir: Year, 1 credit 3776 Women's Chorus: Year, 1 credit 3764 A Cappella Choir: Year, 1 credit 3769 Harmony Road Show: Year, 1 credit 3768 Popular Music: Semester, .5 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
- 34163 Honors Forensic Science: Year, 1 credit
- 3446 Geology: Year, 1 credit
- 3432 Zoology: Year. 1 credit
- 3420 Biochemistry

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
- 3231 American History Through Film: Semester, .5 credit

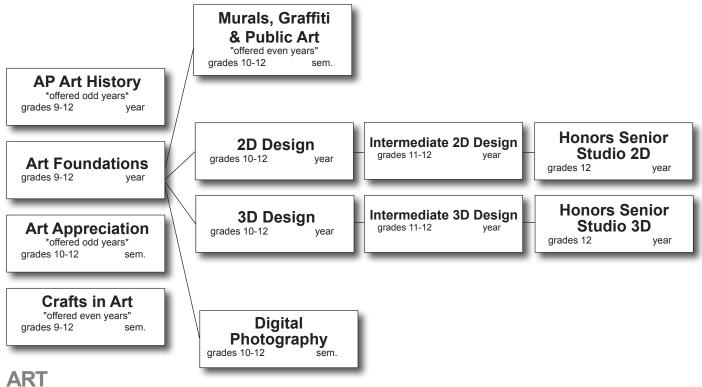
SENIOR: Electives (continued):

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: Year, 1 credit
- 3721 German II: Year; 1 credit
- 3722 Honors German III: Year, 1 credit
- 3723 Honors German IV: Year; 1 credit

Northview Art Department



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. Projects will include drawing, painting, clay, sculpture, printmaking, design and many more. This class is a must for most future art classes.

3743 2D DESIGN

Year	Crec	lit 1		Gr	ade	10-12		Est. Fee	\$33
Prerequi	isite: Art i	Foundatio	ons						
TT1 1	0.1.1	• ,		1	1	1 11	C	1	

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.

3741 3D DESIGN

Year	Credit 1	Grade 10-12	Est. Fee \$35
Prereau	isite: Art Foundations		

The focus of this course is to develop skills for personal expression by exploring sculpture and handbuilt ceramics. 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. Problemsolving pertaining to 3-dimensional design issues will be stressed.

3745 INTERMEDIATE 2D DESIGN

Year Credit 1 Prerequisite: 2D Design Est. Fee \$35

Est. Fee \$40

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. Appropriate methods for matting/displaying work and stretching canvas will be presented. Seniors in this course will be expected to build a body of work to be exhibited in the annual student art show during 4th quarter.

3744 INTERMEDIATE 3D DESIGN

Year Credit 1

Grade 11-12

Grade 11-12

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, and ceramics will be introduced. Students will explore clay construction, decorative processes, throwing wheels, alternative firing processes, and much more. Seniors in this course will be expected to build a body of work to be exhibited in the annual student art show during 4th quarter.

3747 HONORS SENIOR STUDIO 2D DESIGN

 Year
 Credit 1
 Grade 12
 Est. Fee
 \$40

 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. Seniors in this course will be expected to build a body of work to be exhibited in the annual student art show during 4th quarter.

3746 HONORS SENIOR STUDIO 3D DESIGN

Year Credit 1 Grade 12 Est. Fee \$40

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, mange, 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. Students in this course will be expected to build a high-quality, intellectual body of work to be exhibited in the annual student art show during 4th quarter.

3470 CRAFTS IN ART

Semester.5 CreditGrades 9-12Est. Fee \$20Do you want to create the handmade items you see on Etsy or Pinterest? Thisclass is for you! We will focus on creating functional art pieces (things youcan actually use) and/or using natural materials (metals, clay, glass, fibersand wood) to create fun pieces of art. Possible projects and/or materialsto be used include jewelry, weaving, fabric, clay bowls or cups, mosaics,papermaking, and upcycling magazines. (Offered even years only)

3472 DIGITAL PHOTOGRAPHY

Semester.5 CreditGrades 9-12Est. Fee \$10Prerequisite: Art of Photojournalism or Art FoundationsThey say a picture is worth a thousand words. In this class, you willlearn to use your camera to tell amazing stories through the photos youtake. We will discuss camera functions, lighting, photo editing softwareand more in relation to creating a dynamic, eye-catching image. Studentsshould have their own camera (this could be a cell phone, "point and

3741 ART APPRECIATION

shoot" digital camera, or dSLR).

