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NORTHFIELD HIGH SCHOOL

**2018–19 COURSE
REGISTRATION GUIDE**



2018–19 COURSE REGISTRATION GUIDE

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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 1,310 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 50 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, industrial technology, math, music, physical education, science, social studies, wellness and world languages (Spanish, French, German and Chinese).

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 Life of an Athlete 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 Literature
Advanced English 9
Foundations for A.P. Sciences
Honors Algebra 2
Honors Geometry
Honors Pre-Calculus

Advanced Placement Courses

Biology	Physics B
Calculus AB	Psychology
Chemistry	Spanish Language
Computer Science A	Spanish Literature
Economics (Macro/Micro)	Statistics
Environmental Science	U.S. Government & Politics
French Language	U.S. History
German Language	World History
Literature & Composition	

Advanced Placement Exams 2017

2017 Exams	Total Exams	Average Score
Biology	46	3.89
Calculus AB	17	3.71
Calculus BC	7	4.29
Chemistry	33	2.85
Economics – Micro	14	4
Economics – Macro	15	3.93
Environmental Science	12	3.42
European History	1	4
German Language	7	3.86
Literature & Composition	15	3.67
Physics 1	18	3.72
Physics 2	15	3.13
Psychology	41	3.59
Spanish Language	20	3.2
Spanish Literature	2	2.5
Statistics	41	3.85
U.S. Government & Politics	7	2.29
U.S. History	19	3.53
World History	20	3.95

ACADEMIC PERFORMANCE

ACT Average Scores

Year	Tested	English	Math	Reading	Science	Composite
2017	317	21.9	22.6	23.3	22.7	22.7
2016	298	22.3	22.8	23.3	22.6	22.9
2015	258	22.7	23.2	23.8	23.2	23.3
2014	238	23.5	24.6	24.6	24.1	24.4
2013	251	23.1	24	23.9	23.5	23.7

National Merit Recognition

Class of	Semi-Finalist	Commended	Total
2017	4	6	10
2016	3	7	10
2015	0	3	3
2014	0	5	5
2013	1	6	7

Class of 2018 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
3.33	23	50	43	30	26	23	26	16	9	17	11

CLASS OF 2017 POST-SECONDARY PLANS

GRADUATES: 299

FOUR-YEAR COLLEGE: 71%

TWO-YEAR COLLEGE: 15%

ROTARY EXCHANGE BEFORE COLLEGE: 3%

MILITARY: 3%

WORK: 4%

OTHER: 7%

Augsburg College (1)
 Augustana University (SD) (1)
 Beliot College (1)
 Bethany Lutheran College (2)
 Bethel University (2)
 Boston College (2)
 Carleton College (3)
 Carroll University (2)
 Carthage College (1)
 Central College (2)
 College of Saint Benedict (2)
 Cornell College (1)
 Creighton University (1)
 Crown College (1)
 Dakota County Technical College (9)
 Dakota State University (4)
 Dunwoody College of Technology (1)
 Grinnell College (1)
 Gustavus Adolphus College (5)
 Hamline University (1)
 Inver Hills Community College (4)
 Iowa State University (2)
 Johns Hopkins University (1)
 Kansas State University (1)
 Lake Superior College (1)
 Luther College (11)

Macalester College (4)
 Marquette University (1)
 Maryville University (1)
 Minneapolis College of Art and Design (1)
 Minneapolis Community and Technical College (1)
 Minnesota State University, Mankato (14)
 Montana State University–Bozeman (2)
 Normandale Community College (6)
 North Dakota State University (4)
 Northeast Iowa Community College (1)
 Northeastern University (1)
 Northern State University (1)
 Northland College (1)
 Riverland Community College (1)
 Rochester Community and Technical College (2)
 Saint John's University (3)
 San Diego State University (1)
 St. Ambrose University (1)
 St. Catherine University (2)
 St. Cloud State University (2)
 St. Olaf College (20)
 Trinity University (1)
 University of California , Irvine (1)
 University of Denver (1)
 University of Kansas (1)

University of Minnesota, Duluth (10)
 University of Minnesota, Twin Cities (16)
 University of Nebraska–Lincoln (1)
 University of Nebraska Omaha (1)
 University of North Dakota (5)
 University of Puget Sound (2)
 University of South Dakota (1)
 University of St. Thomas (8)
 University of Texas at Austin (1)
 University of Vermont (1)
 University of Wisconsin–Eau Claire (4)
 University of Wisconsin–La Crosse (2)
 University of Wisconsin–Madison (1)
 University of Wisconsin–River Falls (4)
 University of Wisconsin–Stout (4)
 Vermilion Community College (1)
 Western Technical College (WI) (1)
 Wheaton College (1)
 Williams College (1)
 Winona State University (12)

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

Course requests in early spring lead to schedules that are very difficult to adjust - especially when it comes to electives. 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, 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 via a Drop/Add form before the midquarter point of the semester, which is approximately four weeks into the semester. Students who have six classes and wish to drop one must also add a replacement course via a Drop/Add form 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
A- 3.667	B- 2.667	C- 1.667	D- 0.667
B+ 3.333	C+ 2.333	D+ 1.333	F 0

Under the weighted system, all A.P. course grades are weighted an additional 25% in GPA points as follows:

A 5.0	B 3.75	C 2.5
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GRADUATION REQUIREMENTS

REQUIRED CREDITS

Twenty-three credits are required in grades 9–12. Semester courses are worth 0.5 credit; year-long courses are worth 1.0 credit. 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 AND POSTSECONDARY PLANNING RESOURCES

NAVIANCE

Naviance is an online career and postsecondary planning site available to all Northfield High School students. 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 are first introduced to this program in their 9th grade Civics course. Students can log in at: <http://connection.naviance.com/northfieldsh>

Students should see one of the counselors for log-in reminders.

