

**NORTHFIELD**



**RAIDERS**

**Northfield High School  
2023-24  
Course Registration  
Guide**



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# COURSE LISTING

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NORTHFIELD HIGH SCHOOL PROFILE

ABOUT OUR SCHOOL

Located 40 miles south of Minneapolis, Northfield High School is a 9–12 public school serving approximately 1,350 students. Also located in Northfield are Carleton College and St. Olaf College. We offer an incredible array of opportunities for a school of our size and are proud to be among the top schools in Minnesota in a variety of categories, including National Merit Scholarship recognition, Minnesota Comprehensive Assessment scores, ACT scores and Advanced Placement offerings and scores. Our school year is on a semester schedule with school days divided into seven periods - each approximately 50 minutes in length - and one FLEX period - 60 minutes in length.

FACULTY

Seventy-three percent of our licensed faculty members hold a master’s degree or higher.

CURRICULUM

NHS students choose from a wide array of courses in art, business, English, family and consumer science, design engineering, math, music, physical education, science, social studies, wellness and world languages (Spanish, French, and German).

CO-CURRICULAR ACTIVITIES

Northfield High School students are engaged in a wide array of co-curricular activities including athletics, academic activities, music and theatre, and a wide variety of clubs. Approximately 85% of Northfield students take part in these activities where leadership development is emphasized. Student Council, LINK, RALIE, Captain’s Training and National Honor Society are just a few examples of the student leadership programs at our school.

HONORS AND ADVANCED ACADEMICS

Honors / Advanced Courses

Advanced American Literature  
Advanced British English 11  
Advanced English 9  
Foundations for A.P. Sciences  
Honors Algebra 2  
Honors Art

Advanced Placement Exams 2022

2022 Exams	Total Exams	Average Score
Biology	58	3.95
Calculus AB	21	3.24
Chemistry	39	2.62
Computer Science A	6	4.33
Economics – Micro	31	3.65
Economics – Macro	33	3.82
Environmental Science	31	3.58
German Language	20	1.50
Literature & Composition	19	3.95
Physics 1	13	3.23
Psychology	55	3.80
Spanish Language	22	3.32
Statistics	62	3.89
U.S. Gov’t & Politics	10	2.90
U.S. History	40	3.30
World History	73	3.59

Advanced Placement Courses

Biology	Physics 1
Calculus AB	Psychology
Chemistry	Spanish Language
Economics (Macro/Micro)	Statistics
Environmental Science	U.S. Gov’t & Politics
French Language	U.S. History
German Language	World History
Literature & Composition	

ACADEMIC PERFORMANCE

ACT Average Scores

Year	Tested	English	Math	Reading	Science	Composite
2021	288	20.1	22.4	22.4	22.7	21.8
2020	299	20.5	21.9	22	22	21.7
2019	337	21.6	22.3	22.3	22.3	22.3
2018	278	21.3	22.5	22.7	22.7	22.4
2017	317	21.9	22.6	23.3	22.7	22.7

National Merit Recognition

Class of	Semi-Finalist	Commended	Total
2022	0	3	3
2021	1	2	3
2020	1	9	10
2019	3	3	6
2018	2	3	5

Class of 2021 Sixth Semester Weighted GPA Distribution

Median	4.0 +	3.75–3.99	3.5–3.74	3.25–3.49	3.0–3.24	2.75–2.99	2.5–2.74	2.25–2.49	2.0–2.24	1.75–1.99	<1.75
3.456	48	47	45	36	26	19	18	18	12	9	10

CLASS OF 2022 POSTSECONDARY PLANS

GRADUATES: 287

FOUR-YEAR COLLEGE: 59%

TWO-YEAR COLLEGE: 12%

ROTARY EXCHANGE BEFORE COLLEGE: NA

MILITARY: 2%

WORK: 9%

GAP YEAR/OTHER: 18%

Arizona State University-Tempe (1)  
University of Arizona (1)  
Augsburg University (1)  
Augustana University (4)  
Aveda Arts & Sciences (1)  
Barton College (1)  
Baylor University (1)  
Bemidji State University (3)  
Brown University (1)  
California Polytechnic State (1)  
Carleton College (4)  
Carthage College (1)  
Clark University (1)  
College of St. Benedict (2)  
Colorado College (1)  
University of Colorado (1)  
Colorado State University (1)  
Concordia College Moorhead (1)  
Connecticut College (2)  
Dakota County Technical College (14)  
University of Denver (2)  
University of Dubuque (1)  
Dunwoody College of Technology (2)  
George Washington University (1)  
Gonzaga University (1)  
Grinnell College (4)  
Gustavus Adolphus College (9)  
Hamline University (7)

Inver Hills Community College (1)  
Iowa State University (5)  
University of Iowa (4)  
Juniors Hockey (1)  
Lake Superior College (1)  
Lawrence University (1)  
Loyola Marymount University (2)  
Luther College (5)  
University of Maine (1)  
Minnesota State University-Mankato (7)  
Montana State University (1)  
University of Nevada - Las Vegas (1)  
Newberry College (1)  
Normandale Community College (1)  
North Dakota State University (2)  
University of North Dakota (7)  
University of Notre Dame (1)  
North Central University (1)  
North Dakota State University (5)  
Northern Michigan University (1)  
Northwestern College (1)  
St. John’s University (1)  
University of Sioux Falls (2)  
Skidmore College (1)  
South Central College (1)  
South Dakota State University (3)  
Southwest Minnesota State University (1)  
St. Olaf College (14)

College of Saint Scholastica (1)  
Texas Christian University (1)  
University of Minnesota - Duluth (11)  
University of Minnesota - Rochester (1)  
University of Minnesota - Twin Cities (9)  
University of New Hampshire (2)  
University of St. Thomas (3)  
University of Utah (1)  
University of Washington - Seattle (1)  
University of Wisconsin-Eau Claire (4)  
University of Wisconsin-La Crosse (1)  
University of Wisconsin-Madison (4)  
University of Wisconsin-River Falls (2)  
University of Wisconsin-Stout (1)  
Western Technical College (1)  
Willamette University (1)  
Williams College (1)  
Winona State University (6)  
College of Wooster (1)

ACADEMICS AT NORTHFIELD HIGH SCHOOL

Northfield High School follows a semester schedule with school days divided into seven periods, each 50 minutes in length. Students must be enrolled in a minimum of 6 credits to be considered full-time students. A student may choose up to 7 credits to have a full schedule with no study halls. A year long class is worth 1 credit; a semester class is worth .5 credit. Students who have one study hall for the entire year are enrolled in a total of 6 credits.

COURSE DROP/ADD POLICY

Schedules are difficult to adjust once the master schedule is created based on student course requests in the spring. If a scheduling conflict occurs, one or more student-selected alternate courses will be added to student schedules as necessary. If a schedule change is necessary for graduation or in order to carry at least six classes (3.0 credits), students can initiate these changes on the designated schedule change day the week before school begins. Once the school year begins, the only allowed changes will be to drop a class for a study hall if there are seven classes in place or to add a class that is for required graduation credits.

Students who have seven classes on their schedule and drop one in order to take a study hall must do so before the mid-quarter at the start of the semester, which is approximately four weeks into the semester. All other required changes will be complete by the end of the fifth day of the semester. Students may not have two study halls/open hours (Senior Transition, TA) in the same semester. Dropping a course after the deadline results in a failing semester grade for the class.

GRADING SYSTEM

A+/A 4.0	B 3.0	C 2.0	D 1.0	Under the weighted system, all AP course grades are weighted an additional 25% in GPA points as follows:		
A- 3.667	B- 2.667	C- 1.667	D- 0.667			
B+ 3.333	C+ 2.333	D+ 1.333	F 0			
				A 5.0	B 3.75	C 2.5

GRADUATION REQUIREMENTS

REQUIRED CREDITS

Twenty-three (23.0) credits are required in grades 9–12. Semester courses are worth 0.5 credit; year-long courses are worth 1.0 credit. Required credits are a combination of local and state requirements. State standard requirements supercede credit amount within content areas. Credit distribution is as follows:

- 16 required credits
  - » English 4 credits
  - » Social Studies 3.5 credits
  - » Math 3 credits
  - » Science 3 credits
  - » Phy. Ed 1 credit
  - » Health .5 credit
  - » Arts 1 credit
- 7 elective credits chosen by individual student



# LIFE BEYOND HIGH SCHOOL

Northfield Public Schools prioritizes equitable opportunities and support for all career and college paths. The admission requirements vary greatly for postsecondary institutions, branches of the military, and potential employers. Each student needs to become familiar with the specific requirements based upon their interests and goals. Students may gather this information by meeting with admissions representatives and military recruiters who visit Northfield High School, researching relevant websites, contacting the institutions or recruiters directly, and/or arranging campus visits. Although admissions standards vary from school to school, listed below are some general credit guidelines to consider.

## ADMISSION REQUIREMENTS FOR TECHNICAL SCHOOLS AND/OR COMMUNITY COLLEGES

A high school diploma or GED is the basic admissions requirement. Placement testing is required. The following high school credits are recommended:

» English	4 credits
» Social Studies	3.5 credits
» Math	3 credits
» Science	3 credits
» Electives	Electives in areas of interest for potential career

## ADMISSION REQUIREMENTS FOR FOUR-YEAR COLLEGES AND UNIVERSITIES

Colleges and universities have individualized grade point average, class rank, and standardized test score requirements. The following high school credits are typically required:

» English	4 credits (including composition, literature and speech)
» Social Studies	3 credits (including 1 credit each of U.S. history and geography)
» Math	3–4 credits (including 2 credits of algebra and 1 credit of geometry)
» Science	3 credits (1 credit each in biological and physical science, including significant lab experiences)
» World Language	2 credits of a single world language
» Electives	1 credit of visual or performing arts

Highly selective colleges and universities expect additional coursework beyond the above minimum credits. Most selective schools prefer at least 4 credits from the core academic areas of English, math, science, social studies, and world language.

## REQUIREMENTS FOR MILITARY SERVICE

Students may choose from a variety of military service opportunities:

» Army	» Marines
» Navy	» National Guard Reserve Officer Training Corps (ROTC)
» Air Force	

A high school diploma or advanced degree is the basic academic requirement. Recruits must also pass a physical examination and complete the Armed Services Vocational Aptitude Battery (ASVAB). Contact specific branches of the military for more information.

# CAREER & POSTSECONDARY PLANNING RESOURCES

## NAVIANCE

Naviance is an online career and postsecondary planning site available to all Northfield High School students and used during CCR. Through this site, students can learn about careers, research colleges, communicate with counselors, and request transcripts. Naviance also provides students free access to Naviance Test Prep, an online ACT prep course. Students can log in at: <http://connection.naviance.com/northfieldsh> and should contact their counselor for log-in help.

## NORTHFIELD COUNSELING DEPARTMENT WEBSITE

You may link to the [Counseling Office website](#) via the Student Support link from the Northfield High School home page. Be sure to check the site for updated information on the following: graduation requirements, post-secondary planning, scholarships, course registration guides, standardized test information, and links to additional resources.

## NCAA CLEARINGHOUSE WEBPAGE

Student-athletes planning to play at the Division I or Division II level must be registered with the NCAA Clearinghouse after the completion of 11th grade. Registration process and other important information can be found at their website: <https://web3.ncaa.org/ecwr3/>

Students must complete 16 core courses for Division I and 14 core courses for Division II. It is recommended to set 16 core courses as your goal, just in case you develop DI potential in your junior and senior years.

Div I Core Course Requirements:		Div II Core Course Requirements	
Subject	Requirement	Subject	Requirement
English	4 years	English	3 years
Math (Algebra I or higher)	3 years	Math (Algebra I or higher)	2 years
Science (at least one lab)	2 years	Science (at least one lab)	2 years
Additional English, Math or Science	1 year	Additional English, Math or Natural/Physical Science	3 years
Social Science	2 years	Social Science	2 years
Additional from any category above and/or World Language, Philosophy or Non-Doctrinal		Additional from any category above and/or Foreign Language, Philosophy or Non-Doctrinal	
Religion courses	4 years	Religion courses	4 years
Total	16 Courses	Total	16 Courses

The NCAA Eligibility Center requires that you complete your core courses with a minimum GPA of 2.3 for Division I and 2.2 for Division II. This is NOT the same as your overall high school GPA, since your high school GPA includes all of the courses you have taken, whether or not they are approved as core courses. Your core course GPA is calculated using only the core courses you have completed that are listed on your high school's list of approved core courses.

In January 2023, NCAA Divisions I and II adopted legislation to remove standardized test scores from initial-eligibility requirements for all student-athletes who initially enroll full time on or after August 1, 2023. Check with the NCAA school you plan to attend regarding whether standardized test scores are necessary for admission or scholarship requirements.

# ACADEMIC SUPPORT

## NHS INTERVENTION DESCRIPTORS

Every week, a team of staff at Northfield High School reviews data to determine which students are showing a need for intervention support. As those students and their needs are identified, they are being matched with the interventions that best suit those needs.

As we progress through the year, the intervention “net” will be cast under as many struggling learners as possible, with the goal of providing the support that all students need to be successful. In each case, we’ll be letting students know what we’ve discovered, and what we’re going to do about it. In some cases, it will mean providing support during a study hall period; in other cases, it might mean trading an elective for an intervention that we are confident will, in the long run, benefit the student far more significantly. In all cases, we’ll be acting in the student’s best interest as a learner and a contributing citizen of our community and society.

The following are the current interventions into which eligible students will be placed through this process:

**Structured Study Center:** This is a supported study hall that has fewer than 15 students. Students are considered for placement in a SSC when they have grades of D or F for any core course in the most recent grading period. The teachers in the SSC work with the student to identify and prioritize outstanding coursework, to check and monitor grades weekly and to provide an environment where the student can maximize productivity. Students may be scheduled out of SSC at quarter time when their grades are all at a C level or better and in consultation with the SSC teacher. As with a regular study hall, the student does not earn credit in a SSC.

**On Course:** This is an intervention study seminar with a limited number of students designed to develop student skills such as organization, planning, prioritization, attention, focus, and motivation. Students are identified for the for this intervention who may be at risk for continuing to fail academic classes based on previous academic performance and/or attendance. In this credit-bearing coruse, students participate in brief lessons designed to build skills and develop strategies for monitoring and organizing their work, and use the rest of the class period to complete coursework. Students earn an elective credit for this class.

**Standards-Based Courses:** These courses fulfill the local and state requirements for subjects in which they are offered. Students are selected for standards-based based on a series of criteria, including reading scores, previous academic performance, and teacher recommendation. Standards-Based Courses focus specifically on the state-required standards in science, giving all learners access to the science curriculum.

**ADSIS:** Alternative Delivery of Specialized Instructional Services (ADSIS) is designed for students who are struggling to make progress towards grade level standards in reading and math. The goal of the program is to teach specific skills to help remediate the learning concern, so that they will be able to fully participate and make progress in all subjects taught in school. Students must meet eligibility for the ADSIS program with Northfield High School and are determined to be eligible for ADSIS services based on the following data sources: 25% or below on one or more MAP Reading or MCA - III tests. ADSIS services cannot start without written permission, students’ progress in the program is monitored and reported quarterly, and if the student also receives EL services, the school will coordinate these programs to insure students receive appropriate grade level instruction. ADSIS Intervention Services are provided in a manner that best meet the students’ needs and may include pull out classes, in class support, or computerized instruction. ADSIS service is delivered individually and in the following courses:

**Reading Strategies** is a course offered each semester. It is part of Northfield High School’s Multi-Tiered Systems of Supports (MTSS) and an Alternative Delivery of Specialized Instructional Services (ADSIS) class. The goal of Reading Strategies is to improve basic reading skills. Therefore, the class focuses on the development of comprehension, vocabulary, fluency, and content literacy skills.

**ADSIS Math** is for students in grade 9 and in grade 10 who meet the entrance criteria for ADSIS Math. Those students are scheduled for a supplemental math class that alternates with a study hall. The ADSIS Math curriculum is Imagine Math, which is computer-based, rigorous, and rooted in state math standards. It is adaptive to the student’s individual needs and rate of progress. ADSIS Math lessons are supported by an ADSIS Math teacher who assists with generalizing the developing math skills to the competencies of the student’s regular math class.