Semester Credit: .5 Grades: 9-12 Est Fee \$16 Travel to different times and places to learn about interesting artists, techniques, and styles. Then, make your own art based on what we've learned! We will be writing and talking about art in addition to creating it. Projects could include nature sculptures, "drawing" with wire, 3-dimensional masks, mandalas, zentangles, or "upcycled" mobiles. 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. (Offered odd years only)

37421 AP ART HISTORY

Year Credit 1 Grades 9-12

Do other cultures, philosophies, time periods and their artworks fascinate you? Sign up for APAH! Analyze how the artworks of diverse cultures helped shape the world. Discuss how media and style reflect the given civilization and time period. Learn and use the specialized vocabulary of the art world to write descriptions and analyses of art. A variety of artworks will be studied such as architecture, manuscripts, paintings, drawings, prints and sculpture. We will utilize a variety of learning activities in class such as readings, visual presentations, VR activities, videos, discussions and field trips. Active participation in these activities are required for the class. *(Offered odd years only)*

3738 MURALS, GRAFFITI & PUBLIC ART

Semester Credit: .5 Grades: 10-12 Est Fee \$20

Prerequisites: Art Foundations

Murals have been around for 30,000 years and are still a thriving artform today! You only have to walk the streets of Sylvania to see murals created by students and professional artists alike. Learn about a variety of public artforms, like murals, graffiti, installations, and sculptures. Then collaborate with others to create both temporary and/or permanent public artworks around the school or community. Class size will be limited to 20 students. (Offered even years only)

ARTS & COMMUNICATIONS PATHWAY

VISUAL COMMUNICATION DESIGN I (SV) COLLEGE TECH PREP

Year Credit 2

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.

Grade 11

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

VISUAL COMMUNICATION DESIGN II (SV) COLLEGE TECH PREP

 Year
 Credit 2
 Grade 12
 Est. Fee \$50

 Prerequisite:
 Visual Communication Design I
 Est. Fee \$50

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

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 transcripted 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.

BUSINESS & MANAGEMENT PATHWAY

8310 BUSINESS FOUNDATIONS

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

8313 INTRO TO MARKETING

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

8408 FINANCIAL ACCOUNTING

Est. Fee \$43

Year Credit 1 Grades 10-12 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.

8319 MONEY MANAGEMENT

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

BUSINESS TECHNOLOGY I COLLEGE TECH PREP Grades 11

Year Credit 2 Prerequisite: Application

Est. Fee \$30

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, decisionmaking, 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.

Return to course offerings 9, 10, 11, 12

BUSINESS TECHNOLOGY II COLLEGE TECH PREP

Credit 2 Grade 12 Year Prerequisite: Business Technology I

Est. Fee \$40

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 secondsemester 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.

FINANCIAL MANAGEMENT I (SV) **COLLEGE TECH PREP**

Credit 2 Grade 11 Est. Fee \$65 Year 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 incorporate 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.

FINANCIAL MANAGEMENT II (SV) **COLLEGE TECH PREP** Grade 12

Credit 2 Year

Est. Fee \$22

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".

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.

3114 THEATER WORKSHOP

Semester Credit $\frac{1}{2}$ 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.

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.

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.

3137 CREATIVE WRITING

Semester Credit ½ 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

4760 ART OF PHOTOJOURNALISM

SemesterCredit 1/2Grade 9-12Preference given to 9th and 10th graders.

Est. Fee \$10

Students begin this class experiencing the darkroom and making their own pinhole camera. They then move into the basics of digital photography including composition, camera techniques and Photoshop skills. Each class is limited to 24 students. Students enrolled in the class can use their own digital camera, one of the class cameras, or a camera phone. This course fulfills half of the required Fine Arts credit.

3120 INTRO TO JOURNALISM

SemesterCredit ½Grade 9-12Preferred 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 copy editing techniques. Students will also learn about design using computers in media production as well as infographics, headlines, caption writing and design.