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/>

All student-athletes must meet initial eligibility requirements established by the NCAA Clearinghouse. These requirements include a minimum score on a standardized test and a minimum grade point average on 16 *approved** core courses in the following areas: 4 years of English, 3 years of math (Algebra 1 or higher), 2 years of natural/physical science (one must be a lab science), 1 year of additional English/math/science, 2 years of social studies, 4 years of additional core courses from any previous subject or world language. A list of approved Northfield High School courses can be found on the NCAA Clearinghouse website.

Beginning August 1, 2016, NCAA Division I requires 16 core courses to be completed prior to the seventh semester (7 of the 10 must be in English, math or science). Student-athletes must earn the ACT/SAT score matching the core course GPA on the Division I sliding scale (see website).

ACADEMIC SUPPORT

NHS INTERVENTION DESCRIPTORS

Every month, 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 over 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:

9th Grade Academy: This intervention is designed for 65-80 selected 9th grade students, and fulfills the requirements for science, social studies, and English. Students are identified for the academy based on test scores (MAP and MCA), academic performance, grade-point average, and middle school staff recommendation. The academy provides a framework of team support that delivers science, social studies, and science at normal 9th grade rigor.

Structured Study Center: This is a supported study hall that has fewer than 10 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.

Achievement Seminar: This is an intervention study seminar with fewer than 12 students designed to develop student skills such as organization, planning, prioritization, attention, focus, and motivation. Students are identified for the Achievement Seminar when they are currently in a supported study hall (SSC/TORCH) and are at risk for continuing to fail academic classes. In this seminar, 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 (MAP), 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:

Achievement Reading 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 class is split daily into two parts: continued development of basic reading skills and increased understanding of the content literacy skills needed in core classes. The goal of Achievement Reading is to improve basic reading skills and content literacy.

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 9 and 10 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.

Additional Reading Support Class

College Reading Readiness: A course offered each semester. It is part of Northfield High School's Multi-Tiered Systems of Supports (MTSS). Different materials are used each semester; this allows students, depending on their reading needs, to take either one or two semesters of the class. The goal of College Reading Readiness is to improve reading vocabulary, reading rate, reading comprehension, and writing to help better prepare students for demands of college reading and writing.

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 English so that they will be able to fully participate in all classes and subjects taught in school.

EL Service Models

Pullout EL Services: EL teachers provide small-group instruction to English Learners, based on their level of English proficiency and grade level. Though instruction occurs outside the mainstream classroom, the EL teacher consults with the classroom teacher to support the core curriculum.

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.

PROJECT LEAD THE WAY (PLTW)

These courses are a rigorous and relevant curriculum with project-based and problem-based instruction. It is designed to encourage students to pursue science, technology, engineering and mathematics (STEM) majors at the postsecondary level. Students taking these courses can earn college credit through several two and four year colleges/universities in Minnesota. Visit these websites to learn more about PLTW: www.pltw.org (national level); www.mnpltw.org (state level)

NHS PLTW Courses:

- » Introduction to Engineering and Design (IED) – (fulfills Arts requirement too)
- » Principles of Engineering (POE)
- » Civil Engineering and Architecture (CEA)

Earning college credit: Use the national PLTW website to identify partner institutions, then contact the institution to determine their particular response to PLTW courses taken in high school.

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 Statistics
- » AP Calculus
- » AP Chemistry
- » AP Physics (1 and 2)
- » AP Environmental Science
- » AP Biology
- » AP Computer Science A
- » AP Micro Economics
- » AP Macro Economics
- » AP U.S. Gov't & Politics
- » AP United States History
- » AP World History
- » AP Psychology
- » AP German 4 and 5
- » AP French 4 and 5
- » AP Spanish Language
- » AP Spanish Literature

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

POSTSECONDARY ENROLLMENT OPTIONS (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-level, 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 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 may take one career/technical PSEO course. If they earn at least a grade C in that class, they may take additional PSEO courses.
- » There is no charge to PSEO students for tuition, books or fees for items that are required to participate in a course. 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. Funds are available to help pay transportation expenses for qualifying students to participate in PSEO courses on college campuses. Schools must provide information to all students in grades 8–11 and their families by March 1 every year. Students must notify their school by May 30 if they want to participate in PSEO for the following school year. For current information about the PSEO program, visit the Minnesota Department of Education's Postsecondary Enrollment Options (PSEO) webpage.

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 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.

ARTICULATED COURSEWORK

This type of credit can be earned in courses that have agreements with a higher ed institution. A student must see the teacher/instructor for more information about how these credits are offered. (DCTC = Dakota County Technical College, Rosemount, Minnesota)

NHS Articulated Courses:

- » Auto Mechanics 1 (DCTC)
- » Keyboarding/Word Processing (DCTC)
- » Web Design (DCTC and regional)
- » 3D Animation (DCTC)
- » Accounting (DCTC)
- » Advanced Accounting (DCTC)
- » Marketing (DCTC and regional)
- » Computer Applications (DCTC)

Earning college credit: A student must consult the NHS teacher/instructor for more information about how these credits are offered.

CONCURRENT ENROLLMENT COURSES

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.

NHS Concurrent Enrollment Courses:

- » Accounting (also regionally articulated)
- » There may be more options coming for 2018-19!

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

NHS College Credit Courses:

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

GRADUATION REQUIRED COURSES

- **ART**
- **ENGLISH**
- **MATH**
- **PHYSICAL EDUCATION AND HEALTH**
- **SCIENCE**
- **SOCIAL STUDIES**

 Dual Credit Opportunity

GRADUATION REQUIRED COURSES

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 I – Foundations	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 – Sculpture	0.5
Art	Watercolor Painting I	0.5
Art	Design & Illustration	0.5
Art	Honors Art	0.5
Art	Filmmaking	0.5
Art	Watercolor Painting II	0.5
Art	Printmaking	0.5
Art	The Art of Color Design	0.5
Family & Consumer Science	Advanced Baking & Pastries	0.5
Family & Consumer Science	Design	0.5
Family & Consumer Science	Interior Design	0.5
Family & Consumer Science	Textiles & Apparel	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
Technology & Engineering	Adobe InDesign	0.5
Technology & Engineering	Adobe Illustrator	0.5
Technology & Engineering	Adobe Photoshop	0.5
Technology & Engineering	Design Production Studio	1
Technology & Engineering	Intro to Engineering & Design	1
Technology & Engineering	DIY Woods	0.5
Technology & Engineering	Woodworking II	0.5
Business Education	3D Animation	0.5

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

ENGLISH

4.0 credits required for graduation.