## ENGLISH LEARNER (EL) SERVICES

Students who have not yet developed academic English proficiency in their ability to speak, listen, read and/or write, may be eligible for EL services. The goal of EL services is to teach students academic English so that they will be able to fully participate in all classes and subjects taught in school.

### EL Service Models

**Push-In EL Services:** EL and classroom teachers work collaboratively within the mainstream classroom. Although responsibility for instruction is shared, the classroom teacher is primarily responsible for the subject material to be taught, while the EL teacher is responsible for addressing the unique needs of the English Learners, focusing on the vocabulary, language structure, and background knowledge needed to actively engage in the curriculum.

**Sheltered Instruction:** The EL teacher provides instruction in a specific subject area (i.e., History, Social Studies, Health, etc.), using linguistic supports appropriate to students’ language proficiency level, while maintaining the integrity or rigor of the subject matter.

Criteria and additional information regarding EL services can be found on the District website.

# SPECIAL EDUCATION

Northfield High School offers special education classes for students identified as having a specific learning disability, emotional and/or behavioral disorder, mild to severe cognitive disorder, autism spectrum disorder, language impairment, visual impairment, deaf or hard of hearing, and other health impairments. Various testing criteria must be met to qualify for these programs. All students in any of these classes have gone through a process and are currently on an active IEP (Individualized Education Program). The Special Education Department offers a variety of classes designed to meet the individualized needs (reading, writing, math, communication, behavior, social, organization, study, as well as life and work skills development) of students receiving services through their Individual Education Plans (IEP). Students will be registered for these classes based on the documented services in their IEPs by their IEP case managers.

Additionally, transition planning becomes a part of a student’s IEP during grade 9. In planning what type of transition services a student needs to prepare for adulthood, the IEP Team considers the following areas: post-secondary education and training, employment and independent living. The transition services themselves are a coordinated set of activities that are based on the student’s needs and that take into account his or her preferences and interests. Transition services can include instruction, community experiences, the development of employment and other post-school adult living objectives, and (if appropriate) the acquisition of daily living skills and a functional vocational assessment.

# DUAL CREDIT OPPORTUNITIES

Dual Credit Opportunities are academic options that allow students the potential to receive both high school and college credit for a given course or program of study.

## ADVANCED PLACEMENT (AP)

AP courses are available in six academic departments (English, Math, Science, World Language, and Social Studies). Some AP courses have prerequisites and some do not. It is important to understand that each course is different, and it is important that students find courses that are the right fit for their capacity and interests. These courses are taught at a different pacing than regular and advanced/honors courses; they are college level courses and are intended to be challenging for high school students. Students have the option to take an accompanying AP exam in May to determine a student’s proficiency in the subject matter. AP courses require students to do research, reading, and/or writing outside of class—and many students participate in study groups or tutoring sessions to stay on track. It is important for students and parents to think about the amount of work students will have so they can succeed in the courses they choose.

### NHS AP Courses:

- |                               |                            |                       |
|-------------------------------|----------------------------|-----------------------|
| » AP Literature & Composition | » AP Biology               | » AP Psychology       |
| » AP Statistics               | » AP Micro Economics       | » AP German 4 and 5   |
| » AP Calculus                 | » AP Macro Economics       | » AP French 4 and 5   |
| » AP Chemistry                | » AP U.S. Gov’t & Politics | » AP Spanish Language |
| » AP Physics (1)              | » AP United States History |                       |
| » AP Environmental Science    | » AP World History         |                       |

**Earning college credit:** It is up to each college/university to determine if college credit and/or advanced course placement will be awarded. A score of 3 or higher on an AP exam can potentially earn students college credit and/or placement into advanced courses in college, at the discretion of the postsecondary institution the student chooses to attend. More information about the AP program is available at: [www.collegeboard.com](http://www.collegeboard.com)

## CONCURRENT ENROLLMENT COURSES

In partnership with Minnesota State University - Mankato, this is a dual enrollment program in which students who successfully complete a course receive college and high school credit. University or college credit is awarded to students who successfully meet the standards of both the high school and college course. Courses are taught on campus at NHS by NHS teachers who partner with a Mankato instructor.

### NHS Concurrent Enrollment Courses in 2022-23:

- » Comp 101
- » Public Speaking
- » World Language Courses at upper levels

**Earning college credit:** Students receive both high school and college credit for these classes. The course grade will appear on both the high school and college transcripts. The student’s postsecondary institution ultimately determines how PSEO credits will be accepted/acknowledged/accounted for.

## SENIOR HONORS PROGRAM

Through an agreement with St. Olaf College and Carleton College, Northfield High School seniors have the opportunity to enroll in lower-level college courses at no cost to the student.

- » Each college has a specific application process. Application forms are available through the Counseling Office to students in late spring of their junior year. During the summer, students will be informed of the college’s decision and given instructions on how to register for classes.

**Earning college credit:** Students who intend to use a Senior Honors course to meet a specific graduation requirement should check with their counselor in advance to ensure that the class is applicable. Administrative approval is required prior to the start of these courses. Students receive both high school and college credit for these classes. The course grade will appear on both the high school and college transcripts. Whether or not that credit can be transferred to a student’s postsecondary institution is up to that institution.

## COLLEGE LEVEL EXAM PROGRAM (CLEP)

The College-Level Examination Program (CLEP) gives students the opportunity to receive college credit by earning qualifying scores on a variety of examinations. More information is available at: [www.collegeboard.org](http://www.collegeboard.org)

## OTHER NHS POTENTIAL DUAL CREDIT COURSES

TORCH students may be potential candidates for this, and TORCH coordinators will initiate the process with students.

## POSTSECONDARY ENROLLMENT OPTIONS (PSEO)

The following is language found on the MN Department of Education website. The most up to date information can be found here: <https://education.mn.gov/MDE/fam/dual/pseo/>

Postsecondary Enrollment Options (PSEO) is a program that allows 10th-, 11th- and 12th-grade students to earn both high school and college credit while still in high school, through enrollment in and successful completion of college nonsectarian courses at eligible participating postsecondary institutions. Most PSEO courses are offered on the campus of the postsecondary institution; some courses are offered online. Each participating college or university sets its own admissions requirements for enrollment into the PSEO courses. Eleventh and 12th-grade students may take PSEO courses on a full- or part-time basis; 10th graders are eligible to enroll in PSEO on a more limited basis (see note below). Students must meet the PSEO residency and eligibility requirements and abide by participation limits specified in Minnesota Statutes, section 124D.09. If a school district determines a pupil is not on track to graduate, she/he may continue to participate in PSEO on a term by term basis.

By March 1 of each year, or three weeks prior to the date a student registers for courses for the following school year, schools must provide PSEO information to all students in grades 8-11 and their families. To assist the district in planning, a student must inform the district by May 30 of each year of their intent to enroll in postsecondary courses during the following school year.

There is no charge to PSEO students for tuition, books or fees for items that are required to participate in a course; however, students may incur fees for equipment that becomes their property when the course or program is completed, textbooks that are not returned to the postsecondary institution according to their policies, or for tuition costs if they do not notify the district by May 30 and the district does not waive this date requirement.

Funds are available to help pay transportation expenses for qualifying students to participate in PSEO courses on college campuses. For more information on these funds, access the PSEO Mileage Reimbursement Program Instructions.

Enrolling in a PSEO course does not prohibit a student from participating in activities sponsored by the high school.

School districts must allow a PSEO student reasonable access to the high school building, computers and/or other technology resources during regular school hours to participate in PSEO courses, whether on-line or on campus.

Each year, districts must publish their grade-weighting policy on their website, including a list of courses for which students can earn weighted grades.

All courses taken through the PSEO program must meet graduation requirements. Districts must transcript credits earned in PSEO by a ratio prescribed in statute. Districts have the authority to decide which subject area and standards the PSEO course meets. If there is a dispute between the district and the student regarding the number of credits granted for a particular course, the student may appeal the board's decision to the commissioner. The commissioner's decision regarding the number of credits will be final.

Postsecondary institutions are required to allow PSEO students to enroll in online courses consistent with the institution's policy regarding postsecondary student enrollment in online courses.

# GRADUATION REQUIRED COURSES

➤ ARTS

➤ ENGLISH

➤ MATH

➤ PHYSICAL EDUCATION AND HEALTH

➤ SCIENCE

➤ SOCIAL STUDIES



Dual Credit Opportunity




ARTS

1.0 Arts credit required for graduation. Course descriptions for all courses listed below can be found in the Areas of Interest section of this guide (page 35).



ACADEMIC DEPARTMENT	COURSE TITLE	CREDITS
Art	Art Foundation	0.5
Art	Drawing & Painting I	0.5
Art	Drawing & Painting II	0.5
Art	Clay – Potter’s Wheel I	0.5
Art	Clay – Potter’s Wheel II	0.5
Art	Clay - Potter’s Wheel III	0.5
Art	Sculpture	0.5
Art	Watercolor Painting I	0.5
Art	Watercolor Painting II	0.5
Art	Graphic Design & Illustration	0.5
Art	Art Exploration	0.5
Art	Filmmaking	0.5
Art	Printmaking	0.5
Art	Honors Art	0.5

ACADEMIC DEPARTMENT	COURSE TITLE	CREDITS
Music	Concert Band	1
Music	Symphony Orchestra	1
Music	Philharmonia Orchestra	1
Music	Cantabile	1
Music	RaiderKor	1
Music	Concert Choir	1
Music	Uno Vox	1
Music	Symphonic Band	1
Music	Music Theory	0.5

 Look for this symbol in the Areas of Interest section to identify courses that earn credit toward Arts requirements.

ENGLISH

8TH GRADE COURSE	9TH GRADE COURSE	10TH GRADE COURSE	11TH GRADE COURSE	12TH GRADE COURSE
English 8	English 9	American Literature 10	English 11	<b>Two .5 Courses</b> Comp 101 (1.0 credit) Public Speaking (.75) Senior Writing Senior Literature World Mythology Creative Writing
	Advanced English 9	Advanced Am Lit 10	Advanced English 11	AP Lit and Comp

4.0 credits required for graduation.

ENGLISH 9

Grade: 9  
Length / Credits: 1 year / 1 credit

DESCRIPTION:

English 9 is a yearlong survey course that explores classic fiction, memoir & non-fiction, the theme “I Believe” and drama. English 9 introduces skills for creative, research, and expository writing both informally and formally throughout the year. Elements of literature and composition learned in English 9 serve as a foundation for all English courses taught at Northfield High School in grades 10–12.

ADVANCED ENGLISH 9

Grade: 9  
Length / Credits: 1 year / 1 credit

PREREQUISITES AND SELECTION:

- » Minimum average grade of “A-” in English the previous year.
- » Completion of an application form.

DESCRIPTION:

This course is intended to challenge 9th graders who possess outstanding language arts skills. In addition to the regular English 9 curriculum, this course will offer advanced instruction in literary analysis and writing for a variety of audiences and purposes.

EL EXPLORING ENGLISH: LANGUAGE/CULTURE

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit

DESCRIPTION:

This course is designed for students whose primary language is not English. It focuses on students’ development of listening, speaking, reading and writing skills at the developing level of language proficiency. Students will read a variety of texts and genres. Students will expand on writing simple and complex

sentences in present and past tense to compose essays and research papers. Students will orally share opinions and will write and present speeches to the class. Students will receive native language (Spanish) support when applicable.

AMERICAN LITERATURE 10

Grade: 10  
Length / Credits: 1 year / 1 credit

DESCRIPTION:

The primary goal is to focus on language as the students become more adept at critical questioning skills and more effective writers and readers of American Literature. Novels to be read include: The Crucible, The Great Gatsby, two book club novels, plus additional independent reading projects, essays, introduction to writing research papers, learning effective research skills, short stories, poetry and non-fiction.

ADVANCED AMERICAN LITERATURE 10

Grade: 10  
Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » If in Advanced English 9: minimum average grade of B and placement by student’s Advanced English 9 teacher.
- » If not in Advanced English 9, minimum average grade of A- from the previous year. Student must also submit a reading/ writing portfolio and application form.

DESCRIPTION:

This course will incorporate several contemporary and classic novels from American Literature, require the development of a research project, and literary analysis. Novels may include The Scarlet Letter, The Adventures of Huckleberry Finn, The Awakening, The Great Gatsby, The House on Mango Street, The Crucible, and a contemporary Native American novel. There will be a variety of short stories and essays that will

GRADUATION REQUIRED COURSES

supplement this list of novels, including introduction to writing research papers and learning effective research skills.

EL NONFICTION ENGLISH

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
This course is designed for students whose primary language is not English. It focuses on students’ development of listening, speaking, reading and writing skills at the entering and beginning levels of language proficiency. Students read a variety of informational articles and short texts to develop comprehension in English. Students learn to write simple and compound sentences in present and past tense to write paragraphs and will also learn basic English grammar. Students also expand their ability to communicate orally in English. Students will receive native language (Spanish) support when applicable.

ENGLISH 11

Grade: 11  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
In English 11 students work to master the Minnesota English Language Arts benchmarks for reading, writing, speaking, listening, media literacy, and language. Students will study classic and contemporary literature balanced with nonfiction- the major focus is 21st century skill development including critical thinking, communication, collaboration, and creativity. Students examine and compose various types of writing including literary analysis, timed writing, personal essays, research writing, and essays of definition. The students will also deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online and printed information.

ADVANCED ENGLISH 11

Grade: 11  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» If in Advanced American Lit 10: minimum average grade of B and recommendation of Advanced Am Lit 10 teacher.  
» If a student was in American Lit 10 or enrolls from another school, student must have a minimum GPA of 2.8 and at least a B in previous Language Arts course. In addition, students will complete an application form.  
» This course is a concurrent enrollment course through MSU Mankato. Receiving college credit is determined by student applying, being accepted to, and fulfilling grade requirements as part of Mankato’s PSEO program.

**DESCRIPTION:**  
This course is designed to expand students’ knowledge of the human condition and human cultures, especially in relation

to behavior, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature, philosophy, and the fine arts, students will engage in critical analysis, form aesthetic judgments, and develop an appreciation of the arts and humanities as fundamental to the health and survival of any society. Students should have experiences in both the arts and humanities. This is a reading and writing intensive course and will prepare students for future college-level English courses. \*Students will receive information about how to register with MSU before spring semester begins.

★ Dual credit opportunity

ADVANCED PLACEMENT LITERATURE & COMPOSITION

Grade: 12  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
AP Literature and Composition is a college-level course that emphasizes the College Board curriculum framework of close reading and analysis skills across a wide variety of literature. Students will read extensively and write analytical, reflective, and evaluative essays. Literature from a wide range of time periods, genres, and authors are covered and students will be asked to carefully consider each text in its historical and artistic context. Critical reading, advanced writing, academic research, timed writing, and thoughtful discussion skills will be emphasized throughout the course. The structure and content of the course prepares students who may wish to take the advanced placement exam in the spring to be considered for advanced standing and/or college credit at the discretion of the college or university they will attend. Registered students must complete a summer reading assignment.

★ Dual credit opportunity

COMP 101

Grade: 12  
Length / Credits: 1 semester / 1.0 high school credit

**PREREQUISITES:**  
» This course is a concurrent enrollment course through MSU Mankato. Receiving college credit is determined by student applying, being accepted to, and fulfilling grade requirements as part of Mankato’s PSEO program.  
» Rank in the top 50% of your high school class OR;  
» You have a cumulative GPA of at least 3.0 (on a 4.0 scale) OR;  
» You achieve a 21 of higher composite score on the ACT exam (with satisfactory GPA)

**DESCRIPTION:**  
Students in this course may earn college credit through MN State Mankato by passing this class with at least a C-. Similar

to our College Prep course, this course includes curriculum covered in a freshman level English course at Mankato. The main focus of this course is to develop, utilize and analyze a clear and personal writing process while also keeping an electronic portfolio of work. Intensive focus and practice with revision skills, peer review process, and student reflection will drive all work in this class. Grades will focus more on the process of writing than on the final draft. To do this work, students will read texts to support their development as a writer. Students will write a variety of compositions including: Literacy Narrative, Rhetorical Analysis, Research Proposal, and Theory of Writing. Students will also have the opportunity to complete their college application essay in this class. The course will also include in-class essays as well as vocabulary and grammar development.