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. Journalism students produce, plan, research, write, photograph and design the school newspaper. The work involved in this class demands that extra time be spent beyond the regularly assigned publications period. Staffers may spend afternoons completing deadlines. Staff selections are made through application and appointment in December and January. Although there are no prerequisites, Introduction to Journalism or a solid background in other English courses is recommended.

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.

3140 BROADCAST JOURNALISM

Year Credit 1 Grades 9-12

THIS COURSE CAN BE REPEATED

This one-year course is designed for the study and practice of the basic elements of broadcast journalism and video production. The course will primarily focus on news writing, interviewing, storytelling, camera and microphone equipment operation, software editing, shot setup, angle work, graphics creation, title work, title sequence creation, and filming on location. Students work in collaborative teams to produce projects using cameras, while learning the basics of studio and field production, lighting and sound. Throughout the year, students will create multiple projects to meet course objectives, including, but not limited to: a commercial, public service announcement, broadcast feature package, and creating a Northview News program to televise news and feature stories on a regular basis to the Northview student body. This entry-level course assumes no previous film or broadcast experience or training.

ENGINEERING & INDUSTRIAL PATHWAY

8394 ENGINEERING APPLICATION

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

8392 ENGINEERING DESIGN

Semester Credit .5 Grades 9-12 Est. Fee \$10 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.

83921 3D MODELLING & PROTOTYPING

Year Credit 1 Grade 9-12 Est. Fee \$10 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 a n 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.

8396 INTRODUCTION TO ALTERNATIVE ENERGY

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

8398 COMPUTER AIDED DESIGN (CAD)

Credit .5 Grades 9-12 Est. Fee \$10 Semester 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 a n interest in math and sciences. Students completing two 1/2 credits or 1 full credit in this pathway will fulfill the Fine Arts requirement for graduation.

ENGINEERING I COLLEGE TECH PREP Year Credit 2

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.

Grade 11

Est. Fee \$57

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.

ENGINEERING II COLLEGE TECH PREP Year Credit 2 Grade 12

Prerequisite: Engineering Tech Prep I

Est. Fee \$57

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.

CONSTRUCTION I (SV) COLLEGE TECH PREP

Year Credit 3

Grade 11

Est. Fee \$65 Tech Prep Program

3 periods per day *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 are 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

CONSTRUCTION II (SV) COLLEGE TECH PREP

Year Credit 3 Grade 12 3 periods per day

Est. Fee \$56 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

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.

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.

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 biosecurity practices. Students will demonstrate knowledge of propagation methods, plant health, nutrition, and growth stimulation. Throughout this course, business and employability skills will be emphasized.

HORTICULTURE II (SV) COLLEGE TECH PREP Year Credit 2 Grade 12 Est. Fee \$45 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.

HEALTH, EDUCATION &

HUMAN SERVICES PATHWAY

8330 HEALTH CAREERS FOUNDATIONS Semester Credit ¹/₂ Grade 9-10

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.

8377 PRINCIPLES OF NUTRITION & WELLNESS

Grade 9-12 Semester Credit ¹/₂ Est. Fee \$25 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.

8379 CULINARY ARTS FUNDAMENTALS

Grade 11-12 Year Credit 1 Est. Fee \$40 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.

8376 PERSONAL WELLNESS & DEVELOPMENT

Credit ¹/₂ Grade 9-12 Semester 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

8380 PRINCIPLES OF FOOD

may serve as the Health credit.

the junior and senior years.

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

EDUCATION & TRAINING I

Year Credit 3 Grade 11

Est. Fee \$75

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/problembased 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.

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.

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.

8355 COSMETOLOGY II

 Year
 Credit 4
 Grade 12
 Est. Fee \$150

 Prerequisite: Cosmetology I
 Free \$150
 Free \$150

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, end 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.

MEDICAL TECHNOLOGY I COLLEGE TECH PREP 8333 ANATOMY

Year Credit 3 2 periods per day Med. Tech 1 period per day Anat. Prerequisite: Application

Grades 11

Est. Fee: \$175 Est. Anat. Fee \$10 College Tech Prep

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.