8TH GRADE COURSE	9TH GRADE COURSE	10TH GRADE COURSE	11TH GRADE COURSE	12TH GRADE COURSE
English 8	English 9	American Literature 10	English 11	Two .5 Courses College Prep Writing Senior Writing Senior Literature Interpersonal Communications-Speech World Mythology British Literature
	Advanced English 9	Advanced American Literature 10	Advanced British Literature	AP Literature and Composition

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.

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 Adventures of Huckleberry Finn*, *The Crucible*, *The Great Gatsby*, contemporary fiction selections, plus additional independent reading projects, essays, 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, student must have a minimum average grade of A- from the previous year. In addition, student must 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 will include *The Scarlet Letter*, *The Adventures of Huckleberry Finn*, *The Awakening*, *The Great Gatsby*, *The Bean Trees*, *The Crucible*, and *A Yellow Raft in Blue Water*. There will be a variety of short stories and essays that will supplement this list of novels.

GRADUATION REQUIRED COURSES

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 twentieth 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. At the completion of this class students will be well versed in the critical thinking, analysis, argumentation, research, and writing types required for rigorous college and career level reading and writing.

ADVANCED BRITISH LITERATURE

Grade: 11

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » If in Advanced American Lit 10: minimum average grade of B and recommendation of his/her Advanced Am Lit 10 teacher.
- » If the student was in American Lit 10 (or enrolls from another school), he/she must have a minimum average grade of A- from the previous year. In addition, the student must submit a reading/writing portfolio and complete application form.

DESCRIPTION:

This one-year course will focus on the tradition and excellence of the British literary heritage from Beowulf to the present day. We will study such works as Chaucer's *Canterbury Tales*, the King Arthur legends, Shakespeare's plays and sonnets, Charles Dickens, the English Romantic writers, and George Orwell. We will focus on writing skills and developing our ability to write for a variety of academic purposes.

ADVANCED PLACEMENT LITERATURE & COMPOSITION

Grade: 12

Length / Credits: 1 year / 1 credit

DESCRIPTION:

AP Literature and Composition is a study of literature written by male and female writers during various time periods from around the world. The literary value of each work within its respective cultural content will be subjects of close examination. Improving analytical skills in reading and writing will be the result of performing close textual readings of each work. The pace and assignments of the course are designed to imitate a college level course and prepare you for the rigorous demands placed on first-year college students. Interested students may take the AP exam in the spring to potentially earn college credit.

★ *Dual credit opportunity*

COLLEGE PREP WRITING

Grade: 12

Length / Credits: 1 semester / .5 credits

DESCRIPTION:

The overriding concern of this course is to simulate as closely as possible some of the demands that will be made on students in a college first-year English course. This is a writing intensive class that will include a college application essay, short story and novel analysis, poetry explication/analysis, literary criticism essay (focus on drama or fiction novel), problem/solution research paper - MLS Format, lab report and scientific writing, vocabulary development.

SENIOR WRITING

Grade: 12

Length / Credits: 1 semester / .5 credits

DESCRIPTION:

One quarter of this course focuses on a foundational approach to writing various types of fiction. Students in this course will develop and write poetry, short stories, and short drama. The other quarter will focus on various types of non-fiction writing common in our society today. The focus will be on blogging, personal narrative, and journalistic writing. No prerequisites. Students must be in 12th grade (or 11th grade, concurrently enrolled in English 11).

SENIOR LITERATURE

Grades: 12

Length / Credits: 1 semester / .5 credits

DESCRIPTION:

Senior Literature is intended as a capstone literature course: a culmination of the reading skills and applications from previous years. Students will read whole class, small group, and individual novels. Students will practice active-independent reading strategies, work on advanced vocabulary through literature, and 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 vocabulary. Students will engage with film and technology to create projects based on novels. There are no prerequisites for the course. This is a reading-intensive course and students must be prepared for substantial out-of-class reading.

BRITISH LITERATURE

Grades: 12

Length / Credits: 1 semester / .5 credits

DESCRIPTION:

This course surveys the best of British literature from ancient mythology to the present day. We will study such works as Chaucer's *Canterbury Tales*, the King Arthur legends, a Shakespeare play, Orwell's *1984*, and a book club choice. This course is intended for the student who wants to develop reading, writing, and critical thinking skills through reading and analysis of literature, discussion, and formal/informal writing

WORLD MYTHOLOGY

Grade: 12

Length / Credits: 1 semester / .5 credits

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 course is intended for students who may or may not be college bound, but want to develop reading, writing, speaking, and critical thinking skills.

INTERPERSONAL COMMUNICATIONS - SPEECH

Grades: 12

Length / Credits: 1 semester / .5 credits

DESCRIPTION:

Interpersonal Communications is a Language Arts elective that focuses on speech construction and organization, speech analysis, non-verbal communication skills, 21st century communication skills, and the theory and practice of public communication, including individual and group presentations. Students will write, deliver, read, and evaluate a variety of speeches over the course of the semester. This is a writing and participation-intensive course. Course goals include exposure to principles of public speaking, increasing speaking confidence, providing opportunity for student choice and interest, and developing critical thinking, writing, and evaluation skills. No prior public speaking experience required. No prerequisites. Students must be in 12th grade (or 11th grade, concurrently enrolled in English 11).