★ Dual credit opportunity

PUBLIC SPEAKING

Grades: 11, 12  
Length / Credits: 1 semester / .75 high school credit

**PREREQUISITES:**  
» English 11 is required for juniors. This class may be taken in addition to English 11, but my NOT replace English 11.  
» This course is a concurrent enrollment course through MSU Mankato. Receiving college credit is determined by student applying, being accepted to, and fulfilling grade requirements as part of Mankato’s PSEO program.

**DESCRIPTION:**  
Students in this course may earn college credit through MN State Mankato by passing this class with at least a C-. This course is designed to help develop your speaking and communication skills. The following is a list of topics that will be explored: speech composition, speech organization, speech preparation, speech delivery, speech evaluation, giving and receiving critical feedback, audience analysis, and style of language.

★ Dual credit opportunity

SENIOR WRITING

Grade: 12  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
This course offers seniors the opportunity to further develop the writing process and product for fiction, creative nonfiction, and nonfiction writing. In addition, students will respond to other writing through independent reading selections during the semester. This is a writing course for students who will study in any type of postsecondary setting. Students will work on written communication skills in such units as the

GRADUATION REQUIRED COURSES

college application/scholarship essay (creative nonfiction), the character sketch, short stories, short dramatic scenes, film analysis, career writing and more Plan on brushing up on sentence construction, grammar, mechanics, and appropriate word choice. Regardless of your future studies or career path, you will leave this course with a greater awareness of and confidence in your role as a writer of many genres.

SENIOR LITERATURE

Grades: 12  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
Senior Literature is a capstone literature course: a culmination of the reading skills and applications from previous years. Novels will be read and studied mostly through small groups/ book clubs. Students will practice active-independent reading strategies, and they will be expected to speak, write, and create based on their reading. Core skills to be taught include reader response, review writing, compare-contrast, interpretive reading, and literary discussion. Students will engage with film and technology to create projects based on novels. There are no pre-requisites for the course. This is a reading-intensive course and students must be prepared for substantial out-of-class reading.

CREATIVE WRITING (NEW)

Grades: 11, 12  
Length / Credits: 1 semester / .5 credit

**PREREQUISITES:**  
» English 11 is required for juniors. This class may be taken in addition to English 11, but my NOT replace English 11.

**DESCRIPTION:**  
This one-semester course will allow students to explore their creativity through writing. The curriculum includes assignments such as a dream journal, personal narratives, 1st and 3rd person short stories, science fiction, and children’s literature. The class will utilize a writer’s workshop model.

WORLD MYTHOLOGY

Grade: 12  
Length / Credits: 1 semester / .5 credit

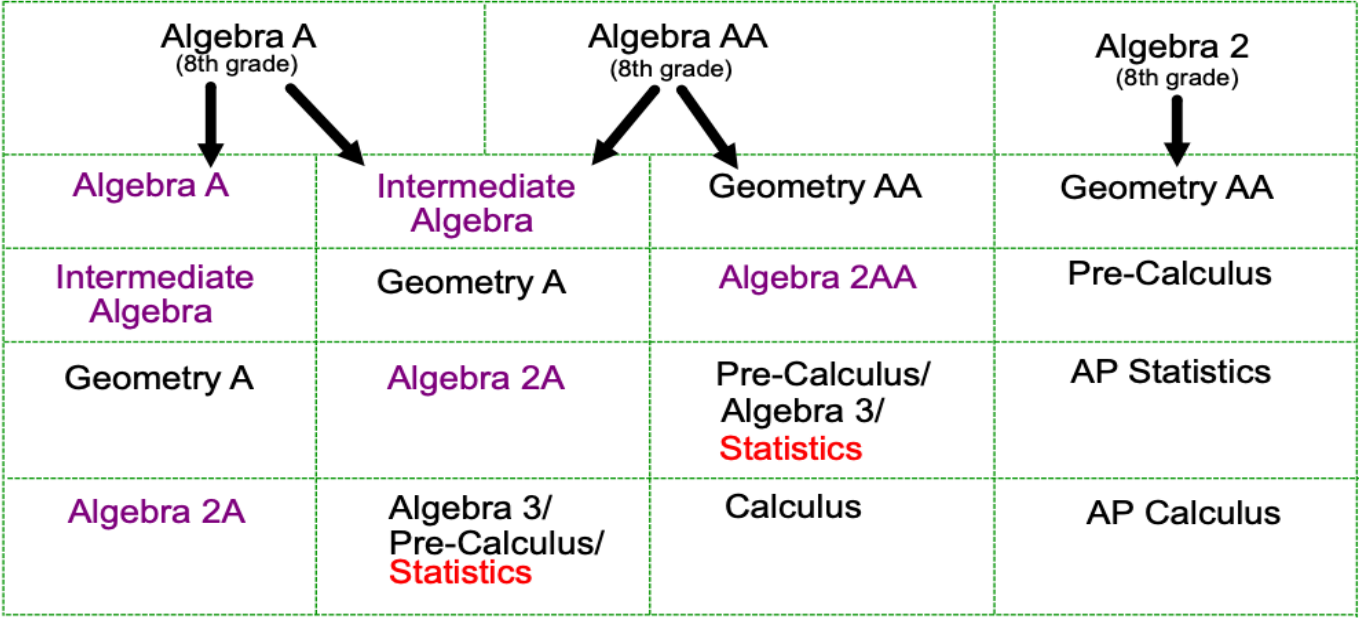
**DESCRIPTION:**  
This one-semester course will provide an opportunity for seniors to read and interact with the literature of world mythology. The course will look at the mythology of cultures throughout the world and history including Greek, Norse, Egyptian, African, and many others, and how they impact our world today. The study of creation stories as well as the hero’s journey will also be a key component of the course. The course is intended for students who may or may not be college bound, but want to develop reading, writing, speaking, and critical thinking skills.



MATH

Math course requests and course placement are verified and overseen by the Math Department!

These are the most frequently used progressions through the High School Mathematics curriculum.



3 credits required for graduation

4 credits recommended for many four-year colleges (including completion of Algebra IIAA or Algebra IIA)

Honors Algebra II is offered. Student placement in this course is by application and teacher recommendation. Students must maintain at least a B+ average to remain in this course.

CALCULATORS FOR MATH CLASSES

Texas Instruments calculators are recommended, preferably a TI-83, TI-84, or Nspire CX (NOT the C.A.S. system.)

TI-89 and TI-92 models or any other calculator with a C.A.S. system will NOT be allowed for use in class. Other brands are allowed, but our curriculum is designed for Texas Instruments products. All Math classrooms at Northfield High School have TI Nspire calculators available for student use.

ALGEBRA A

Grade: 9  
Length / Credit: 1 year / 1 credit

PREREQUISITES:

- » Algebra A in 8th grade
- » MCA is at or below 839 or grade of C or below in Middle School Algebra

DESCRIPTION:

This course is designed to solidify students' Algebra I skills and begin Algebra II state standards. Topics include linear functions

and inequalities, quadratic functions, exponents and radicals, polynomial operations and systems of equations.

INTERMEDIATE ALGEBRA

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Intermediate Algebra, Algebra AA (8th grade), or Algebra A (8th grade), or MCA score is equal or greater than 840 and a C+ grade or higher in previous math course, or math teacher recommendation.

DESCRIPTION:

Topics include equations, inequalities, exponents, radicals, linear, quadratic, absolute value functions, and polynomial functions. We explore these concepts using real world applications.

GEOMETRY AA

Grade: 9, 10  
Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Students in 8th grade who earned a B or above throughout Algebra AA AND a MCA score equal or greater than 850.

DESCRIPTION:

Geometry AA is an accelerated class designed for the student who wishes to further their mathematical ability and is planning to take an AP math course during high school. Algebra topics will be reviewed, and geometry topics will include: basics of geometry, geometric proofs, triangle similarity and congruence, right triangle trigonometry, polygons, volume and surface area, and properties of circles.

GEOMETRY A

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Completion of Intermediate Algebra, or the recommendation of the previous math teacher.

DESCRIPTION:

Our Geometry course will integrate traditional and coordinate approaches with applications. Algebra is applied throughout. Additional topics include computer-based explorations of 2-D and 3-D figures, three dimensional geometry, real world applications and modeling. A study of probability and statistics will be included in preparation for the MCA and ACT tests.

ALGEBRA II A

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Successful completion of Intermediate Algebra. It is also recommended that students take Geometry before taking this course.

DESCRIPTION:

Curriculum will build on topics covered in Intermediate Algebra; additionally, trigonometry, transformations, exponential functions, logarithmic functions, rational functions and probability and statistics will be introduced.

HONORS ALGEBRA II

*This course only available by application.*

Grade: 10, 11  
Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » A in Algebra AA and Geometry plus the recommendation of previous teacher.

DESCRIPTION:

This course covers the same materials as Algebra II, but moves at a faster pace, studies the topics in greater depth, and includes some additional topics.

ALGEBRA II AA

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » B or better in Geometry, or the recommendation of previous teacher

DESCRIPTION:

This course will further develop a student's algebraic skills. Topics will include first degree equations and inequalities, systems of equations and inequalities, quadratics, transformations, logarithms, continued work with polynomials, and an introduction to trigonometry.

ALGEBRA III

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» Algebra II A or Algebra II AA

**DESCRIPTION:**  
Students will develop their understanding with topics of trigonometry (right triangles, circular functions, graphs, composite angles, and identities) mathematical modeling, transformations of graphs, conics, sequences and series, solving linear, quadratic, and cubic equations, graphing linear, quadratic, and cubic equations, function notation in a variety of situations, use computers/graphing calculators as a tool for the understanding of mathematical concepts. This course is designed to be a bridge between Algebra II and Pre-Calculus. It is intended to be taken by students who received less than a B in Algebra II and plan to take Pre-Calculus in High School or any Mathematics courses in college.

PRE-CALCULUS

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» B or better in Algebra II A or Algebra II AA, or recommendation of previous teacher.

**DESCRIPTION:**  
Students will work to have mastery with the topics of trigonometry (right triangles, circular functions, graphs, composite angles, and identities) mathematical modeling, transformations of graphs, conics, sequences and series, solving linear, quadratic, and cubic equations, graphing linear, quadratic, and cubic equations, function notation in a variety of situations, use computers/graphing calculators as a tool for the understanding of mathematical concepts.

CALCULUS

Grade: 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» C+ or better in Pre-Calculus and a recommendation from a previous teacher.

**DESCRIPTION:**  
This course is designed for students who desire some exposure to Calculus topics without the rigor of the AP curriculum. The course begins with a review of Pre-Calculus topics needed for Calculus including: Algebraic manipulation, functions (polynomial, circular, exponential, logarithmic, trigonometric) and related topics (domain, range, period, and composition). Topics to be studied will include limits, differential calculus (definition of the derivative, rules for computing derivatives and applications of derivatives). We will explore Integral Calculus as time permits. Students will NOT be prepared to take any Advanced Placement Calculus exam in May. Graphing calculator required.

ADVANCED PLACEMENT STATISTICS

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» B+ or better in Pre-Calculus and a recommendation from a previous teacher.

**DESCRIPTION:**  
This is a non-calculus based statistics course which will introduce students to the major concepts and tools for collecting, analyzing, and drawing inferences from data. Extensive use will be made of computers and the graphing calculator and several projects will be given. AP Stats prepares students for the Advanced Placement exam, a qualifying score on which may allow them to be considered for advanced standing and/or credit at the discretion of the college or university they will attend. Topics include: graphical and numerical techniques to observe patterns and departures from patterns in data, how to plan studies and decide what to measure and how to do it, probability distributions, and statistical inferences.

★ Dual credit opportunity

STATISTICS (NEW)

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» C or better in Algebra II A or Algebra II AA

**DESCRIPTION:**  
This is a non-calculus based statistics course which will introduce students to the major concepts and tolls for collecting, analyzing, and drawing inferences from data. This course will not require the use of a graphing calculator. Topics include: graphical and numerical techniques to observe patterns and departures from patterns in data, how to plan studies and decide what to measure and how to do it, probability distributions, and statistical inferences. Students will not be prepared to take the Advanced Placmement Statistics Exam in May.

ADVANCED PLACEMENT CALCULUS (AB)

Grade: 12  
Length / Credit: 1 year / 1 credit

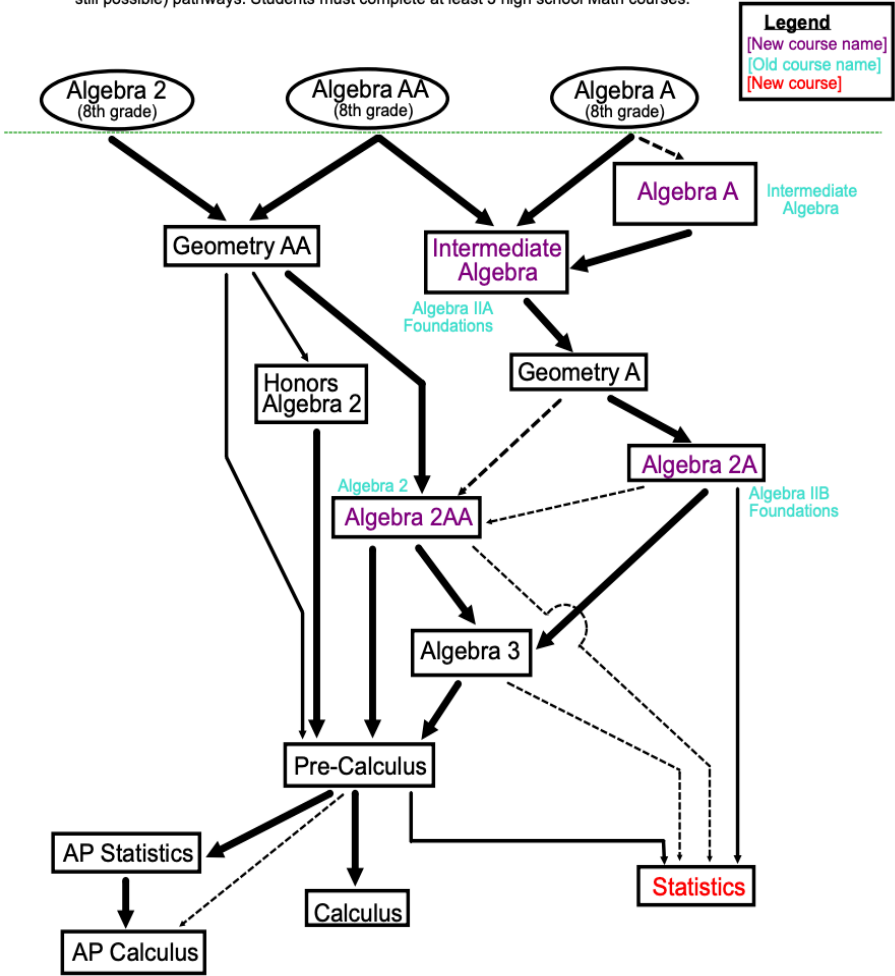
**PREREQUISITES:**  
» B+ or better in Pre-Calculus and a recommendation from a previous teacher.

**DESCRIPTION:**  
A review of functions (polynomial, circular, exponential/ logarithmic) and topics related to them (domain, range, period, composition, and limits) will begin the year, followed by the study of calculus. Topics to be studied will include differential calculus: definition of the derivative, rules for computing derivatives, (1) polynomial, trigonometric, inverse trigonometric, exponential and logarithmic functions, (2) composite functions, (3) implicitly defined functions; applications of the derivative, and integral calculus: antiderivatives, applications of antiderivatives, techniques of integration, definite integrals, and applications of integrals. Students will be prepared to take the A/B Advanced Placement exam in May. Students have the option to do extra preparation for B/C Exam. Graphing calculator required.

★ Dual credit opportunity

High School Math Progression Chart

(rev 1/6/2023)  
Bolder, solid arrows indicate the usual progression. Smaller, dashed arrows indicate less usual (but still possible) pathways. Students must complete at least 3 high school Math courses.