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 3 periods per day Med Tech 7 periods per week Chemistry Prerequisite: Medical Technology I Est. Med. Fee \$131 Est. Chem. Fee \$10 College Tech Prep

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 a 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.

8340 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** 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.

8309 TODAY'S TECHNOLOGY

SemesterCredit $\frac{1}{2}$ Grade 9-12Est. Fee \$5This 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.

8415 INTRO TO COMPUTER PROGRAMMING

Semester Credit ¹/₂ Grade 9-10

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.

8545 2D GAME DESIGN

Grades: 9-12 Est. fee: \$10

Credit: ¹/₂ Semester 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.

HONORS PROGRAMMING I (SV) **COLLEGE TECH PREP**

Year

Credit 2

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.

Grade 11

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.

HONORS PROGRAMMING II (SV) COLLEGE TECH PREP Credit 2

Year

Est. Fee \$60

Grade 12 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.

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.

HONORS COMPUTER PROGRAMMING II (NV) **COLLEGE TECH PREP** Credit 2 Year 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.

Return to course offerings 9, 10, 11, 12

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.

8598 INTRO TO VISUAL TECHNOLOGY

Semester Credit ¹/₂ 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.

INTERACTIVE MEDIA I COLLEGE TECH PREP Credit 2

Year

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

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

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.

MUSIC

HONORS OPTION

The Honors Option will be available to students who are enrolled in the Wind Ensemble, Chamber Orchestra and 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. Student responsibility, intrinsic motivation, independent study and research will be emphasized. A decision to enroll should be discussed with and supported by your director. Students must receive written permission from their private teacher prior to scheduling this class.

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 fees 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. The band will provide entertainment during the pregame 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 in October and the Memorial Day parade in May. 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.

3756 CONCERT BAND

Credit 1

Year

Grades 9-12 Est. Fee: Uniform Rental \$30.00

Concert Band consists of mostly underclassmen players. The curriculum emphasizes basic/intermediate fundamentals of band performance to develop individual musician skills and application of skills to concert literature. Concert band performs music consistent with the experience and skill level of the members, usually equal to the O.M.E.A. classification of "C or D" band literature.

3758 SYMPHONIC BAND

Credit 1

Year

Grades 9-12 Est. Fee: Uniform

Rental \$30.00

Symphonic Band consists of mostly upperclassmen and experienced players. The curriculum emphasizes developing more advanced techniques of performance and application to concert literature. This ensemble performs music of a more advanced quality and difficulty equal to the O.M.E.A. classification of "A or B" band literature. Private lessons are STRONGLY encouraged for participation.

3752 WIND ENSEMBLE

Grades 9-12 Est. Fee: Uniform Year Credit 1

Rental \$30.00

Wind Ensemble consists of our strongest and most independent musicians. The curriculum emphasizes advanced techniques of performance and application to concert literature. This ensemble performs music of the most advanced quality and difficulty equal to the O.M.E.A. classification of "A or AA" band literature. Private lessons are STRONGLY encouraged for participation.

3761 HONORS WIND ENSEMBLE

Credit 1 Grades 9-12 Est. Fee: Uniform Rental \$30.00

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

3750 BAND AUXILIARY

Year

Credit ¹/₄ Grade 9-12 Ouarter

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. Students who play an instrument have the option to be in the auxiliary during marching band season, but then play their instrument in one of the three concert bands. Attendance at scheduled performances is mandatory.

*A Pay to Participate fee is required for this class

Instrumental Music - Orchestra 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.

37513 ACADEMY ORCHESTRA

Credit 1 Grades 9-12 Year

Academy Orchestra is an intermediate Orchestra that will focus on the advancing string player. This ensemble will work on skills and perform literature that will prepare students to be members of our Chamber Orchestra.