GRADUATION REQUIRED COURSES

MATH

8TH GRADE COURSE	9TH GRADE COURSE	10TH GRADE COURSE	11TH GRADE COURSE	12TH GRADE COURSE
Algebra Basics	Intermediate Algebra	Algebra II A Foundations	Geometry	Algebra II B Foundations
Algebra	Algebra II A-9 Foundations	Geometry	Algebra II B Foundations	Algebra III
	Geometry 9	Algebra II	Algebra III OR Pre-Calculus	Pre-Calculus OR Calculus OR AP Statistics OR AP Calculus OR Advanced Topics + Probability & Statistics
Algebra II	Honors Geometry	Honors Pre-Calculus	AP Statistics	AP Calculus

3 credits required for graduation (Personal Finance & Business Finance .5 Bus. options)

4 credits recommended for many four-year colleges (including completion of Algebra II)

Honors sections are offered in Algebra II, Geometry and Pre-Calculus. Student placement in these courses is by teacher only. Students must maintain at least a B+ average to remain in the honors program.

CALCULATORS

Texas Instruments calculators are recommended, preferably a TI-84 or Nspire without 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.

INTERMEDIATE ALGEBRA

Grade: 9

Length / Credit: 1 year / 1 credit

PREREQUISITES:

- » Algebra Basics 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 B

Grade: 10, 11

Length / Credit: 1 year / 1 credit

PREREQUISITES:

- » Intermediate Algebra

DESCRIPTION:

Intermediate Algebra B will review topics that deal with lines, solving equations, and addition, subtraction, and multiplication of polynomials. It will also cover topics dealing with quadratics using factoring, the quadratic formula, and graphing to solve. The topics of rational expressions and equations will also be introduced.

ALGEBRA II A-9 FOUNDATIONS

Grade: 9

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Algebra I (8th grade) or Algebra Basics (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:

This course is the first of two year-long courses to meet Algebra II state standards. Topics include equations and inequalities, functions and exponents, quadratic equations and conic sections and polynomial, rational and radical functions.

ALGEBRA II A FOUNDATIONS

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

PREREQUISITES:

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

DESCRIPTION:

This course is the first of two year-long courses to meet Algebra II state standards. Topics include equations, inequalities, exponents, radicals, linear, quadratic, absolute value functions, polynomials and polynomial functions. We explore these concepts using real world applications.

ALGEBRA II B FOUNDATIONS

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

PREREQUISITES:

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

DESCRIPTION:

This course is the second of two year-long courses to meet Algebra II state standards. Curriculum will build on topics covered in Algebra II A Foundations; additionally, trigonometry and transformations will be introduced.

GEOMETRY

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Completion of Intermediate Algebra B or Algebra II A Foundations, 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.

HONORS GEOMETRY

This course only available by teacher placement.

Grade: 9

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » 9th graders with at least a B+ in Algebra II course in the middle school and MCA score is equal or greater than 860. Placement in this course is by teacher only.

DESCRIPTION:

This course includes a comprehensive examination of geometry and a careful development of proof.

GEOMETRY 9

Grade: 9

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Students in 9th grade who earned a B or above throughout Algebra I AND a MCA score equal or greater than 850.

DESCRIPTION:

This course is designed for college bound students for whom math may be a focus. Algebra is utilized throughout the course to apply the geometric concepts.

GRADUATION REQUIRED COURSES

ALGEBRA II

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » B or better in Algebra I and 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.

HONORS ALGEBRA II

This course only available by teacher placement.

Grade: 10, 11

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » A in Algebra I and Geometry plus the recommendation of previous teacher. Placement by teacher only.

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 III

Grade: 11, 12

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Algebra II or Algebra 2B (with recommendation of teacher)

DESCRIPTION:

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, or recommendation of previous teacher.

DESCRIPTION:

Topics include 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.

HONORS PRE-CALCULUS

This course only available by teacher placement.

Grade: 10, 11, 12

Length / Credit: 1 year / 1 credit

PREREQUISITES:

- » B+ or better in Honors Algebra II and completed Geometry. Placement by teacher only.

DESCRIPTION:

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

PROBABILITY AND STATISTICS

Grade: 11, 12

Length / Credits: 1 semester / .5 credits

PREREQUISITES:

- » Pre-Calculus; students who have received any credit(s) in AP Stats are not eligible to take this class.

DESCRIPTION:

The course covers basic probability, combinations, permutations and basic inferential statistics.

ADVANCED TOPICS

Grade: 11, 12

Length / Credits: 1 semester / .5 credits

PREREQUISITES:

- » Pre-Calculus

DESCRIPTION:

This is a “liberal arts” math course covering logic, voting and apportionment, set theory, graph theory and the math behind mortgages, consumer credit and investing. The class will use spreadsheets to explore math applications.

CALCULUS

Pass/fail is not an option

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

Pass/fail is not an option.

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 and it 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. Students may elect to take the AP exam in May. 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. Graphing calculator required.

★ *Dual credit opportunity*

ADVANCED PLACEMENT CALCULUS (AB)

Pass/fail is not an option.

Grade: 12

Length / Credit: 1 year / 1 credit

PREREQUISITES:

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

DESCRIPTION:

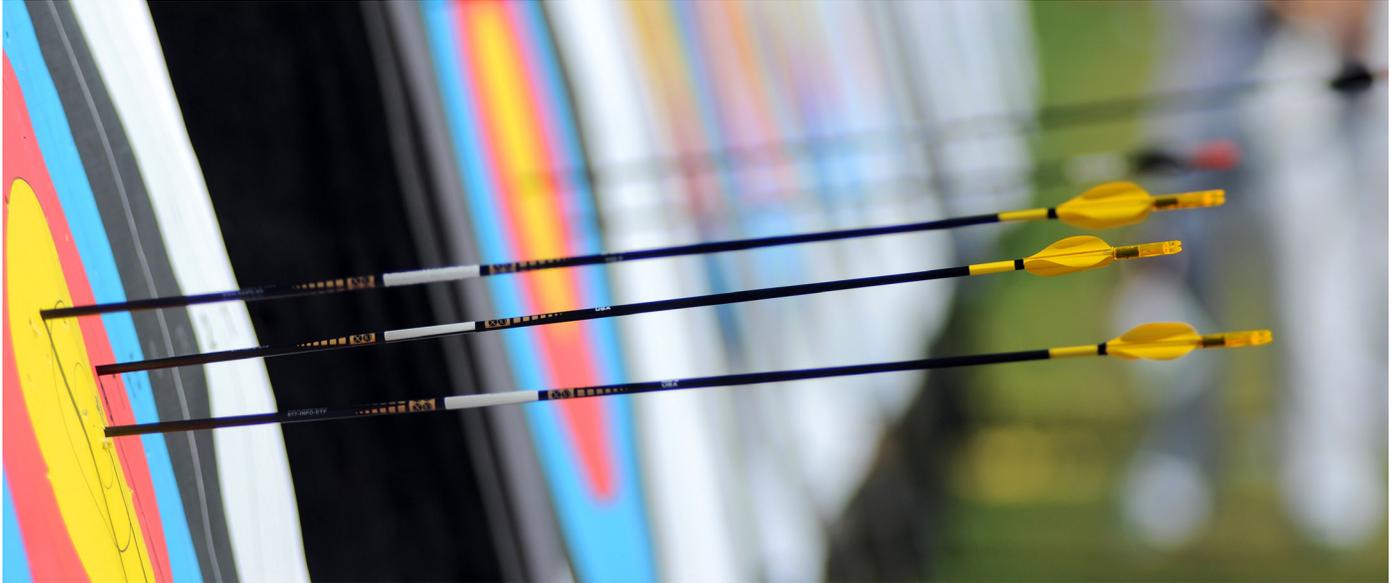
A review of functions (polynomial, circular, exponential/logarithmic) and topics related to them (domain, range, period, composition, and limits) will begin the year, followed by the study of calculus. Topics to be studied will include differential calculus: definition of the derivative, rules for computing derivatives, (1) polynomial, trigonometric, inverse trigonometric exponential, 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*

GRADUATION REQUIRED COURSES

PHYSICAL EDUCATION AND HEALTH

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



PHYSICAL EDUCATION 9

Grade: 9

Length / Credits: 1 semester / .5 credits

All students are required to take one semester of PE 9.

DESCRIPTION:

PE 9 will provide health enhancing activities while emphasizing competence in basic movement skills and promoting social development. PE 9 allows students to assess their overall physical health, set semester goals, and work toward those goals while engaging in physical activities. Activities may include but are not limited to: archery, basketball, dance, nitroball, ultimate frisbee, volleyball, and weightlifting.

HEALTH

Grade: 10

Length / Credits: 1 semester / .5 credits

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 and goal setting skills 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.

CORE STRENGTH & FUNCTIONAL TRAINING

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

PREREQUISITES:

- » Successful completion of PE 9.

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 credits

PREREQUISITES:

- » Successful completion of PE 9.

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 credits

PREREQUISITES:

- » Successful completion of PE 9.

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 credits

PREREQUISITES:

- » Successful completion of PE 9.

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.

AEROBIC GAMES & ACTIVITIES

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

PREREQUISITES:

- » Successful completion of PE 9.

DESCRIPTION:

Students in this course will participate in a variety of aerobic games and activities to maintain/improve their cardiovascular endurance and physical health. Performance testing and goal setting will be part of the course. Students will participate in aerobic activity daily like basketball, angleball, team handball, speedball, ultimate frisbee, and soccer.

GRADUATION REQUIRED COURSES

STRENGTH & CONDITIONING

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

PREREQUISITES:

- » Successful completion of PE 9.

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.

SUMMER PERSONAL FITNESS ONLINE (HYBRID)

Grade: 10, 11, 12 (after completion of PE 9 course)

Length / Credits: 1 semester / .5 credits

PREREQUISITES:

- » Successful completion of PE 9.
- » Access to internet and a plan to access fitness equipment and/or a fitness center/facility.

DESCRIPTION:

This class starts in May 2018. This course is designed as an option for students interested in earning their PE credits in the summer. Students will be required to attend a minimum of 6 face to face meetings (fitness testing, written tests, progress checks, classroom sessions), perform a minimum of 30 hours of physical activity, and complete an Individual Fitness Timeline Project. Personal Fitness Online will allow students to obtain the knowledge and skills necessary to develop and maintain healthy personal fitness and the motivation to pursue lifelong physical activity.

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.
- » 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.

Aquatics 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	Chemistry 9 AND Physics 9	Biology	Chemistry OR Physics (one or the other required to graduate)	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)

CHEMISTRY 9

Grade: 9

Length / Credits: 1 semester / .5 credit

DESCRIPTION:

Chemistry 9 is designed to introduce students to the basic concept of inorganic chemistry. The structure and properties of matter are examined, as well as atomic theory and the fundamental components of all atoms. Elements, the periodic table, and compounds are discussed, and students will be able to classify simple inorganic compounds, interpret their formulas, and name them. Other topics include: chemical reactions, symbolic equations, radioactivity and nuclear power. The course features many laboratory experiences with a special emphasis on observation, data collection, and drawing conclusions.

PHYSICS 9

Grade: 9

Length / Credits: 1 semester / .5 credit

DESCRIPTION:

Students will study motion, forces and different types of energy (mechanical, electrical and heat) and will learn how they are measured. Laboratory investigation and inquiry are fundamental to developing skills in observation, measurement, data collection, analysis and writing conclusions.

FOUNDATIONS FOR ADVANCED PLACEMENT SCIENCES

Grade: 9

Length / Credits: 1 year / 1 credit

DESCRIPTION:

This class is designed to provide accelerated ninth grade science students with an intense experience in the concepts and laboratory skills associated with biology, chemistry and physics that will facilitate success in the Advanced Placement science courses offered at NHS. Time management skills and study skills will also be emphasized.

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.

GRADUATION REQUIRED COURSES

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 interactions” in accordance with the College Board’s AP Biology curriculum framework. The course will utilize lectures, laboratories, and independent and group work to explore the field of biology. AP Biology prepares students who may wish to take the advanced placement exam in the spring 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.