# PHYSICAL EDUCATION AND HEALTH

1.0 PE credit required for graduation and .5 Health credit required for graduation.



## FOUNDATIONS OF PHYSICAL EDUCATION

Grade: 9 or 10  
Length / Credits: 1 semester / .5 credit  
*All students are required to take one semester of Foundations of PE.*

**DESCRIPTION:**  
Foundations of physical education will provide physical activity everyday while emphasizing competence in basic movement skills and promoting social development. Foundations of PE allows students to assess their overall physical health, create personal SMART goals, and work toward those goals while engaging in daily physical activities. Foundations of PE students will gain knowledge and access information to make responsible, healthy choices for lifelong physical health. Activities will include but are not limited to: archery, dance, nitroball, ultimate frisbee, volleyball, and weightlifting.

## HEALTH

Grade: 10  
Length / Credits: 1 semester / .5 credit  
*Required for all students in 10th grade.*

**DESCRIPTION:**  
The course is designed to make the student more aware of how decisions affect their overall quality of health and life. Students will demonstrate the ability to use interpersonal communication to enhance health. Topic areas include: decision making skills; goal setting, mental health/emotional health - including anger management, depression/suicide prevention, disordered eating, and stress management; chemical health - including types of drugs, drug effects, and drug refusal skills demonstration; basic adult CPR/AED; human sexuality - including anatomy, pregnancy prevention, and sexually transmitted infections/diseases; and nutrition.

## ELECTIVES

All students are required to take one semester of PE from the selection of courses below after a successful completion of PE 9/ Foundations of PE.

## CORE STRENGTH & FUNCTIONAL TRAINING

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit

**PREREQUISITES:**  
» Successful completion of PE 9/Foundations of PE

**DESCRIPTION:**  
This course is designed for students interested in building core (abdominal) strength and balance. Performance testing and goal setting will be part of the course and instruction will include human anatomy and exercise training principles. Students will participate in a variety of activities including upper body and core strength training, balance training, pillars, medicine ball training, and plyometrics.

## MEGA-RECREATION

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit

**PREREQUISITES:**  
» Successful completion of PE 9/Foundations of PE

**DESCRIPTION:**  
This course is designed for students interested in participating in recreational/leisure sports and activities. Students will assess their personal fitness levels, set semester goals, and work toward those goals while participating in recreational/leisure sports or activities. Health-Enhancing levels of physical activity will be provided during the class. Activities may include: Archery, Badminton, Bowling, Dance, Golf, Resistance Training, Tennis, and Ultimate Frisbee.

## TEAM SPORTS

Grade: 10,11,12  
Length / Credits: 1 semester / .5 credit

**PREREQUISITES:**  
» Successful completion of PE 9/Foundations of PE

**DESCRIPTION:**  
This course is designed as an elective physical activity course for students interested in team sports. There will be equal emphasis on competitive play, sportsmanship, skill development, and individual improvement. Students will assess their personal fitness levels, set semester goals, and work towards those goals by participating in team sports at Health-Enhancing levels of physical activity. The following sports may be included: Basketball, Flag Football, Nitroball, Floor Hockey, Soccer, Speedball, Volleyball, Angleball, and Team Handball.

## WALKING FOR WELLNESS

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit

**PREREQUISITES:**  
» Successful completion of PE 9/Foundations of PE

**DESCRIPTION:**  
Walking for Wellness is designed for students that prefer low-impact, non-contact physical activity. Students will participate in daily physical activity, monitor personal wellness data, and learn about lifelong wellness in the areas of activity, nutrition, stress reduction, sleep, and overall physical health.

STRENGTH & CONDITIONING

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit

**PREREQUISITES:**  
» Successful completion of PE 9/Foundations of PE

**DESCRIPTION:**  
This course is designed to teach students the basic skills and fundamentals of strength training fitness conditioning. Instruction will include basic theories of increasing strength, power, basic anatomy, fitness conditioning, goal setting, and proper lifting techniques. Strength & Conditioning will include designing a basic workout routine, fitness assessments, and logging activities. Students will participate in lifting routines regularly in class.

LIFEGUARD CERTIFICATION & AQUATICS

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credits  
*Additional fee to obtain lifeguard certification.*

**PREREQUISITES:**  
» Successful completion of PE 9/Foundations of PE  
» Students must have successfully passed Red Cross certificate levels 5-7 or demonstrate swimming skills at the below levels.  
» Students should be able to swim the front crawl and breaststroke efficiently, and be able to swim 300 yds. continuously.

**DESCRIPTION:**  
The focus of this class will be in the certification of students in the Red Cross: Lifeguard Training and CPR/First Aid/AED use for the Professional Rescuer. Students will also develop basic skills in swimming strokes and aquatic activities.

*The Lifeguard Training & Aquatics class will be held at the Middle School. Students will be responsible to provide their own transportation to and from the Middle School.*

SCIENCE

8TH GRADE COURSE	9TH GRADE COURSE	10TH GRADE COURSE	11TH GRADE COURSE	12TH GRADE COURSE
Science 8	Science 9	Biology	Chemistry, Industrial Chemistry OR Physics (one or the other required to graduate)	Chemistry, Industrial Chemistry OR Physics (one or the other required to graduate)
	Foundations for AP Sciences (FAPS)	AP Biology	AP Chemistry	AP Physics

3.0 credits required for graduation (1.0 Biology required and 1.0 Chemistry or 1.0 Physics of any level required)

SCIENCE 9

Grade: 9  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
This course employs an exploratory, investigative, and inquiry based approach to study the major interacting components of the earth system: the earth’s interior, its rocks and soils, waters, atmosphere, and the fossilized record of the earth. The course also includes investigations of the scale and structure of the universe. Instructors will focus on the national science education content standards and Minnesota Science standards in the earth and space sciences.

FOUNDATIONS FOR ADVANCED PLACEMENT SCIENCES

Grade: 9  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
This course, which includes content in earth and space sciences, biology, chemistry, and physics, is designed to provide motivated ninth-grade science students with an academic experience that will facilitate success in the Advanced Placement science courses offered at NHS. This rigorous course will emphasize the concepts, science practices, and laboratory skills that are prerequisite for AP Science classes. The course is fast-paced, so the intended student is committed to timely completion of assigned work, as well as has the ability to learn and study independently. Strong reading, writing, and math skills will contribute to success in FAPS, as well.

BIOLOGY

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
This course is designed to introduce students to nine basic topics in life science: biochemistry, cells, genetics, molecular biology, evolution, microbiology, plants, animals, and ecology. Students will participate in a variety of laboratory experiences emphasizing the skills and content of each unit.

ADVANCED PLACEMENT BIOLOGY

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» Completion of Foundations for AP Sciences with a grade of “C” or better, or completion of Biology with a “C” or better.

**DESCRIPTION:**  
This advanced biology course is designed to cover topics typically covered in a full-year college introductory biology course and accompanying biology lab. The course will focus on the Big Ideas of information, energy, evolution, and system interactions in accordance with the College Board’s AP Biology curriculum. The course will utilize lectures, laboratories, and independent and group work to explore the field of biology. AP Biology prepares students for the Advanced Placement exam, a qualifying score on which may allow them to be considered for advanced standing and/or credit at the discretion of the college or university they will attend.

★ Dual credit opportunity

CHEMISTRY

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» Completion of Algebra 1 with a “C” or better; and completion of Chemistry 9 and Physics 9 or Foundations for AP Sciences.

**DESCRIPTION:**  
The topics of modern chemistry will be covered such as atomic structure, chemical bonding, the periodic table, chemical reactions, and stoichiometry. Nuclear chemistry and methods of analysis will also be included, and there will be an emphasis on laboratory work.

INDUSTRIAL CHEMISTRY

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
This chemistry course is designed to introduce students to fundamental chemistry concepts and explore how these concepts are used in industry. The content will cover classifications and phases of matter, atomic structures, chemical bonding, and chemical reactions, but with an emphasis on metals, ceramics, polymers, and other industrial processes. This conceptual lab based course does not cover mathematical relationships used in chemistry or academic chemistry skills essential for success in a typical college-level chemistry course.

ADVANCED PLACEMENT CHEMISTRY

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» Completion of Chemistry or Foundations for AP Sciences with a grade of “C” or better, and Advanced Algebra with a grade of “B” or better.

**DESCRIPTION:**  
Intended to be the equivalent of a year of introductory college chemistry, AP Chemistry prepares each student to take the advanced placement exam in order to be considered for advanced standing and/or credit at the discretion of the college or university which they eventually attend. Subject areas covered in AP Chemistry include atomic structure, structure of molecules, reactions (types, equilibrium, rates, thermo chemistry), descriptive chemistry, and a variety of intensive laboratory experiences.

★ Dual credit opportunity

PHYSICS

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» Completion of Algebra 1 with a grade of “C” or better and successful completion of Chemistry 9 and Physics 9 or Foundations for AP Sciences.

**DESCRIPTION:**  
This course is designed for students who wish to learn how physics is important in understanding the phenomena that are present in our everyday experience. This conceptual approach, through activities, demonstrations and experiments, will cover the major topics in physics: mechanics, properties of matter, energy, thermodynamics, sound, light, optics, electricity, and magnetism.

ADVANCED PLACEMENT PHYSICS (AP PHYSICS 1)

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» Completion of Advanced Algebra and Geometry with a grade of “B” or better.  
» Completion of Physics 9 or FAPS with a grade of “C” or better.  
» Completion of Biology and/or Chemistry or FAPS with grades of “C” or better.

**DESCRIPTION:**  
AP Physics is a college level, algebra and trigonometry based physics course. The course provides a conceptual and mathematical foundation for understanding the physical nature of the universe through lectures, discussions, demonstrations, laboratory investigations and problem solving activities. Topics include: mechanics, energy, fluids, thermodynamics, waves (sound), light (optics), electricity, magnetism, and nuclear physics. Emphasis will be on the College Board - AP Physics 1 curriculum framework, in preparation for the examination in May which students may take to be considered for advanced standing and/or credit at the discretion of the college or university which they attend.

★ Dual credit opportunity



SOCIAL STUDIES

8TH GRADE COURSE	9TH GRADE COURSE	10TH GRADE COURSE	11TH GRADE COURSE	12TH GRADE COURSE
Geography	Early American History 9 and Civics 9	American History	World History	Economics and Global Studies
		AP United States History	AP World History	AP Micro & Macro Econ and Global Studies

3.5 credits required for graduation.

EARLY AMERICAN HISTORY 9 (1491–1877)

Grade: 9  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
This course will provide students a basic understanding of the foundations of United States history organized around 6 units of study: (1) Three Worlds Meet, (2) The English Colonies, (3) The American Revolution, (4) The Early Republic, (5) A Changing Nation and (6) The Civil War and Reconstruction, the course will introduce students to the narrative but also challenge some preconceived notions about our collective past. Students will be able to practice a number of skills that historians use on a regular basis.

CIVICS 9

Grade: 9  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
This course will provide students with basic concepts central to the study of local, state and national government, the U.S. Constitution and the Bill or Rights while instilling in students the qualities of good citizenship so important in a representative democracy. The course will also focus on current events and the social and political issues of the day.

EL EARLY AMERICAN HISTORY/CIVICS

Grade: 9 or 10  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
This course is designed for students whose primary language is not English (must qualify for EL services). EL Early American History/Civics provides an overview of the history of the United States, surveying the major events and turning points of U.S. history as it moves from America’s cultural roots through Reconstruction. This course provides students with a basic understanding of civic life, politics, and government, and a history of government’s foundation and development in this country. Students will receive native language (Spanish) support when applicable.

AMERICAN HISTORY

Grade: 10  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
The course will begin with the study of the Gilded Age and continue into the late 1980s. The units will not only cover the mainstream of social, political and economic development, but will also deal with minority history, ethnic contributions and special interest groups and issues. The approach will be chronological and will include tests, writing, audio-visual materials, projects, small-group work and simulations.

ADVANCED PLACEMENT U. S. HISTORY

Grade: 10  
Length / Credits: 1 year / 1 credit

**PREREQUISITES:**  
» Completion of a required summer assignment.

**DESCRIPTION:**  
AP U.S. History focuses on developing students’ understanding of American history from approximately 1491 to the present. The course has students investigate the content of U.S. history for significant events, individuals, developments and processes. The course prepares students to be successful on the AP U. S. History exam given in May.

★ Dual credit opportunity

EL MODERN AMERICAN HISTORY

Grade: 9 or 10  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
This course is designed for students whose primary language is not English (must qualify for EL services) and examines the history of the United States of America from 1877 to the present. Students will understand the major transformations that led to the development of modern America by examining the chronological development of the American people and government by examining the political, economic, social, religious, military, scientific, and cultural events that have affected the rise and growth of the nation. Students will receive native language (Spanish) support when applicable.

WORLD HISTORY

Grade: 11  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
World History is a required course for juniors that examines the interactions of human societies from the prehistoric era to the present. The course traces the story of mankind through six different regions including: the Middle East, Europe, Africa, the Americas, Northern Asia, and Southern Asia. Throughout each unit of study an emphasis is placed on historical thinking and writing skills used by historians. Class discussions, simulations, group activities, lectures, podcasts, textbook readings, and films are also incorporated to enhance student learning.

ADVANCED PLACEMENT WORLD HISTORY

Grade: 11  
Length / Credits: 1 year / 1 credit

**DESCRIPTION:**  
AP World History is designed to cover topics typically covered in a college introductory world history course. The course will cover world history from 1200 to the present. Students will learn using a digital text, primary source readings, and short themed videos. Class activities will include games, discussions, short projects, and argumentative writing to explore historical topics. Extensive group work is utilized. AP World History prepares students who may wish to take the AP exam in spring to be considered for advanced standing and/or credit at the discretion of the college or university they will attend.

★ Dual credit opportunity

GLOBAL STUDIES - HYBRID

Grade: 12  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
Global Studies is a required semester course for seniors designed to study world human geography, land issues, and how human living patterns and movement affect issues concerning the environment and human interactions. This course will examine outcomes using a problem-based learning approach. Students will be experiencing real world situations using current issues, trends, and technology. The hybrid model will involve a varied schedule each week of what days students will be required to report to class and days when the task or assignment may be completed in or out of class. The teacher will always be available for added support and assistance.

GLOBAL STUDIES - TRADITIONAL

Grade: 12  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
Global Studies is a required semester course for seniors designed to study world human geography, land issues, and how human living patterns and movement affect issues concerning the environment and human interactions. This course will examine outcomes using a problem-based learning approach. Students will be experiencing real world situations using current issues, trends, and technology. This traditional model will meet each instructional day on the calendar with a full class. Students who know reporting to class each day is best for them and their learning outcomes are encouraged to sign up for this method of delivery.

ECONOMICS

Grade: 12  
Length / Credits: 1 semester / .5 credit

**DESCRIPTION:**  
Economics is a required semester course for seniors. Students will be introduced to “the study of choice” by exploring major microeconomic, macroeconomic, and personal finance principles. Possible questions to explore may include: Why do people make the choices they do? What is the most efficient way for an economy to be structured? How are prices found within an economy? What is money and where does it come from? Such topics will be covered through lecture, film, simulations, independent and group projects, and possible guest speakers.

ADVANCED PLACEMENT MICRO & MACRO ECONOMICS

Grade: 12  
Length / Credits: 1 year / 1.0 credit

**DESCRIPTION:**  
AP Economics is a yearlong hybrid course consisting of AP Microeconomics (fall) and AP Macroeconomics (spring). Students must register for and complete both semesters to meet required state standards for economics. Students may choose to take one, both, or neither AP exam(s) to potentially earn college credit. As a hybrid class, each day students may be meeting in class, working together in the school building, or working independently outside of class. The structure and schedule of each class day is at the teacher’s discretion. In microeconomics, students will study economic decisions made by individuals and businesses, scarcity, the advantages of trade, economic systems, supply and demand, profit maximization, market structures, and more. In macroeconomics, students will study our economy as a whole, the business cycle, economic performance indicators, aggregate supply and demand, fiscal and monetary policy, international trade, and more. Topics will be covered through lecture, simulations, film, textbook readings, independent and group projects, and possible guest speakers.