3763 JAZZ BAND/JAZZ CATS

Credit ¹/₄ Grade 9-12 Year

Prerequisite: Enrollment in HS Band or by permission of director The Jazz Band consists of two groups: Jazz Band and Jazz Cats. Jazz Band consists of more experienced musicians, and is a set big band instrumentation (saxophones, trombones, trumpets, and rhythm section). Jazz Cats consists of less experienced musicians and has a flexible instrumentation where any instrumentalist can participate. Both groups study and perform the various styles of jazz music, such as Big Band, Pop, Rock, the Blues, and small combos. A basic understanding of improvisational techniques are also taught in this class.. The jazz bands perform a number of times throughout the school year. Practices will be conducted after school hours. Jazz Band rehearses on Monday and Wednesday. Jazz Cats rehearse on Tuesday and Thursday. Attendance at scheduled performances is mandatory.

Vocal Music

Year

3764 A CAPPELLA CHOIR 3766 HONORS A CAPPELLA CHOIR

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.

3759 SYMPHONIC CHOIR

Grade 9-12 Year Credit 1

Symphonic Choir is a 9th-12th grade vocal group focused on developing the fundamental skills of voice production, sight reading, tuning, blend and balance This mixed ensemble is primarily a skill building group for Northview's young female and male voices, but is also open to upperclassman involvement and leadership. The chorus performs a wide variety of music that is of a lesser difficulty than that of the A Cappella Choir. It is required that participating students be able to carry a simple tune. Membership is by simple audition that requires no preparation during January and February of the previous year. Symphonic Choir will perform at all Northview Choral events, including OMEA District and State competitions. Attendance at scheduled performances is required. New member fees for concert attire: Women: \$100; Men: \$150. *A Pay-to-Participate fee is associated with this class.

3768 POPULAR MUSIC

Semester Credit 1/2 Grade 11-12

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.

3776 WOMEN'S CHORUS

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

3767 AP MUSIC THEORY

Grade 10-12 Est. Fee: \$93 Year Credit 1 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.

3769 THE HARMONY ROAD SHOW

Credit 1 Grade 10-12 Year

Prerequisite: A Cappella Choir

Specializing in pop a capella, Harmony Road Show ("HRS") is a mixed voice audition-only group of 16 singers. Students learn vocal pop 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 workshopped 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.

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

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

Credit 1 Year

Grade 11-12 7 periods or equivalent

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

Est. Fee \$10

A course for highly motivated/interested students, AP Biology gives indepth 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.

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.

Year

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.

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 Prerequisite: Biology

Grade 11-12 Est. Fee: \$7

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.

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.

3434 ASTRONOMY I

Semester Credit ¹/₂ Grade 11-12

Prerequisites: Physical Science or Honors Physical Science 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

Semester Credit ¹/₂ Grade 10-12

Prerequisites: Physical Science or Honors Physical Science 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 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".

3416 FORENSIC SCIENCE

Year Credit 1 Grade 11-12

Est. Fee: \$10

Prerequisite: Physical Science 9 and Biology

Forequisite: 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.

34163 HONORS FORENSIC SCIENCE

Year Credit 1 Grades 11-12 Est. Fee: \$10 Prerequisite: Physical Science 9 and Biology. Teacher recommendation required.

Honors Forensic Science covers the same general topics as Forensic Science but at an accelerated pace and greater depth. Students in Honors Forensic Science must complete a summer packet. This is due at the start of the course in the fall. Each student should pick up a welcome letter from the instructor detailing the work required.

3422 CHEMISTRY

YearCredit 1Grade 10-12Est. Fee \$10Prerequisite:Phys. Science or H. Phys. Science, 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.

3420 BIOCHEMISTRY

Year Credit 1 Grades 11-12 Est. Fee: \$10 Student must have a non-programmable scientific calculator. Prerequisite: Physical Science

Biochemistry is an integrated course combining chemistry and biology with the major emphasis on chemistry. It is designed for the 11th or 12th grade student who does not have the math prerequisite for Chem I. Topics include bio/medical applications, environmental technology, and engineering technology. It is an applications based course.

3431 HONORS CHEMISTRY

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

Prerequisites: Physical Science or Honors Physical Science, Algebra I and 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

7 periods or equivalent Prerequisites: Chemistry or Honors Chemistry with a minimum grade of 'B' and Teacher Recommendation. Corequisite: Algebra II

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.

3430 ANATOMY

Credit 1

Grade 11-12 Est. Fee \$10 Year Prerequisite: Biology or Honors Biology with a grade of 'B' or better, and Teacher Recommendation. Chemistry or Honors Chemistry taken concurrently is also highly recommended.