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, thermochemistry), 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, AP PHYSICS 2)

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 and 2) 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*

GRADUATION REQUIRED COURSES

SOCIAL STUDIES

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

3.5 credits required for graduation.

EARLY AMERICAN HISTORY 9 (1492–1877)

Grade: 9

Length / Credits: 1 semester / .5 credits

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. Finally, 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 credits

DESCRIPTION:

This course will provide students with basic concepts central to the study of local, state and national government 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.

AMERICAN HISTORY

Grade: 10

Length / Credits: 1 semester / .5 credits

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 UNITED STATES HISTORY

Grade: 10

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » There will be a summer assignment that will need to be completed before the first day of school.

DESCRIPTION:

AP U.S. History course 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 National Advanced Placement United States History exam given in May.

★ *Dual credit opportunity*

ANCIENT WORLD HISTORY (WORLD HISTORY I)

Grade: 11

Length / Credits: 1 semester / .5 credits

DESCRIPTION:

The course will emphasize the history and influence of geographical locations and conditions during the period of pre-history through the Middle Ages. The course will cover historical developments, religions and the significance of geographical locations in Europe, China, India, Japan, Africa and Latin America.

MODERN WORLD HISTORY (WORLD HISTORY II)

Grade: 11

Length / Credits: 1 semester / .5 credits

DESCRIPTION:

The course will emphasize the history and influence of geographical locations and conditions during the period of the Middle Ages to the present. The course will cover historical developments, religions and the significance of geographical locations in Europe, China, India, Japan, Africa and Latin America.

ADVANCED PLACEMENT WORLD HISTORY

Grade: 11

Length / Credits: 1 year / 1 credit

DESCRIPTION:

This AP World History course is designed to cover topics typically covered in a college introductory world history course. The course will cover world history from pre-historical times to the present. The course will utilize lectures, primary source readings, speakers, discussions, independent research, and field trips to explore the topics. Students will gain experience in writing free response and document based-essay questions. 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*

ECONOMICS

Grade: 12

Length / Credits: 1 semester / .5 credits

DESCRIPTION:

Economics is a semester course that meets the Minnesota state standards for social studies education and is required for graduation. This course introduces students to the fundamental economic concepts through both theory and application. Particular emphasis will be placed on market structure, supply and demand determination, monetary and fiscal economic policy, money and banking, topics in governmental economic policy and personal finance. This course will include simulations, guest speakers, current event analysis/discussion, outside reading materials, and individualized/group projects that cater to the interests of students.

GLOBAL STUDIES

Grade: 12

Length / Credits: 1 semester / .5 credits

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 the latest technology.

ADVANCED PLACEMENT MICRO & MACRO ECONOMICS

Grade: 12

Length / Credits: 1 year / 1.0 credits

DESCRIPTION:

Advanced Placement (AP) Economics is a yearlong course split into two semesters – AP Microeconomics (fall) and AP Macroeconomics (spring). Students must register for and complete both semesters to meet state standards; however, they may choose to take neither, one or both AP exams to potentially earn college credit.

In microeconomics, students will focus on economic decisions made by individuals and businesses as they attempt to maximize their satisfaction. Special emphasis is placed upon the advantages of trade, the operation of efficient markets, the behavior of businesses in a market economy and the economics of labor and other resources used in our society. In macroeconomics, students study the composition of our nation's economy, economic instability, governmental economic policy, money and banking and international trade. Simulations, outside readings, textbooks and lectures will be utilized as resources throughout the course.

★ *Dual credit opportunity*

WORLD LANGUAGES

 Dual Credit Opportunity

WORLD LANGUAGES

AMERICAN SIGN LANGUAGE (ASL) 1

Grade: 9, 10, 11, 12

Length / Credits: 1 year / 1 credit

DESCRIPTION:

An introduction to the basics of American Sign Language with emphasis on both receptive and expressive skills. Students will learn vocabulary signs as well as grammatical features such as facial expression, classifiers, specialization and directionality through drills, games, activities and projects. Students will learn about deafness and the deaf community through films, guest speakers, readings and demonstrations of communication devices for the deaf.

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.

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.

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.

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.

WORLD LANGUAGES

SPANISH 4

Grade: 11, 12

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » To advance to level IV the student must have at least a 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. In addition, the following are areas addressed across the languages: history and geography, literature/and the arts, media and current events, and travel. 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 4 PLUS IMMERSION

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

PREREQUISITES:

- » Students must have 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.

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.

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*

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 SPANISH LANGUAGE

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

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

AREAS OF INTEREST

- **ARTS & COMMUNICATION**
- **BUSINESS & ENTREPRENEURSHIP**
- **ENGINEERING & MANUFACTURING**
- **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	ENGINEERING & MANUFACTURING
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 different 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

ENGINEERING & MANUFACTURING

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

Engineering & Manufacturing 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

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	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	News and Print Media	Artist and Art Marketer
Director	Producers and Directors		Graphic Designers

INTRODUCTORY

ACTING & PLAYWRITING

Grade: 9, 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Elective

DESCRIPTION:

Students in grades 9-12 will be responsible for writing scripts in the fall, then acting, producing, and advertising the production's year-end show in the spring. The goals of the class are to empower students, give them a voice and a stage on which to express their truly unique experiences, and allow them to share these personalized histories with the community.

ART I – FOUNDATION

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

DESCRIPTION:

This is the foundation art course that instills an amazing set of basic vocabulary of techniques and materials upon which students can build upon serves as a prerequisite for all other art classes. Students will learn to strengthen and expand their artmaking skills, develop their ability to SEE closely, and build an awareness of designing a composition. General art history, observational drawing (contour drawing and shading), basic photography, 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.