★ Dual credit opportunity



# WORLD LANGUAGES

## WORLD LANGUAGES

### HERITAGE SPANISH 1: SPANISH FOR SPANISH SPEAKERS

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit

#### PREREQUISITE:

» Spanish Speaker

#### DESCRIPTION:

Do you want to keep up your Spanish language skills and improve them? Do you want to learn how to connect the valuable bilingual skills you have with employment opportunities? This course is conducted entirely in Spanish for any and all native Spanish speakers who would like to strengthen their reading, writing, and grammar skills in Spanish - helping them become truly bilingual. This will be done in many ways - including the use of text, film, television shows, other media, cultural experiences and activities. This course will be interactive and activity-based. Improving these Spanish skills will also improve acquisition of academic English. The class is for World Language credit and it can be a stand-alone class or a launching point for taking other Spanish classes (in consultation with the instructor).

### SPANISH 1, FRENCH 1, GERMAN 1

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit

#### DESCRIPTION:

Students will learn to communicate in their chosen language. Students will engage with other students to speak, read, write and understand a new language. No prior knowledge is necessary. Come join us for an adventure! Successful completion of level 1 (C or higher) will allow students to progress to level 2.

### HERITAGE SPANISH 2/3: SPANISH FOR SPANISH SPEAKERS

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

#### PREREQUISITE:

» Successful completion of Heritage Spanish 1, or recommended by instructor

#### DESCRIPTION:

Heritage Spanish 2,3 is intended to continue to strengthen a heritage learner's reading, writing and grammar skills, helping them to become truly bilingual. As in Heritage Spanish 1, this will be achieved in many ways including the use of text, film, television shows, other media, cultural experiences and activities. In class we will be exploring and experiencing literature through group and individual work. This course will be interactive and activity based. Improving these Spanish skills will also improve acquisition of academic English.

### SPANISH 2, FRENCH 2, GERMAN 2

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit

#### PREREQUISITES:

» Students who do not pass the previous semester with a C or above may be removed from the class.

#### DESCRIPTION:

Students will learn to express themselves in their chosen language using the present and past tenses. We will explore language and culture through thematic units, such as Personal Interests, Daily Routine, Food, Vacations, Shopping, and Celebrations. Fun activities are designed to engage multiple learning styles.



Dual Credit Opportunity

SPANISH 3, FRENCH 3, GERMAN 3

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » Students who do not pass the previous semester with a C or above may be removed from the class.
  - » French 3 second semester is concurrent enrollment French 102 with Minnesota State-Mankato.

**DESCRIPTION:**  
In addition to exploring new themes, students will expand on thematic content learned in levels one and two. Because grammatical concepts vary in the level of difficulty within each language, the individual languages will choose grammatical concepts appropriate for this level. This would include a variety of tenses, moods, and advanced grammatical concepts.

Spanish at the High School has two tracks; regular and for those who have been in the District’s immersion program. Those students who have been in the immersion program are expected to continue in the immersion course offerings.

SPANISH 3 PLUS IMMERSION

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » Student must have completed Spanish I and Spanish II through the Amistades program with C average or higher or by teacher recommendation and/or student application. Student is required to speak Spanish.

**DESCRIPTION:**  
Students will hone their spoken and written communication skills by applying the grammar that they have acquired thus far through guided and spontaneous activities. An exploration of thematic units such as, Daily Life, Health/Well being, Travel, Nature, Science/Technology, and Economy/Work will engage all learning styles and promote competency. This class will be taught almost exclusively in Spanish.

SPANISH 4

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » Minimum B average in the level III course. Students who do not pass the previous semester with a C or above may be removed from the class.

**DESCRIPTION:**  
Students will expand on thematic content learned in previous levels. The following are also areas addressed across the languages: history and geography, literature/and the arts, media and current events, and travel, grammatical concepts appropriate for this level. This would include a variety of tenses, moods, and advanced grammatical concepts.

★ *Dual credit opportunity: MN State Mankato concurrent enrollment*

SPANISH 4 PLUS IMMERSION

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » Completed III + Immersion with a B average or higher or by teacher recommendation and/or student application. Student is required to speak Spanish. Students must pass each semester in order to advance to the next semester.

**DESCRIPTION:**  
Students will expand on thematic content learned in levels one, two, and three. In addition, the following are areas addressed across the languages: literature, media and current events, and travel.

SPANISH 5

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » Students must pass each semester in order to advance to the next semester. To advance to level V the student must have at least a B average in the level IV/IV+ course.

**DESCRIPTION:**  
Students will expand on thematic content learned in previous levels. In addition, the following are areas addressed: history and geography, literature/and the arts, media and current events, and travel.

AP FRENCH LANGUAGE AND CULTURE 4, AP GERMAN LANGUAGE AND CULTURE 4

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » Students must pass each semester in order to advance to the next semester. Student must have completed III level.
  - » French 4 first semester is concurrent enrollment French 201 with Minnesota State-Mankato.

**DESCRIPTION:**  
Students will hone their spoken and written communication skills as they engage in an exploration of culture in both contemporary and historical contexts. The course develops students’ awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). The course is taught almost exclusively in the target language.

★ *Dual credit opportunity: MN State Mankato concurrent enrollment*

AP SPANISH LANGUAGE AND CULTURE

Grade: 11, 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » Students must have completed Spanish IV or Spanish IV + Immersion with a B average or higher. All instruction and coursework will be done in Spanish. Students must pass each semester in order to advance to the next semester.

**DESCRIPTION:**  
AP Spanish Language is intended for students who wish to develop proficiency and integrate their language skills using authentic materials and sources. Students will prepare to demonstrate their level of Spanish proficiency across three communicative modes:

- » Interpersonal (simulated conversation, email correspondence)
- » Interpretive (comprehension of audio fragments and text)
- » Presentational (spoken cultural comparison and written persuasive essay)
- » The class is conducted almost exclusively in the target language and geared toward all students taking the AP exam in the spring.

★ *Dual credit opportunity*

AP SPANISH LITERATURE AND CULTURE

Grade: 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » All students must have completed Spanish IV+, V or AP Spanish Language with an average of a B+ or higher. All instruction of the course will be done in Spanish. Students must pass each semester in order to advance to the next semester.

**DESCRIPTION:**  
The AP Spanish Literature and Culture course is designed to introduce students to the formal study of a representative body of literature—written in Spanish—from Spain, Latin America and the United States. The course provides students with ongoing and varied opportunities to develop proficiency in Spanish across a full range of skills, with emphasis on critical reading and analytical writing. It also encourages students to reflect on the many voices and cultures included in a rich and diverse body of literature written in Spanish.

★ *Dual credit opportunity*

AP FRENCH LANGUAGE AND CULTURE 5, AP GERMAN LANGUAGE AND CULTURE 5

Grade: 12  
Length / Credits: 1 year / 1 credit

- PREREQUISITES:**
- » Students must have completed level IV. Students must pass each semester in order to advance to the next semester.

**DESCRIPTION:**  
Students will continue to hone their spoken and written communication skills as they engage in an exploration of culture in both contemporary and historical contexts. The course is taught almost exclusively in the target language. Topics for levels 4 and 5 are on a two-year rotation so that students will not repeat content if they take both courses.

★ *Dual credit opportunity*

WORLD LANGUAGES

CONVERSATION COURSES A and B  
SPANISH OR GERMAN

Grade: 10, 11, 12  
Length / Credits: Each course, A or B, can be taken for 1 Semester for .5 credit, or take both for a full year!

**PREREQUISITE:**  
Spanish or German 1 and 2

**DESCRIPTION:**  
Do you want to travel to a Spanish or German-speaking country to test your language skills in real situations? Here is a chance for you to gain and practice language skills that will help you speak your chosen language with more fluency. Topics are different each semester, so you can take it for one or two semesters. This is a stand-alone class and does not take the place of any other course in the traditional sequence. You can take it at any point after you meet the prerequisites, or even if you have taken a break from taking language classes. Or are you interested in emphasizing your language study? Take it alongside a course with a written component!

CONVERSATION COURSE A (Politics, Art and Music)

- Spanish Conversation A
- German Conversation A

CONVERSATION COURSE B (Food, Sports and Film)

- Spanish Conversation B
- German Conversation B

FRENCH FILM (NEW)

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit

**PREREQUISITE:**  
French 1

**DESCRIPTION:**  
This course will use entertaining movies to help us develop our French listening, speaking, writing and reading skills. 6 award winning films will be used in this semester long course three comedies and three dramas.

FRENCH CONVERSATION (NEW)

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit

**PREREQUISITE:**  
French 2

**DESCRIPTION:**  
Speaking a language is viewed as an essential task in world language study. In this class speaking will be the focus where we discuss our weekend and the coming week, Sports, Entertainment, News and Current events and discuss a French fictional tv series about high schoolers in Nice, France.

AREAS OF  
INTEREST

- > ARTS & COMMUNICATION
- > BUSINESS & ENTREPRENEURSHIP
- > DESIGN ENGINEERING
- > HEALTH SCIENCES
- > HUMAN SERVICES
- > SCIENCE & TECHNOLOGY



Can be used as a prerequisite



Earn credit towards Arts graduation requirement



Dual Credit Opportunity



May be substituted for course in fulfilling graduation requirements

AREAS OF INTEREST

In a continuing effort to prepare all students to be career and college ready, we encourage all students to explore their interest areas. Arts requirement and elective courses are organized into six areas of interest:

ARTS & COMMUNICATION	BUSINESS & ENTREPRENEURSHIP	DESIGN ENGINEERING
Performance Production and Management Media Production and Recording Publishing and Online Media Creative Design	Accounting and Finance Entrepreneurship and Business Management Hospitality and Restaurant Management Marketing and Sales	Architecture and Construction Manufacturing and Fabrication Technologies Engineering and Design Transportation Technologies
HEALTH SCIENCES	HUMAN SERVICES	SCIENCE & TECHNOLOGY
Biomedical Public Health Exercise Science Healthcare	Teaching and Educational Services Law and Legal Services Public Service and Leadership Social and Mental Health Services	Electrical Systems Information Technology Solutions Computer Science Green Energy and Innovative Technologies

The next pages in the guide outline the variety of courses from which students can select. NHS is proud of the level of choice we offer, and we want to help students and families discover the types of courses students may want to pursue in the postsecondary school or plan of their choice and how they relate to future career paths. Courses required for graduation may fit into a number of diffrent career pathways.

OVERVIEW OF THE AREAS OF INTEREST

ARTS & COMMUNICATION

Performance Production and Management / Media  
Production and Recording / Publishing and Online Media /  
Creative Design

Arts & Communication fosters creativity, innovation, and expression to support students to become well-rounded individuals who can apply their skills in a number of fields. Career fields include the performing arts, visual arts, design, communications, and publishing.

RELATED CAREERS:

Art Directors, Curator, Stage Manager, Museum and Exhibit Manager, Director, Performer (Musician, Actor), Music Directors and Composers, Audio and Video Technician, Sound Engineer, Producers and Directors, Editors, Writers and Authors, Public Relations and Fundraising Manager, News and Print Media, Journalist, Multimedia Artists and Animators, Interior Designers, Artist and Art Marketer, Graphic Designers

BUSINESS & ENTREPRENEURSHIP

Accounting and Finance / Entrepreneurship and Business Management / Hospitality and Restaurant Management / Marketing and Sales

Business & Entrepreneurship offers students industry-relevant experiences that will allow them to explore business practices, ideas and products that impact local, state, national, and the global economy. Career fields include marketing, sales, finance, hospitality and tourism, management, and entrepreneurship.

RELATED CAREERS:

Accountant, Bookkeeper, Actuary, Insurance Underwriters, Loan Officer, Financial Planner, Tax Preparer, Venture Capitalist, Small Business Owner, Entrepreneur, Business Analysts, Office Manager, Supply Chain Manager, Hotel Management, Event Planner, Tour Operator, Food and Beverage Manager, Executive Chef, Sous Chef, Restaurant Owner, Market Research Analysts, Recruiters, Social Media Marketing Manager, Sale Representatives & Retail Managers, Fundraiser, Media Buyer

AREAS OF INTEREST

DESIGN ENGINEERING

Architecture and Construction / Manufacturing and Fabrication Technologies / Engineering and Design / Transportation Technologies

Design Engineering is a high-tech, high-skill, high-demand area that will help students gain hands-on training to prepare for a variety of jobs. Career fields include manufacturing, robotics, transportation, design, electronics, architecture, construction, and engineering.

RELATED CAREERS:

Aircraft Mechanic, Aeronautic Engineer, Architect, Building Engineer, Civil Engineer, CNC Machinist, Computer Control Programmer/Operator, Design Electrical Engineer, Engineer, Electrician, Entrepreneur, HVAC Controller, Industrial Engineer, Machinists, Manufacturing Mechanical Engineer, Process Engineer, Packaging Engineer, Process Engineer, Robot Technician, Quality Engineer, Structural Engineer, Tool and Die Maker, Welder

HEALTH SCIENCES

Biomedical / Public Health / Exercise Science / Healthcare

A Health Science education will provide students with the knowledge and skills to pursue a variety of positions within this high-demand career area. Health Science fields include biomedical science, exercise science, health and wellness, nutrition, and healthcare fields.

RELATED CAREERS:

Medical Appliance Technician, Medical and Clinical Lab Technologist, Surgical Technologist, Medical Imaging Technologist, Biomedical Engineer, Forensic Science Technician, Dietetic Technician, Dietitian and Nutritionist, Community Health Worker, Massage Therapist, Fitness Trainer and Aerobics Instructor, Athletic Trainer, Recreational Therapist, Physical Therapist, Occupational Therapist, Massage Therapist, Exercise Physiologist, Pharmacy Technician, Medical Assistant, Healthcare Social Worker, Physician, Physician Assistant, Licensed and Practical Nurse, Respiratory Therapist, Dentistry, Ophthalmology, Surgical and Medical Technician

HUMAN SERVICES

Teaching and Educational Services / Law and Legal Services / Public Service and Leadership / Social and Mental Health Services

Skills students gain in Human Services can be applied across all academic disciplines. Human Services courses encourage students to look beyond themselves to serve others. Career fields include human development, psychology, education legal fields, law enforcement, and public services.

RELATED CAREERS:

Early Childhood Educator, K-12 Teacher, Administrator, Educational Paraprofessional, Training and Development Manager/Supervisor, Police and Sheriff’s Patrol Officers, Correctional Officers and Jailers, Attorney, Court Reporters, Paralegal and Legal Assistants, Government Service, Labor Relations Specialist, Firefighter, Military Service, Non-Governmental Organization, Lobbyist, Social and Human Service Assistant, Mental Health Counselors, Health Educators, Clinical, Counseling, and School Psychologist

SCIENCE & TECHNOLOGY

Electrical Systems / Information Technology Solutions / Computer Science / Green Energy and Innovative Technologies

Science & Technology supports students to be critical thinkers and leaders across a number of dynamic industries that rely on scientific and technical skills. The education will reflect the modern needs of employers and prepare students to successfully use skills that will contribute to the betterment of the community. Career fields include investigative science, math, applied science & technology, and computer science.

RELATED CAREERS:

Electrician, Electrical Engineer, Electronics Technician, Electrical Power-Line Installers and Repairers, Power Plant Technician and Operator, Electrical Systems Designer and Drafter, Network and Computer Systems Administrators, Computer Network Architects, Computer Hardware Engineer, Computer Hardware Technician and Repairer, Computer Research Scientist, Software Developer, Computer Systems Analyst, Computer and Information Systems, Computer Programmers, Information Security Analysts, Database Administrators, Natural Sciences Managers, Environmental Engineer, Green Technology and Alternative Energy Designer, Geoscientist & Conservation Scientists, Mining and Geological Engineer



ARTS & COMMUNICATION

Performance Production and Management / Media Production and Recording / Publishing and Online Media / Creative Design

Arts & Communication fosters creativity, innovation, and expression to support students to become well-rounded individuals who can apply their skills in a number of fields. Career fields include the performing arts, visual arts, design, communications, and publishing.