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

Credit 1 Grade 11-12 Est. Fee: \$25 Year Prerequisites: Biology and Teacher Recommendation. Corequisite: Chemistry or Honors Chemistry

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

Grade 11-12

Est. Fee \$10

Est. Fee: \$7

Est. Fee \$10

3425 PHYSICS

Credit 1 Year 7 periods or equivalent

Est. Fee \$20

Prerequisites: Physical Science or Honors Physical Science Corequisite: Algebra II

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 11-12 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.

Grade 11-12

3426 AP PHYSICS I

Year Credit 1 7 periods or equivalent

Prerequisites: Algebra II and 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.

34461 GEOLOGY

Year Credit 1.0 Grade(s) 11-12 Est. Fee \$5.00 Prerequisite: Physical Science and 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: Physical Science and Honors English 9 or Teacher Approval AP Seminar is a requirement for the AP Capstone[™] 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 eviduate 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

APResearch, the second course in the APCapstone 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

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. 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

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.

Grade 11-12

3228 GEOGRAPHY Semester Credit ¹/₂

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.

3231 AMERICAN HISTORY THROUGH FILM Semester Credit 0.5 Grade(s) 11-12

Prerequisite: American History, AP US History, or Equivalent

This one-semester course leads students to critically examine the use of film in telling the history of the United States. In an ever more technology-driven society, many Americans use film dramatizations as their primary source of knowledge about our country's past. Sometimes, these films present a distorted view of the facts. This course will allow students to examine this phenomenon through both a chronological and thematic approach to determine historical accuracy. Each week will begin with activities to introduce the historical era on which the film is based. Two to four days will be spent viewing key scenes of the film. The viewing of each film will be followed with a weekly film analysis assignment. Each quarter will end with an independent research project that will allow students to examine themes from the films previously viewed. The second independent research project will serve as the final exam.

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 and perspectives. World Language students are encouraged to be actively engaged in the language they are studying both within and outside their community. Real world activities such as compiling work and reflecting in a Linguafolio, being a member of the Spanish or French Club and Honor Societies, hosting exchange students, and traveling abroad will enrich the connection between student learning and real life use of the language in their future. World Language teachers participate in the Global Education program with The EF Tour Company, which provides students the opportunity to earn high school volunteer hours and/or college credit during their travel abroad. All courses are based on the modes of communication and use of the target language in the classroom. As in real life, the following modes of communication will be the focus: interpersonal conversations between people and writing, presentational writing and speaking such as essays, summaries, and informal/formal speaking presentations, and interpretive reading and listening skills with authentic text/websites and video/audio. 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 current cultural topics. Very importantly, the Ohio World Language Standards and the World-Readiness Standards for Learning Languages by ACTFL are at the heart of daily instruction.

In preparation for post secondary education, many colleges require a minimum of two years, but recommend three or more years of consecutive language study for admission to the college, as well as require continued language study for most majors at the university. All levels will prepare students to proficiently utilize their language skills outside of the classroom, as well as succeed on The Ohio Seal of Biliteracy Test in levels 4-5, and the Advanced Placement Exam in level 5.

LEVEL 1

3700 FRENCH I Year Credit 1 Grade 9-12

3720 GERMAN I

Year Credit 1 Grade 9-12

3730 SPANISH I

Year Credit 1 Grade 9-12

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 student is Novice-Mid or the ability to identify with phrases, combine words and express ideas with simple phrases and expressions.

LEVEL 2

3701 FRENCH II

Year Credit 1 Grade 9-12 Prerequisite: French I

3721 GERMAN II

Year Credit 1 Grade 10-12 Prerequisite: German I

3731 SPANISH II

Year Credit 1 Grade 9-12

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.

LEVEL 3 3702 HONORS FRENCH III

Year Credit 1 Grade 10-12

Prerequisite: French II

3722 HONORS GERMAN III

Year Credit 1 Grade 11-12 Prerequisite: German II

3732 HONORS SPANISH III

Year Credit 1 Grade 10-12 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.