DESIGN

Grade: 9, 10, 11, 12

Length / Credit: 1 semester / .5 credit

Academic Department: Family & Consumer Science

DESCRIPTION:

In this class, we will study the Elements of Design and the Principles of Design as they apply to Interior Design & Housing and Apparel, Textiles & Fashion Design. You will have the opportunity to express your creative design style through personalized projects in the areas of Interior Design & Housing and Apparel, Textiles & Fashion Design. This “hands on” project-based class is perfect for the driven student that is looking for a variety of mediums to express their artistic creativity.

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



ADOBE® INDESIGN®

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

DESCRIPTION:

Create powerful layouts using Adobe InDesign! In this class you will master InDesign's core production and layout features. You'll learn how to design posters, announcements, fliers, business cards and advertisements. Prerequisites include basic computer knowledge, enthusiasm and an eye for detail.

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

ADOBE® PHOTOSHOP®

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

DESCRIPTION:

Digital photography is everywhere—and in this exciting class you will maximize the photographic capabilities of your iPad (or iPhone) and then use Adobe Photoshop to edit and retouch your images. Composition, resizing, cropping, levels, curves, effects and image extraction will be introduced. You'll be amazed at Photoshop "magic" as you create stunning and memorable artwork. Please bring your iPad and your creative energy with you to class.

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

RAIDERKOR (MEN'S CHOIR)

Grade: 9, 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Music

PREREQUISITES:

- » Raiderkor is open to all interested high school men wishing to learn more about music, singing, and procedures of the NHS Choral Department. This is an ensemble for men of all ability levels. Students are expected to commit to Raiderkor for the entire year. Raiderkor performs in all four major performances during the year: Fall Concert, Traditions, Choral Classics, and Spring Finale. Additionally, the choir attends mens' 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 are required to attend voice lessons and sectional rehearsals each semester.

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

CANTABILE

Grade: 9, 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Music

PREREQUISITES:

- » None. Varsity Women Choir is open to all interested women wishing to learn more about music, singing, and procedures of the NHS Choral Department. Students are expected to commit to Varsity Women Choir 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 are required to attend voice lessons and sectional rehearsals each semester.

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

AREAS OF INTEREST

INTERMEDIATE

THE ART OF COLOR DESIGN

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I-Foundation

DESCRIPTION:

Color plays a huge role in our everyday lives as we are bombarded by advertising and constantly expressing our own color preferences. This course will begin with color theory and encourage students to think like some of the world's top designers who do product packaging, sports team branding, fashion and interiors. During the semester, students will use a variety of paint media including watercolor and acrylic paint; paper media, including marbling and collage; and dry media including charcoal, graphite, chalk pastel and oil pastel to work on exciting projects that will challenge their creative design ideas.

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

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

CLAY – SCULPTURE AND HANDBUILDING

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I-Foundation

DESCRIPTION:

This course gives the students the opportunity to express themselves by creating 3D sculptures and hand constructed pots. Emphasis is placed on developing clay skills with techniques such as pinch, coil, and slab construction. With each exciting assignment students will have a great chance 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, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I-Foundation

DESCRIPTION:

The course teaches students how to make pots on the potter's wheel. Students will create functional forms such as bowls, mugs, plates, vases, and jars. Each assignment will introduce a new decorating technique so the students have an opportunity to express themselves through designing the surface of the pot.

 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 credits

Academic Department: Art

PREREQUISITES:

- » Art I-Foundation
- » Potter's Wheel I

DESCRIPTION:

This class is designed for students who have loved Potter's Wheel I and who would value the opportunity to further develop their pottery making abilities. The class curriculum will teach the following: new potter's wheel techniques, new pottery forms (such as teapots, pitchers, and lidded jars), and exploration of new 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.

DESIGN AND ILLUSTRATION

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I-Foundation

DESCRIPTION:

This graphic design and digital drawing class is designed to teach students how to visually communicate ideas using tools such as pencil, pen, marker, digital SLR cameras and tools from Adobe® Creative Cloud. In this class, students will keep a hand-drawn sketchbook as well as use Adobe® Photoshop and Adobe® Illustrator to create innovative artwork that expands their ideas and potential as designers and illustrators in a digital age. Project themes include typography, logos and branding, photo editing and manipulation, 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.

DRAWING AND PAINTING I

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I-Foundation

DESCRIPTION:

This course is open to NHS students who have previously taken Art I-Foundation. A wide variety of choices in drawing and painting will be introduced. Materials used include plaster casting, 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.

 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 credits

Academic Department: Art

PREREQUISITES:

- » Art I-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 Drawing and Painting I. Students will explore contemporary techniques in drawing using Micron and ballpoint pen; white and black charcoal; and new painting techniques using acrylic and mixed media on canvas, wood and a variety of quality papers, with a final mini-series 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, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I 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 by developing rich content; and refine their work by editing and adding after-effects in post production using Adobe Premiere Pro. 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.

AREAS OF INTEREST

ADOBE® ILLUSTRATOR®

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

DESCRIPTION:

Like doodling? Then you should get to know Adobe Illustrator, the premier design and illustration program used by designers worldwide. This course will provide an overview of Illustrator's power and creative potential. You don't need to be an artist to take this class—but you should be comfortable working on a computer and interested in seeing what you can do with digitized art!

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

INTERIOR DESIGN

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Family & Consumer Science

PREREQUISITES:

- » Completion of Design with at least a B

DESCRIPTION:

As a hands-on project based class for the student interested in exploring careers in the design field, this class will introduce the student to the basics of interior design. Students will learn about various housing and furniture styles past and present, while having the opportunity to create showcase pieces of their own.

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

JOURNALISM

Grades: 9, 10, 11, 12

Length / Credits: 1 Year / 1 credit

Academic Department: English / Language Arts

ALL students taking this course will earn elective credit, as the course does NOT go towards graduation requirements in English.

DESCRIPTION:

The class will be responsible for the complete publication of the school's yearbook: the Norhian. Course work includes ad sales, photography, research, story and caption writing, page design, theme development, editing, and equitable coverage of all NHS students. It is imperative that all class members are dedicated to the class and the deadlines that are a part of publishing a yearbook.