RELATED CAREERS:



Art Directors	Performer (Musician, Actor)	Editors	Journalist
Curator	Music Directors and Composers	Writers and Authors	Multimedia Artists and Animators
Stage Manager	Audio and Video Technician	Public Relations and Fundraising Manager	Interior Designers
Museum and Exhibit Manager	Sound Engineer		Artist and Art Marketer
Director	Producers and Directors	News and Print Media	Graphic Designers

INTRODUCTORY

ART FOUNDATION

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

**DESCRIPTION:**  
Art Foundation is the prerequisite (required course) for all other art classes in the NHS Art Department. For the students, this important first art class instills a wide variety of creative skills and a basic understanding of art vocabulary. Students will learn new artistic techniques through the use of various materials and assignments, as well as grow artistically through repetition and practice. In this course, students of all ability levels will learn to expand their technical skills, develop their ability to SEE the world through their own artistic eyes, and build a useful awareness of composition and color theory. General artistic knowledge, observational drawing (contour drawing and shading), and painting skills are emphasized.

-  This course can earn passing students .5 credit towards Arts graduation requirements.
-  This course can be used as a prerequisite for Honors Art.



MODERN MEDIA MASHUP

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credits  
Academic Department: Design Engineering

**DESCRIPTION:**  
This is a foundational media design course. Students will explore the social, political, cultural, historic, and business impacts of modern media in society. Students will learn about and practice responsible digital citizenship using social media applications and platforms while building skills in photography, video, graphics, podcasting, blog, and website development. Students will create, edit, organize, and publish digital media. They will also practice critique and receive feedback from peers as they apply communication, creative thinking, and critical thinking skills.

3D ANIMATION

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**DESCRIPTION:**  
This course explores the world of animation used in games, videos and movies. Students will learn to use Autodesk 3Ds Max to create and assemble virtual worlds and animate them. As students move through units of study they will dig deep into the many possible applications for 3D Animation. Students will explore not only the fun and games side of this technology but also the practical side that helps users and their audience understand the world around them more fully with realistic modeling of systems, architecture, and more.

CREATIVE CAMERA

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**DESCRIPTION:**  
This foundational photo and video digital camera course will introduce students to the fundamentals of using cameras. They will learn to make strong compositions, control for different lighting conditions and settings. Students will use traditional DSLR, digital video, and their own mobile cameras to produce digital images. Students will be introduced to the power of post processing using Adobe Lightroom, Photoshop, and Premier Pro image editing software to resolve and finish their images.




# AREAS OF INTEREST

## RAIDERKOR

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Music

- PREREQUISITES:**
- » None! This is an ensemble for singers of all ability levels. RaiderKor is open to all interested high school bass/tenor voices wishing to learn more about music, singing, and procedures of the NHS Choral Department. Students are expected to commit to RaiderKor for the entire year.

**DESCRIPTION:**  
RaiderKor performs in all four major performances during the year: Fall Concert, Traditions, Choral Classics, and Spring Finale. Additionally, the choir attends bass/tenor festivals as the opportunity arises. Rehearsal time is spent on developing vocal independence, basic choral techniques, musical concepts and development of music literacy (how to read music). Rehearsal time will also be spent on aspects of music listening, appreciation and theory. Choir members attend voice lessons and sectional rehearsals each semester.


 For passing students, this course fulfills the Arts graduation requirements.

## CANTABILE (CAHN-TAH-BEE-LEH)

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Music

- PREREQUISITES:**
- » None! Cantabile is open to all interested treble voices wishing to learn more about music, singing, and procedures of the NHS Choral Department. Students are expected to commit to Cantabile for the entire year.

**DESCRIPTION:**  
Cantabile performs in all four major performances during the year: Fall Concert, Traditions, Choral Classics, and Spring Finale. Rehearsal time is spent on developing vocal independence, basic choral techniques, musical concepts and development of music literacy (how to read music). Rehearsal time will also be spent on aspects of music listening, appreciation and theory. Choir members attend voice lessons and sectional rehearsals each semester.

 For passing students, this course fulfills the Arts graduation requirements.


## INTERMEDIATE


### ART EXPLORATION

Grade: 9 (2nd semester only after Art Foundation), 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

- PREREQUISITES:**
- » Art Foundation

**DESCRIPTION:**  
Here’s your chance to draw, work with color and use a variety of materials! In this class we will experiment with ways of using drawing to illustrate our ideas and develop some style! This course will begin by expanding on students’ knowledge of color in the world around them and help students use drawing and color media to create unique works of art. This is primarily a DRAWING class, and a variety of materials will be used including pen, blending markers, colored pencil, pastel pencils and charcoal; however students will also use paint including watercolor, gouache and acrylic to enhance their drawings. This class is FUN and will include projects that will increase student creativity and problem solving skills.

 This course can earn passing students .5 credit towards Arts graduation requirements.


 This course can be used as a prerequisite for Honors Art.


### SCULPTURE

Grade: 9 (2nd semester only after Art Foundation), 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

- PREREQUISITES:**
- » Art Foundation

**DESCRIPTION:**  
If you like to work with your hands to BUILD this class is for you! Sculpture is an artistic form in which materials are worked into 3-dimensional art objects. In our world we see sculptural designs that are freestanding, relief on walls, and even large scale public art. This course introduces the student to the contemporary sculpture, places where they see sculpture in the world around them, and to variety of materials and processes. We will develop clay handbuilding skills with techniques such as coil and slab construction and relief surface designs. Other 3D media exploration may include wire, cardboard, plaster, wood, and/or found materials. With each assignment, students will have an opportunity to express themselves and expand their 3D art making abilities.

 This course can earn passing students .5 credit towards Arts graduation requirements.


 This course can be used as a prerequisite for Honors Art.


## CLAY – THE POTTER’S WHEEL I

Grade: 9 (2nd semester only after Art Foundation), 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

- PREREQUISITES:**
- » Art Foundation

**DESCRIPTION:**  
This first ceramic course teaches students how to make clay pots on the potter’s wheel. Students will create everyday functional forms such as bowls, mugs, plates, vases, and jars. Clay objects will be decorated with a variety of surface techniques. Students will also be introduced to a number of glazes that produce different surface effects. Leaving this class, students will understand 3-dimensional artmaking through the creation of work that embodies their own personal ideas and passions. Students will have a treasured collection of pottery when they leave this class that can be used and displayed for a lifetime.

 This course can earn passing students .5 credit towards Arts graduation requirements.


 This course can be used as a prerequisite for Honors Art.


## CLAY – THE POTTER’S WHEEL II

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

- PREREQUISITES:**
- » Art Foundation
  - » Clay - Potter’s Wheel I

**DESCRIPTION:**  
This class is designed for students who have loved Clay - Potter’s Wheel I and who would value the opportunity to further develop their pottery making abilities. The class curriculum will teach the following: advanced potter’s wheel techniques, unique pottery forms (such as teapots, pitchers, and lidded jars), and exploration of additional glazes and surface decorating techniques.

 This course can earn passing students .5 credit towards Arts graduation requirements.

 This course can be used as a prerequisite for Honors Art.


# AREAS OF INTEREST


## CLAY – THE POTTER’S WHEEL III (NEW)

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

- PREREQUISITES:**
- » Art Foundation
  - » Clay - Potter’s Wheel I and Clay - Potter’s Wheel II

**DESCRIPTION:**  
This course will offer students a deeper dive into their understanding of clay as a creative material by expanding their technical knowledge and their ability to discuss and analyze works with greater academic fluency. Students will continue to create and grow their body of work while still making both functional and sculptural pieces. Complex handbuilding and wheel throwing skills will be necessary as students begin to investigate and incorporate more personal styles and perspectives in their work. Students will continue experimenting and perfecting their use of textures, mid-range glazes, underglaze and other decorative approaches. The curriculum could be co-created with students and we will examine current work and trends in the greater Ceramics community.

 This course can earn passing students .5 credit towards Arts graduation requirements.


 This course can be used as a prerequisite for Honors Art.


## GRAPHIC DESIGN AND ILLUSTRATION

Grade: 9 (2nd semester only after Art Foundation), 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

- PREREQUISITES:**
- » Art Foundation

**DESCRIPTION:**  
This graphic design and hand drawing class is designed to teach students how to visually communicate ideas using illustration tools such as cameras and Adobe Photoshop. In this class, students will keep a hand-drawn sketchbook as well as use traditional art materials and Adobe® Photoshop to create innovative artwork that expands their ideas and potential as designers and illustrators in a digital age. Key units include typography, logos and branding, photo editing and montage, illustration and packaging design.

 This course can earn passing students .5 credit towards Arts graduation requirements.

 This course can be used as a prerequisite for Honors Art.





# AREAS OF INTEREST

## DRAWING AND PAINTING I

Grade: 9 (2nd semester only after Art Foundation), 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

**PREREQUISITES:**  
» Art Foundation

**DESCRIPTION:**  
This course is open to NHS students who have previously taken Art Foundation. A wide variety of choices in drawing and painting will be introduced. Materials used include plaster casting, graphite pencil, charcoal, pastel, acrylic, and mixed media. The advanced curriculum builds critical skills that can be used to begin to make individual artistic decisions. Students will engage in a high-level of creative production and exciting group discussions about art. Some of the course assignments include: a large black-ink doodle drawing, a realistic animal portrait shaded with pencil, a music-inspired acrylic painting and a final landscape painting on canvas. You will leave this class with a large collection of art to enjoy and increased confidence as an artist.



-  This course can earn passing students .5 credit towards Arts graduation requirements.
-  This course can be used as a prerequisite for Honors Art.

## DRAWING AND PAINTING II

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

**PREREQUISITES:**  
» Art Foundation and Drawing and Painting I

**DESCRIPTION:**  
The Drawing and Painting II course offers advanced instruction in 2-dimensional artistic processes and is open to NHS students who have previously taken Art Foundation and Drawing and Painting I. Students will explore contemporary techniques in drawing using ballpoint pen, white charcoal pencils and other drawing materials. New painting techniques will be explored using acrylic paint and mixed media and students will work on a variety of surfaces, like canvas and wood and possibly even tackle a group project to improve the school. A final mini-series will be created using a media chosen by the student. Participants are expected to perform at a higher level and use artistic language to respond to works of art through class critique and discussion.



-  This course can earn passing students .5 credit towards Arts graduation requirements.
-  This course can be used as a prerequisite for Honors Art.

## FILMMAKING

Grade: 9 (2nd semester only after Art Foundation), 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

**PREREQUISITES:**  
» Art Foundation

**DESCRIPTION:**  
This course will approach working with the moving image from an artistic point of view and allow students to creatively explore the world of video and sound through the lens of a DSLR camera. Students will learn about relevant artists and film genres; learn how to use filmmaking to communicate and express his/her ideas and refine their work by editing and adding after-effects in post production using Adobe Premiere Pro. Students will create 4 films: an experimental film, a public service announcement, a documentary, and a silent narrative. Students must be willing to film outside of class time and the course will culminate with a student film festival in the NHS auditorium.

-  This course can earn passing students .5 credit towards Arts graduation requirements.
-  This course can be used as a prerequisite for Honors Art.

## EMPOWERED MEDIA MAKER

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**PREREQUISITES:**  
» Modern Media Mashup **OR** Creative Camera with a B or better



**DESCRIPTION:**  
This media design course builds on the foundation courses Modern Media Mashup and Creative Camera. Students will expand their knowledge and skill using a variety of media such as photography, video, graphics, podcasting, vlogs, and websites. Students will create, edit, organize, and publish digital media. They will also work in editorial teams and practice critique as they apply communication, creative thinking, and critical thinking skills.

## PRINTMAKING

Grade: 9 (2nd semester only after Art Foundation), 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

**PREREQUISITES:**  
» Art Foundation

**DESCRIPTION:**  
Don't let the name of this class intimidate you because Printmaking is Amazing! Printmaking is a class that is perfect for artists of all abilities and backgrounds. In Printmaking you will learn multiple ways to create works of art and you will be able to make endless original copies of your work. Think of Printmaking as an artist-powered copy machine. Some printmaking methods are more like drawing, some are like painting and some involve carving or scratching onto surfaces like wood, linoleum or plexi-glass. You will learn techniques called Monoprinting, Intaglio, Relief Carving, Chine Collé and many more. Plan to learn a new way of making art almost every week! The possibilities for creating in Printmaking are literally endless and this will be a very important part of your artistic education. Don't miss out on a class that you will love.



-  This course can earn passing students .5 credit towards Arts graduation requirements.
-  This course can be used as a prerequisite for Honors Art.

## WATERCOLOR PAINTING I

Grade: 9 (2nd semester only after Art Foundation), 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

**PREREQUISITES:**  
» Art Foundation

**DESCRIPTION:**  
Watercolor painting is some of the best art therapy around. Painting with watercolor helps you to slow down, relax and focus as an artist in order to improve overall skills of observation and visual communication. Watercolor will focus on color theory, innovative painting techniques, texture studies, and mixed media approaches. The course will offer students the opportunity to learn new ways of working with the watercolor painting medium, explore personal ideas and discover new details about art history. This course will provide an environment centered around enhancing individual painting skills and developing skills for creative problem solving.

-  This course can earn passing students .5 credit towards Arts graduation requirements.
-  This course can be used as a prerequisite for Honors Art.



# AREAS OF INTEREST

## WATERCOLOR PAINTING II

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

**PREREQUISITES:**  
» Art Foundation & Watercolor Painting I


**DESCRIPTION:**  
Have you taken Watercolor I already? Did you love the peace-filled classroom environment? Did you love the way that you could get lost in your paintings every day? Did you love the work that you created and are you ready to keep dipping your toes into the creative pool? If so, then you should sign up for Watercolor II. Watercolor II will continue to dive into working with watercolor paint as the primary medium in your artwork but students will be given a greater level of freedom and exciting opportunities to grow connections between working with watercolors and a variety of other mediums. Please bring the watercolor paint set that you received in Watercolor I with you to this class.

-  This course can earn passing students .5 credit towards Arts graduation requirements.
-  This course can be used as a prerequisite for Honors Art.

## MUSIC THEORY

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Music

**DESCRIPTION:**  
Music theory is the study of the fundamental building blocks of music including: pitch, rhythm, notation, melody, harmony, time signatures, key signatures, dictation and composition. Although there are no prerequisites for the class, it is not recommended for students should who have no experience with reading music while singing or playing an instrument.

-  This course can earn passing students .5 credit towards Arts graduation requirements.

AREAS OF INTEREST

UNO VOX


Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Music

**PREREQUISITES:**

» As an upper level music class, Uno Vox members have typically participated in Cantabile first. Singers are selected through consent of the instrctor after a Voice Listening (scheduled w/ Mr. Eastman). Consideration is given to tone quality, sight-reading, intonation and prior vocal experience. Students in Uno Vox should have basic music literacy skills (notes, dynamics, rhythms, articulations, etc.) and be able to demonstrate that fluently. Uno Vox rehearses daily. Students are expected to commit to Uno Vox for the entire year.

**DESCRIPTION:**

Uno Vox will sing two (SA) to four part (SSAA) music representing various styles and periods of music, both accompanied and unaccompanied. Rehearsal time is spent on developing vocal independence, basic & advanced choral techniques, musical concepts and music literacy. Rehearsal time will also be spent on aspects of music listening, appreciation and music theory. Choir members attend voice lessons and sectional rehearsals each semester. Uno Vox performs in all four major performances each year in addition to select festivals, conventions, and special invitations.

 For passing students, this course fulfills the Arts graduation requirements.

PHILHARMONIA ORCHESTRA


Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Music

**PREREQUISITES:**

» Open to all string players. Piano and Harp by special consent with the conductor. Students are expected to commit to the Philharmonia Orchestra for the entire year. Concerts are mandatory.

**DESCRIPTION:**

The high school Philharmonia Orchestra rehearses for one period each day and is dedicated to the development of string technique using repertoire from all periods. The emphasis in orchestra is to perform well, to enjoy making music, and to have a sense of commitment to the group. Students also study music theory, history and listening techniques during class time. Orchestra is open to all string players, either by successfully participating in orchestra during the previous school year, or by consent of the instructor.

 For passing students, this course fulfills the Arts graduation requirements.

SYMPHONIC BAND

Grade: 9, 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Music

**PREREQUISITES:**


» The Symphonic Band is open to students in grades 9–12 who have participated in band through 8th grade or have equivalent musical experience. No audition is required - basic knowledge of musical concepts and playing experience is required.