LEVEL 4 3705 HONORS FRENCH IV

Year Credit 1 Grade 11-12 Prerequisite: French III

3723 HONORS GERMAN IV

Year Credit 1 Grade 12 Prerequisite: German III

3735 HONORS SPANISH IV

Year Credit 1 Grade 11-12 Prerequisite: Spanish III

This course is designed around the Ohio World Language Standards and 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. Students have the opportunity to are The Ohio Seal of Biliteracy at this level stating that they are proficient in English and another language. 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.

LEVEL 5 3706 AP FRENCH LANGUAGE

Year Credit 1 Grade 12

Prerequisite: French IV

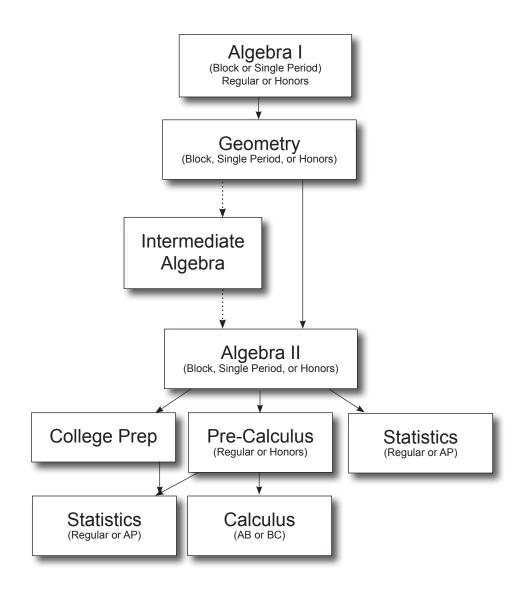
3736 AP SPANISH LANGUAGE

Year Credit 1 Grade 12 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-High or the ability to describe in strings of sentences and express personal thoughts, opinions or debate in multiple time frames. Students have the opportunity to earn college credit by performing well on the Advanced Placement as well as earn The Ohio Seal of Biliteracy at this level stating that they are proficient in English and another language. *Please reference the Northview website for any summer work assigned.

*See teacher for assigned summer activity.

MATH COURSE FLOW CHART



1. Freshmen typically take Algebra I or Geometry, depending on their 8th grade math course and their teacher's recommendation.

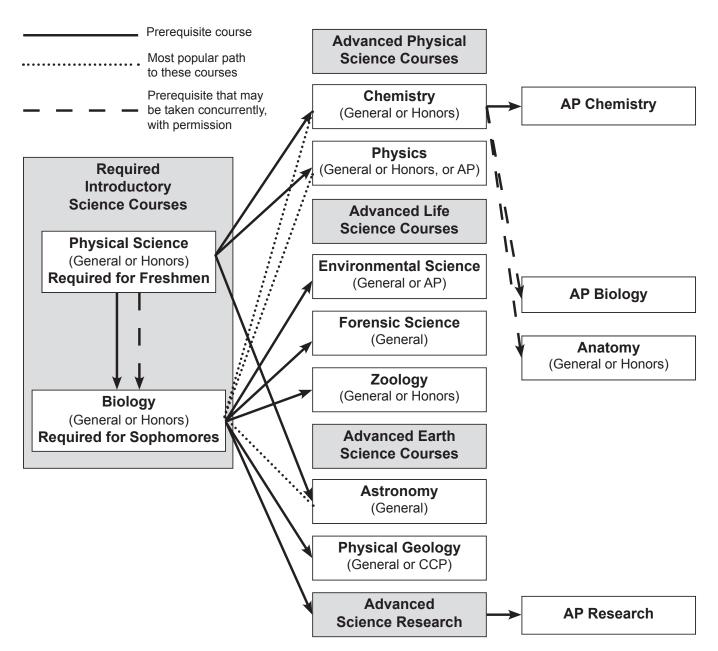
2. Each course is a full year; it is not recommended to take more than one math course at a time with the exception of Statistics. Statistics may be taken concurrently with any course following Algebra II.

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 ____ GRADE 10 **SUBJECT GRADE 9 GRADE 11** GRADE 12 TOTAL **CLASSES/CREDIT CLASSES/CREDIT CLASSES/CREDIT** CLASSES/CREDIT AREAS 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