**DESCRIPTION:**

Symphonic Band rehearses daily and performs in three public concerts per year. Students will start to develop an understanding of intonation, rhythm, articulation, phrasing, and style. Students engage in a collaborative setting where they begin to build and foster their knowledge of technique on their primary instrument. Students will experience music in both a large and small ensemble setting through varied repertoire. Opportunities to engage in topics of music theory, history and musicology are included within daily rehearsals.

All band students are required to participate in rehearsals, concerts and various assigned events throughout the school year. Private instrumental music lessons will be given to each band student; students studying privately will schedule a playing check-in with the director during each grading period.

*Commitment to individual practice outside of rehearsal is vital. Opportunities for solo and ensemble performance, jazz band, pep band, tours and festival participation are available at various times. Concert and Symphonic Bands combine for community and school events including DJJD Parade, Memorial Day and Graduation.*

 For passing students, this course fulfills the Arts graduation requirement.

ADVANCED

HONORS ART

Grade: 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Art

**PREREQUISITES:**


» To be eligible for Honors Art, a student must complete Art Foundation AND a MINIMUM of four other advanced visual art courses (FIVE total) including: Drawing and Painting I & II, Clay - The Potter’s Wheel I & II, Sculpture, Watercolor I & II, Filmmaking, Art Exploration, Graphic Design and Illustration, and Printmaking before the start of the Honors Art semester. Courses taught outside of the Art Department do not count towards acceptance into Honors Art. Each student must have earned a B+ or higher in every visual art class taken prior to Honors Art in order to be considered as a candidate.

**APPLICATION PROCESS:**

» Students should register for Honors Art during the registration period in the previous school year. Registered students will be sent an application and course information approximately 1.5 months prior to the beginning of the second semester class. Students who receive an application will need to fill out all of the materials and turn them into the instructor by the date specified in order to be considered for final acceptance into the course. Late applications will not be accepted.

**DESCRIPTION:**

Honors Art provides student artists with a unique opportunity to explore individual interests and aspirations in great depth. Course participants will work individually with the instructor to develop semester-long artistic concepts that will result in a thematic body of work. Honors artists create a minimum of 8 pieces of art, a weekly artist journal, and a final artist statement. A professional gallery presentation will be the cumulative experience for artists in Honors Art. The final gallery show will be held at a local Northfield community gallery in partnership with the art department. Artists in the class will produce every aspect of the final show and they will also have the opportunity to sell their work to prospective art collectors.

 This course can earn passing students .5 credit towards the Arts graduation requirement.

AREAS OF INTEREST

CONCERT CHOIR (MIXED CHOIR)


Grade: 10, 11,12  
Length / Credits: 1 year / 1 credit  
Academic Department: Music

**PREREQUISITES:**

» Concert Choir members have typically participated in RaiderKor, Cantabile & Uno Vox, prior to membership. Singers are selected through consent of the instructor after a Voice Listening (scheduled with Mr. Eastman). Consideration is given to tone quality, sight-reading, intonation and prior vocal experience. Students in Concert Choir should have basic music literacy skills (notes, dynamics, rhythms, articulations, etc.) and be able to demonstrate that fluently. Concert Choir rehearses daily. Students are expected to commit to Concert Choir for the entire year.

**DESCRIPTION:**

Concert Choir will strive for the highest possible performance level, while performing four to eight part SATB music representing all styles and periods of music, both accompanied and unaccompanied. Rehearsal emphasis is on more advanced choral techniques, vocal independence and on advanced musical concepts. Rehearsal time will also be spent on aspects of music listening, appreciation and theory. Choir members attend voice lessons and sectional rehearsals each semester. Concert Choir Tours annually, and performs in all four major performances each year in addition to select festivals, conventions, and invitations.

 For passing students, this course fulfills the Arts graduation requirement.



CONCERT BAND


Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Music  
*Audition is required. Selection is based on playing ability and instrumentation. The Concert Band strives to challenge players to the highest possible level of ensemble performance.*

**PREREQUISITES:**  
Audition with instructor that demonstrate the following:  
**Winds** – Demonstrated ability on scales (Major/Minor/Chromatic), provided etude(s), and sight reading.  
**Percussion** – Demonstrated ability on snare, and mallets; Prepared scales, etude(s) and sight reading.  
*Concert attendance is required.*

**DESCRIPTION:**  
Concert Band rehearses daily and performs in five public concerts per year. Rehearsal emphasis is on more advanced instrumental techniques, musical independence and on advanced musical concepts. Students will experience music in both a large and small ensemble setting through challenging and varied repertoire. Opportunities to engage in topics of music theory, appreciation, history and musicology are included within daily rehearsals. Students are expected to commit to Concert Band for the entire year.

All band students are required to participate in rehearsals, concerts and various assigned events throughout the school year. Private instrumental music lessons will be given to each band student; students studying privately will schedule a playing check-in with the director during each grading period.


*Commitment to individual practice outside of rehearsal is very important. Opportunities for solo and ensemble performance, jazz band, pep band, tours and festival participation are available at various times. Concert and Symphonic Bands combine for community and school events including DJJD Parade, Memorial Day and Graduation*

 For passing students, this course fulfills the Arts graduation requirement.

SYMPHONY ORCHESTRA

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Music  
**PREREQUISITES:**  
» Audition required: Players must be able to play major scales and a solo demonstrating music reading skills.  
» Violin, Viola, Cello, Bass; possible to play Harp or Piano.  
» Students are expected to commit to Symphony Orchestra for the entire year. Concerts are mandatory.

**DESCRIPTION:**  
The high school Symphony Orchestra rehearses for one period each day. Repertoire ranges from baroque to 20th century, string orchestra and full symphony orchestra. Students study music theory, history and listening techniques during class time. The emphasis in orchestra is to perform well, to enjoy making music, and to have a sense of commitment to the group. Orchestra is open to string players in grades 10–12 by audition and consent of the instructor.

 For passing students, this course fulfills the Arts graduation requirement.

BUSINESS & ENTREPRENEURSHIP

Accounting and Finance / Entrepreneurship and Business Management  
Hospitality and Restaurant Management / Marketing and Sales  
Business & Entrepreneurship offers students industry-relevant experiences that will allow them to explore business practices, ideas and products that impact local, state, national, and the global economy. Career fields include marketing, sales, finance, hospitality and tourism, management, and entrepreneurship.

RELATED CAREERS:			
Accountant	Venture Capitalist	Event Planner	Recruiters
Bookkeeper	Small Business Owner	Tour Operator	Social Media Marketing Manager
Actuary	Entrepreneur	Food and Beverage Manager	Sale Representatives & Retail Managers
Insurance Underwriters	Business Analysts	Executive Chef	Fundraiser
Loan Officer	Office Manager	Sous Chef	Media Buyer
Financial Planner	Supply Chain Manager	Restaurant Owner	
Tax Preparer	Hotel Management	Market Research Analysts	

INTRODUCTORY- BUSINESS

**KEYBOARDING & COMPUTER APPLICATIONS**  
Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Business Education

**DESCRIPTION:**  
Master a skill you can’t do without in today’s world; the keyboard is the primary means of communication and technology input. The first quarter of this course consists of mastering the keyboard using the correct touch-typing technique and emphasizing speed and accuracy. During the second quarter of this course, students will learn the features of Microsoft Office: Word, Excel, Publisher, and PowerPoint. Students will learn how to use these programs by creating a variety of business, personal and desktop publishing documents.

**PERSONAL FINANCE**  
Grade: 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Family & Consumer Science

**DESCRIPTION:**  
This course will prepare students for life by understanding the practical skills of personal finance. Students will learn about the following: credit cards and credit scores, student and personal loans, buying a car, auto and health insurance, budgeting, preparing income taxes, finding an apartment and reading a lease, researching products before making expensive purchases, advocating for their rights as a consumer when they are not treated fairly and planning a financially responsible vacation. Students will also cover some basic skills needed for effective

communication when dealing with matters related to finances and employment.

INTRODUCTORY- CULINARY

**INTRO TO CULINARY**  
Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Family & Consumer Science

**DESCRIPTION:**  
If you would like to learn to cook basic, delicious and mostly healthy foods, come join us as we explore the fundamental cooking techniques needed to make a variety of delicious, simple, inexpensive (and mostly healthy) food. Cooking labs include: Fruit Smoothies, Chili, Omelets, Pasta Dishes, Homemade Spaghetti Sauce and Chicken Noodle Soup, Roasted Vegetables, Enchiladas and many more tasty items.

**BAKING AND PASTRIES**  
Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Family & Consumer Science

**DESCRIPTION:**  
If you are interested in learning more about baking or would like to take your baking skills to the next level, then this is the class for you. Some of our labs will include homemade quick breads, biscuits, pies, cakes, cookies and yeast breads. Kitchen, food and knife safety are a main focus of each unit.

INTERMEDIATE - BUSINESS

ACCOUNTING 1

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Business Education

**DESCRIPTION:**  
This one-semester course introduces students to the accounting. Accounting is the language of business. After completing this course, you will have an advantage when taking college accounting and you will possess some of the skills necessary for entry-level accounting and bookkeeping careers. This one-semester course introduces students to the accounting principles for a small service business including analyzing business transactions, completing journals, ledgers, worksheets, and financial statements. Students will learn the tasks for an entire accounting cycle. Accounting I is recommended for anyone who only has room for a semester elective and is thinking of a business major/minor at the 2-year or 4-year college level, interested in business finance, and/or owning their own business.

ACCOUNTING 1 AND 2

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Business Education

**DESCRIPTION:**  
Accounting is the language of business. After completing this full year course, you will have a major advantage when taking college business and accounting courses and you will possess the skills necessary for entry-level accounting and bookkeeping careers. This course is a must for all students considering majoring/minoring in business, or pursuing a degree in accounting or finance. First semester students will learn accounting principles for a small service business including journals and ledgers, worksheets, financial statements, and completing a year-end accounting cycle. Second semester focuses on corporate accounting for a business selling products and includes statements necessary for stockholders. Students are also introduced to automated accounting software.

BUSINESS FINANCE & MATH

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Business Education

**DESCRIPTION:**  
This course focuses on learning how finances work and affect business. Topics covered include the fundamentals of economics, business ownership, developing a financial business plan, finding sources of funding, financial accounting, managing payroll and inventory, and careers in business finance. Learning about investments (stocks, bonds, mutual funds) and The Stock Market Game, financial planning, and business planning will be part of the hands-on projects throughout the semester. Learning and using business math is incorporated throughout all topics within this course.

BUSINESS PRINCIPLES & MANAGEMENT

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Business Education

**DESCRIPTION:**  
This course introduces students to the activities involved in business operations. Students will develop a clear understanding of the characteristics, the organization, and the operations of business including forms of business ownership, production and marketing, financial management and human resource management. The course also teaches the practical applications of management theory. Students will be introduced to the fundamental management functions including planning, organizing, leading and controlling from multiple perspectives. A semester-long project of developing a business plan allows students a realistic application of content learned.

ADVANCED - BUSINESS

ADVANCED ACCOUNTING

Grade: 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Business Education

**PREREQUISITES:**  
» Successful completion of Accounting 1 and 2

**DESCRIPTION:**  
The major goal will be to learn advanced accounting principles and integrate software into accounting. Accounting principles used in corporate accounting will be refined, as well as payroll, departmentalized accounting, uncollectible accounts, plant assets, accrual basis and other accounting systems. Software will be used as a tool for the basic accounting procedures and also for the more refined tasks. This class is taught in an independent/seminar format, running at the same time as Accounting 1 and 2.

INTERMEDIATE - CULINARY

ADVANCED BAKING AND PASTRIES

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Family & Consumer Science

**PREREQUISITES:**  
» Pass Baking and Pastries with at least a B.

**DESCRIPTION:**  
Layer cakes, double crust pies, yeast breads, and advanced cake decorating. If you are interested in advancing your baking skills, then this is the class for you. We will focus on recipes that challenge the skills and techniques that you learned in Baking & Pastries.

INTERNATIONAL FOODS

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Family & Consumer Science

**PREREQUISITES:**  
» Pass Intro to Culinary or Baking and Pastries with at least a B.

**DESCRIPTION:**  
Would you like to take a trip around the world through food? We make complete meals from each of the countries and/or regions that we study. If you are adventurous and are looking for a different type of foods class, then this is definitely the class for you.

DESIGN ENGINEERING

Architecture and Construction / Manufacturing and Fabrication Technologies / Engineering and Design / Transportation Technologies

Design Engineering is a high-tech, high-skill, high-demand area that will help students gain hands-on training to prepare for a variety of jobs. Career fields include manufacturing, robotics, transportation, design, electronics, architecture, construction, and engineering.

RELATED CAREERS:

Aircraft Mechanic	Computer Control Programmer/	Industrial Engineer	Robot Technician
Aeronautic Engineer	Operator	Machinists	Quality Engineer
Architect	Design Electrical Engineer	Manufacturing Mechanical	Structural Engineer
Building Engineer	Engineer	Engineer	Tool and Die Maker
Civil Engineer	Electrician	Process Engineer	Welder
CNC Machinist	Entrepreneur	Packaging Engineer	
	HVAC Controller	Process Engineer	

FOUNDATION

INTRODUCTION TO DESIGN ENGINEERING

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**DESCRIPTION:**  
Students are introduced to the design process and steps to creating products using a variety of materials such as wood, steel and plastic in this foundational class. Students will be introduced to computer aided design and be able to use CAD applications to rapidly prototype ideas. Students fabricate designs in the woodshop and metal shop areas. They will learn basic safety skills, operations or machinery, and fabrication techniques

INTRODUCTORY

SMALL ENGINES

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**DESCRIPTION:**  
If you ever own a snowmobile, lawn mower or anything else with a small engine, you'll be glad you took this class! You and your lab partner will disassemble, measure, evaluate and reassemble two- and four-cycle engines. After this class you will understand the basic operating principles and know how to repair and maintain small engines. No previous experience is needed—we'll cover shop safety and use of tools and you'll be up and running in no time!

CARS 101

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**DESCRIPTION:**  
Most of us will own or lease a car someday. You don't need to be a "gearhead" to take this course—it's designed for anyone who wants to know how to purchase and then maintain a vehicle. Practical and essential automotive skills will be covered including buying and selling a vehicle, insurance, engine operation and classifications, cooling and lubrication systems, vehicle maintenance and inspection, tires and wheels, lighting systems, and washing and detailing. After this class you'll be ahead of the curve when it comes to owning and maintaining a vehicle!

DIGITAL DESIGN ENGINEERING

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**PREREQUISITE:**  
» Intro to Design Engineering w/ a C or better

**DESCRIPTION:**  
Students will build on the basic CAD (Comdesign skills from the Intro to Design Engineering class). Autodesk Inventor, and Fusion 360 will be the main applications used in this course. Developing knowledge and skill with these applications will allow students to create and output their work for use in a number of different machines such as 3D printers, laser cutters, plasma cutters, and routers - CAM (Computer Aided Manufacture).

INTRODUCTION TO ROBOTICS ENGINEERING

Grade: 9,1 0, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**PREREQUISITE:**  
» Intro to Design Engineering w/ a C or better

**DESCRIPTION:**  
In this course, students will explore the world of engineering through the study of Robotics. In this hands-on course, students will explore the relationship between mechanical, electrical, fluid power and computer systems. Students will use the Design Process along with Arduino and Raspberry Pi to create robots and other automated systems to solve real world problems. Students will use a variety of digital design (CAD) and fabrication tools (lasers, 3D printers, CNC machines) to fabricate components of their robots.

FABLAB: INTO THE WOODS

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**PREREQUISITE:**  
» Intro to Design Engineering w/ a C or better

**DESCRIPTION:**  
Students who complete the Intro to Design Engineering - Foundation course may take this course.. This course will deepen students' understanding of materials (different woods) machines needed to manipulate and work with wood as well as the skills needed to fabricate and assemble wood products. A variety of projects will be undertaken by students with an increasing degree of difficulty required for each in succession.

*Students will be responsible for the cost of the materials for their nightstand. Average cost for the project ranges from \$52 to \$100.*

FABLAB: INTRO TO METAL FABRICATION

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**PREREQUISITE:**  
» Intro to Design Engineering w/ a C or better

**DESCRIPTION:**  
Students who complete the Intro to Design Engineering - Foundation course may take this course. This course will deepen students' understanding of materials (different metals) machines needed to manipulate and work with metals as well as the skills needed to fabricate and assemble metal products.

Students will learn a basic understanding and operation of ARC and MIG welding. Students will also learn basic operation of a metal lathe and mill while fabricating parts for their projects. A variety of projects will be undertaken by students with an increasing degree of difficulty required for each in succession.

INTERMEDIATE

AUTO MECHANICS

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**PREREQUISITE:**  
» Cars 101 w/ a B or better

**DESCRIPTION:**  
The course will explore the automobile from two standpoints: the theory behind how each system works and diagnostics and repairs that go along with those systems. Students will learn about shop safety, engine theory & repair, steering and suspension system, brake system, electrical system, starting & charging system, ignition system, fuel system, transmissions, engine management and careers in the Automotive Industry.

★ *This course has been approved for up to 5 credits at Dakota County Technical College if completed with a grade of B+ or better.*

ARCHITECTURE

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

**DESCRIPTION:**  
Open to all students, this stand alone course is an opportunity to fuse architectural history with architectural design. Students will be introduced to influential architects of the past and present. They will explore history, cultural influences, styles, forms, techniques, methods, and materials used in the constructed human landscape. Students will apply this knowledge to design and create their own models and then be introduced to AutoCAD and Revit to render digital models of their designs. It is helpful if students have some prior CAD experience but it is not a prerequisite.



FABLAB: DEEPER INTO THE WOODS

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

- PREREQUISITES:**
- » Intro to Design Engineering w/ a C or better
  - » FabLab: Into the Woods with a B or better

**DESCRIPTION:**  
Expanding on the woodworking skills learned in Into the Woods, students will construct a project of their design or assigned by the instructor which uses new techniques and processes that enable the woodworker to successfully combine plywood products with solid wood products. Specific areas to be covered in the class include the safe use of power tools, new methods of wood-products fabrication (ie. CNC router), research and plan for major projects. Project options may include: desk, dresser, bookshelf, entertainment center, cabinets, etc.

*Students will be responsible for the cost of the materials for their project.*

FABLAB: ADVANCED METAL FABRICATION

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

- PREREQUISITES:**
- » Intro to Design Engineering w/ a C or better
  - » FabLab: Intro to Metal Fabrication with a B or better

**DESCRIPTION:**  
Students who complete the Intro to Design Engineering - Foundation course and Metal Fabrication may take this course. Students will design and build products out of metal. In this course students will work with digital design to plan a product and then use their plans to construct the product. Students will also learn how to take their digital designs and use them with high tech CNC Plasma and Laser technologies to complete projects. Students will complete individually designed projects as well as developing a product to be manufactured.

ADVANCED ROBOTICS ENGINEERING

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Design Engineering

- PREREQUISITES:**
- » Intro to Design Engineering w/ a C or better
  - » Intro to Robotics Engineering with a B or better

**DESCRIPTION:**  
Students will dive deeper into the world of robotics. This course is designed to further develop their robotics, digital design and digital fabrication knowledge and skills. Possible projects would include building 3D printers, robotic arms, autonomous vehicles, or home automation.

HEALTH SCIENCES

Biomedical / Public Health / Exercise Science / Healthcare

A Health Science education will provide students with the knowledge and skills to pursue a variety of positions within this high-demand career area. Health Science fields include biomedical science, exercise science, health and wellness, nutrition, and healthcare fields.

RELATED CAREERS:

Medical Appliance Technician	Dietitian and Nutritionist	Occupational Therapist	Licensed and Practical Nurse
Medical and Clinical Lab Technologist	Community Health Worker	Massage Therapist	Respiratory Therapist
Surgical Technologist	Massage Therapist	Exercise Physiologist	Dentistry
Medical Imaging Technologist	Fitness Trainer and Aerobics Instructor	Pharmacy Technician	Ophthalmology
Biomedical Engineer	Athletic Trainer	Medical Assistant	Surgical and Medical Technician
Forensic Science Technician	Recreational Therapist	Healthcare Social Worker	
Dietetic Technician	Physical Therapist	Physician	
		Physician Assistant	

INTERMEDIATE

ANATOMY, PHYSIOLOGY, AND CURRENT ISSUES IN HUMAN HEALTH

Grades: 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Science

- PREREQUISITES:**
- » Completion of Chemistry 9 and Physics 9; completion of Biology is recommended.

**DESCRIPTION:**  
This course is designed for students interested in the structures (anatomy) and functions (physiology) of the human body. An emphasis will be placed on current issues in human health; recent topics covered include addiction, Alzheimer's, cancer, health insurance, tissue and organ donation, and more. The course will utilize lectures, labs, movies, activities, readings, research, and small and large group discussions.

COMMUNITY FIRST AID AND HEALTH ISSUES

Grade: 11,12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Physical Education / Wellness

- PREREQUISITES:**
- » Health (10th Grade)

**DESCRIPTION:**  
This course is designed for students to develop mastery in CPR/AED and First Aid Skills. This course will be strictly First Aid & CPR/AED Skills for one full quarter. We will develop positive leadership skills and problem solving skills. Other health topic areas could include: aging, death and dying, health careers, consumer health and possibly worldwide environmental concerns.



SPORTS MEDICINE LOWER BODY

Grade: 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Physical Education / Wellness

**PREREQUISITES:**  
» Health (10th Grade)

**DESCRIPTION:**  
Sports Medicine Lower Body is designed for students to evaluate current health concerns in our world related to sports medicine - specific to the lower body. Emphasis will be placed on classroom discussions and student projects in the areas of lower body musculoskeletal anatomy, musculoskeletal injury, fitness, lower body diseases and disorders, and health careers. The students will also be introduced to basic information regarding medical terminology and athletic training techniques.

SPORTS MEDICINE UPPER BODY

Grade: 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Physical Education / Wellness

**PREREQUISITES:**  
» Health (10th Grade)

**DESCRIPTION:**  
Sports Medicine Upper Body is designed for students to evaluate current health concerns in our world related to sports medicine - specific to the upper body. Emphasis will be placed on classroom discussions and student projects in the areas of upper body musculoskeletal anatomy, musculoskeletal injury, fitness, upper body diseases and disorders, and health careers. The students will also be introduced to basic information regarding medical terminology and athletic training techniques.

HUMAN SERVICES

Teaching and Educational Services / Law and Legal Services / Public Service and Leadership / Social and Mental Health Services

Skills students gain in Human Services can be applied across all academic disciplines. Human Services courses encourage students to look beyond themselves to serve others. Career fields include human development, psychology, education legal fields, law enforcement, and public services.

RELATED CAREERS:

Early Childhood Educator	Correctional Officers and Jailers	Military Service	Clinical
K-12 Teacher	Attorney	Non-Governmental Organization	Counseling
Administrator	Court Reporters	Lobbyist	and School Psychologist
Educational Paraprofessional	Paralegal and Legal Assistants	Social and Human Service	
Training and Development	Government Service	Assistant	
Manager/Supervisor	Labor Relations Specialist	Mental Health Counselors	
Police and Sheriff’s Patrol Officers	Firefighter	Health Educators	

INTRODUCTORY

CHILD PSYCHOLOGY AND DEVELOPMENT

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Family & Consumer Science

**DESCRIPTION:**  
If you are interested in working with children or plan on being a parent someday, you will enjoy this class! We cover the basics of development beginning with pregnancy and investigate the physical, intellectual, social/emotional aspects of children. Students explore the reasons why children think and behave the way they do, learn about the impact of different family and parenting styles on kids, the significant role that all adults play in the lives of children and come to understand the remarkable and complex lives of children. Students have an option to take home a baby (simulated) or wear a pregnancy belly, but this is not required.

CHILD PSYCHOLOGY AND THE MIND

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Family & Consumer Science

**DESCRIPTION:**  
Students will explore the mind of the child from birth to teenage years. Students will learn about: mental health issues in children, different types of learning disabilities and genetic disorders, a variety of learning styles and intelligences (including your own), how trauma, poverty and race impact kids, and more! Students observe children and develop strategies for teaching, nurturing and better relating to kids. This class includes projects, research, independent reading, lectures, and a chance to volunteer with their favorite elementary school teacher. This class was formerly called “Child Psychology and Education”. If you have taken that class, you may not take this class again.

INTERMEDIATE

HUMAN AND FAMILY RELATIONSHIPS

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Family & Consumer Science

**DESCRIPTION:**  
If you find the way that people function in friendships, relationships and families interesting, this class is for you. Students will learn about healthy and unhealthy friendships and romantic relationships, how to create positive boundaries, how to manage conflicts, how to argue in a healthy way, different communication styles and how to get along with all types of people. Students will also learn about family systems and the roles each member in a family plays. We look at healthy and unhealthy family dynamics and how addiction and mental health issues impact families and relationships. Students will be presented with interesting readings, film clips, speakers and discussions. If you are interested in creating healthy relationships and a healthy family of your own and/or entering the fields of counseling, social work, education, medicine or any other type of human or community service field, this class will be a benefit to you.

LAW: CIVIL, CRIMINAL, & CONTRACT

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Business Education

**DESCRIPTION:**  
This course in practical law is designed for students to develop the knowledge and problem-solving skills necessary for survival in our society. Topics covered include: the study of basic legal concepts, our court systems, types of laws, rights and duties of individuals, criminal and civil law and the making of contracts. In addition, a trip to the county courthouse, guest speakers and a variety of activities will enhance a student’s legal understanding. This course attracts students interested in legal careers, business, law enforcement, and public service.

SPORTS PSYCHOLOGY, PERFORMANCE, AND LEADERSHIP

Grade: 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Wellness/Physical Education

**DESCRIPTION:**  
This course is for students interested in sports - specifically how psychological factors impact sports performance, how people acquire and develop motor skills, and how leadership impacts teams and performance. Throughout the course students will be introduced to strategies for improving sports performance and leadership.

PSYCHOLOGY

Grade: 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Social Studies  
*Students who have already completed A.P. Psychology are not eligible to take this course.*

**DESCRIPTION:**  
In this semester-long introductory course, students will be exposed to a wide variety of psychological concepts and research ranging from biological psychology, developmental psychology, social psychology, and abnormal psychology. The course will emphasize how psychological knowledge can serve a practical purpose as it is applied to everyday life. We will utilize psychological principles to become better thinkers and learners. This course is NOT a prerequisite to Advanced Placement Psychology.

IMPACT (NEW)

Grade: 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Social Studies

**DESCRIPTION:**  
This course begins with a study of exemplary worldwide community service for alienated peoples and continues with a thorough study of our community in and around Northfield and the needs therein. Guided by Stanford University’s design-thinking process, students will learn to identify real world problems, brainstorm innovative solutions, and carry out human-centered projects. A development of a service plan of action and the execution of that plan will complete the course. The course includes research, community service, literature, and a reflective action process that is student driven.

ADVANCED

AP PSYCHOLOGY

Grade: 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Social Studies

**DESCRIPTION:**  
The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice.

★ Dual credit opportunity

AP U.S. GOVERNMENT & POLITICS

Grade: 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Social Studies

**DESCRIPTION:**  
Advanced Placement (AP) Government and Politics is a semester course designed for those “political scientists” who wish to have a deeper understanding of America’s democracy. Units of study include the U.S. Constitution, civil rights and liberties, political institutions, campaigns, elections, voting and the media. Students will engage in respectful debate and discussion of the current political issues of the day.

★ Dual credit opportunity

SCIENCE & TECHNOLOGY

Electrical Systems / Information Technology Solutions / Computer Science / Green Energy and Innovative Technologies

Science & Technology supports students to be critical thinkers and leaders across a number of dynamic industries that rely on scientific and technical skills. The education will reflect the modern needs of employers and prepare students to successfully use skills that will contribute to the betterment of the community. Career fields include investigative science, math, applied science & technology, and computer science.

RELATED CAREERS:

Electrician	Electrical Systems Designer and Drafter	Computer Research Scientist	Natural Sciences Managers
Electrical Engineer		Software Developer	Environmental Engineer
Electronics Technician	Network and Computer Systems Administrators	Computer Systems Analyst	Green Technology and Alternative Energy Designer
Electrical Power-Line Installers and Repairers	Computer Network Architects	Computer and Information Systems	Geoscientist & Conservation Scientists
Power Plant Technician and Operator	Computer Hardware Engineer	Computer Programmers	Mining and Geological Engineer
	Computer Hardware Technician and Repairer	Information Security Analysts	
		Database Administrators	

INTRODUCTORY

INFORMATION TECHNOLOGY

Grade: 9, 10, 11, 12  
Length / Credits: 1 semester / .5 credit  
Academic Department: Business Education

**DESCRIPTION:**  
In this hands-on course, students will learn about computer systems, understand computer hardware, learn how to design and code web pages, games, and apps along with learning about data analytics using Excel. This course can prepare you for career pathways in technology, computer engineering, software engineering, and all areas of information technology.

Units will include:

- Web Page Development (learn html and javascript)
- App Development
- Game Design
- Hardware (disassemble and reassemble computer towers)
- Analytics (learn about advanced Excel features which allow you to analyze large amounts of data)

INTERMEDIATE

COMPUTER PROGRAMMING I

Grade: 10, 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Mathematics

**PREREQUISITES:**  
» B+ or better in Algebra 2 or teacher recommendation.

**DESCRIPTION:**  
This course is an introduction to the basic concepts of computer programming. C++ is the language that is used to develop the problem solving and logical thinking skills needed for the computer programming process. Topics covered will include: data structures, structured programming concepts, strings, arrays, structs, classes, problem solving techniques, and object oriented development.

RANDOLPH AGRICULTURE

Grade: 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Technology & Engineering

**DESCRIPTION:**  
This is a basic class for all students to help them understand agriculture's value in society and in our economy. Students will be introduced to and will study basic crop and livestock production in agriculture, agribusiness and FFA. Students will also get hands on experience with engine starting, troubleshooting, maintenance, repair and overhaul of one-cylinder and multi-cylinder engines.

RANDOLPH FORESTRY

Grade: 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Technology & Engineering

**DESCRIPTON:**  
Students will be study the following: wildlife habitat, balance of nature, identification, and tracking. Forestry concepts include identification, surveying, timber management, harvest. Conservation of Natural Resources concepts include air and water pollution.

Randolph Agriculture and Randolph Forestry take place at Randolph High School, and students must provide their own transportation. ***Both classes must be taken for the full school year and the courses can be taken in both 11th and 12th grades.***



ADVANCED

AP COMPUTER PROGRAMMING

Grade: 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Mathematics

- PREREQUISITES:**
- » Computer Programming I

**DESCRIPTION:**  
This course is intended to provide a strong background in programming/computer science. Topics covered will include: data structures, structured programming concepts, strings, arrays, classes, data abstraction, problem solving techniques, and object - oriented development. Students may elect to take the AP exam in May.

AP ENVIRONMENTAL SCIENCE

Grade: 11, 12  
Length / Credits: 1 year / 1 credit  
Academic Department: Science

- PREREQUISITES:**
- » Completion of Foundations for AP Sciences with a “C” or better, or completion of Biology and Chemistry with a “C” or better.

**DESCRIPTION:**  
AP Environmental Science is designed to be the equivalent of a one-semester introductory college course in environmental science. This course is interdisciplinary, giving students the unique opportunity to use an integrated approach while studying complex environmental topics. Students will use skills and concepts obtained in biological and physical science to address the following topics: Interdependence of Earth systems, Human Population Dynamics, Renewable and Nonrenewable Resources, Environmental Quality, Global Changes and their Consequences, Environment and Society.

 *Dual credit opportunity*

SENIOR SCIENCE SEMINAR - HYBRID

Gr: 12  
Length / Credits: 1 semester / .5 credit (2nd semester only)  
Academic Department: Science

**DESCRIPTION:**  
Senior Science Seminar is intended for seniors who will be taking science courses (both major and non-major) at a four-year college or university. Designed to mirror a college course, some days will be designated as face-to-face, in-classroom days, and others will be designated for independent work with the instructor available (similar to “office hours”). The intent of the course is to sharpen the skills that are essential for success in post-secondary science classes, as well as to explore current hot topics in all areas of science.





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PRINCIPAL  
**Shane Baier**

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