PRINTMAKING

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I-Foundation

DESCRIPTION:

Students particularly interested in drawing and illustration will enjoy this course which will explore a wide variety of artistic printmaking processes to create exciting and unique images. Students will have access to a large scale printing press and use amazing techniques such as carving into a surface like linoleum or wood (relief), scratching onto plexiglass (intaglio), and painting on glass (monoprinting). Printmaking is an unusual art form because the artist is able to make one unique and personal image and recreate it an infinite number of times!

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

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

TEXTILES & APPAREL

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Family & Consumer Science

PREREQUISITES:

- » Completion of Design with at least a B

DESCRIPTION:

Introduction to principles and hands-on application of construction techniques for clothing and home furnishings. Students interested in careers related to the design of apparel, home furnishings, marketing and/or merchandising should consider this course. Student projects will be aligned with sewing skills and experience.

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

WATERCOLOR PAINTING I

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I Foundation

DESCRIPTION:

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 art department 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.*

WATERCOLOR PAINTING II

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » Art I Foundation & Watercolor Painting I

DESCRIPTION:

Have you taken Watercolor I already? 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.

 *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 (WOMEN'S CHOIR)

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Music

PREREQUISITES:

- » As an upper level music class, Uno Vox members are selected by audition and with the consent of the instructor with regard 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. Belle Voci 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 are required to 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 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 all students in grades 9–12 who have some prior playing experience. This band performs music that complements the abilities of the players and strives to encourage individual growth in all aspects of instrumental music.

DESCRIPTION:

The High School Bands each rehearse one period daily. Providing the opportunity to grow musically and to enjoy making good music are primary goals of both bands. Instrumental technique, music theory and history are studied through a varied musical repertoire. All band students are required to participate in rehearsals, concerts and various assigned events throughout the school year. Weekly instrumental music lessons will be given to each band student. Students studying privately will schedule a playing check-in with 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 requirements.

ADVANCED

HONORS ART

Grade: 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Art

PREREQUISITES:

- » To be eligible for Honors Art, a student must complete Art I–Foundation along with any four other advanced visual art courses including: Drawing and Painting I & II, Clay I & II, Watercolor I & II, Filmmaking, Design and Illustration, Printmaking, Color Design and Photography before the start of the Honors Art semester (courses such as 3D Animation and Graphics 1 & 2 that are taught outside of the visual 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 who register for Honors Art during the registration period in the previous school year will be sent an application and course information 1 month prior to the beginning of the class. Students who receive an application will need to fill out 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:

The NHS Honors Art course provides students with an opportunity to explore individual preferences in great depth. Students will work individually with the instructor to develop a thematic body of work. Students will prepare a portfolio consisting of a minimum of 8 works of art and an artist statement. A gallery quality presentation will be the final culmination to the course.

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

DESIGN PRODUCTION STUDIO

Grade: 11,12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

PREREQUISITES:

- » Adobe InDesign and Adobe Illustrator or Adobe Photoshop

DESCRIPTION:

Enter the dynamic world of design as you work with clients to produce a variety of print jobs. You will maximize your Adobe Illustrator, Photoshop and InDesign skills and follow each project from concept to completion. You'll learn advanced layout and typography strategies and prepare files that accomplish the design objective and are technically correct. Most of all, you'll have the opportunity to build your professional portfolio with stunning work.

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

CONCERT CHOIR (MIXED CHOIR)

Grade: 10, 11,12

Length / Credits: 1 year / 1 credit

Academic Department: Music

PREREQUISITES:

- » Concert Choir members are selected by audition in the spring and with the consent of the instructor with regard 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 are required to 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.*

AREAS OF INTEREST

CONCERT BAND

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Music

The instructor selects the Concert Band from grades 10–12 through audition. Selection is based on playing ability, instrumentation and audition. The Concert Band strives to challenge players to the highest possible level of ensemble performance.

PREREQUISITES:

Audition with instructor that demonstrate the following:

- » **Winds** – All major scales, chromatic scales, long tones and a prepared etude or solo demonstrating phrasing, articulation and musicality.
- » **Percussion** – Demonstrate ability on snare, timpani, and mallets; a working knowledge of the standard 26 drum rudiments and a prepared etude or solo on all three instruments.

DESCRIPTION:

The High School Bands each rehearse one period daily. Providing the opportunity to grow musically and to enjoy making good music are primary goals of both bands. Instrumental technique, music theory and history are studied through a varied musical repertoire. All band students are required to participate in rehearsals, concerts and various assigned events throughout the school year. Weekly instrumental music lessons will be given to each band student. Students studying privately will schedule a playing check-in with 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

PERSONAL FINANCE

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Business Education

DESCRIPTION:

This introductory course is designed to provide any student with a practical understanding of personal financial records from the birth of children to post high school education until retirement and beyond. Topics include personal records pertaining to: budgets, credit, banking, savings, income taxes, insurance, and personal goals. Students will create, maintain, and analyze a budget, a checking account, and tax statements.

 *This course may be substituted for one semester math course in fulfilling graduation requirements.*

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

ACCOUNTING

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Business Education

DESCRIPTION:

Accounting is the language of business. This course will prepare students 1) who need a foundation for studying business and accounting at the postsecondary level; 2) who desire careers in related business fields for which some accounting knowledge and application is needed; or 3) who desire job preparation for an accounting career. Students will learn accounting procedures for starting a business, creating financial statements, and completing an accounting cycle for a business. Students will be introduced to different career pathways in Accounting.

AREAS OF INTEREST

BUSINESS FINANCE

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Business Education

DESCRIPTION

This course is a sequel to Personal Finance but can be taken independently. It focuses on learning how finances affect both individuals and business. Topics covered include investments (stocks, bonds, mutual funds) and The Stock Market Game, financial planning, and business planning.

 *This course may be substituted for one semester math course in fulfilling graduation requirements.*

BUSINESS MANAGEMENT

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Business Education

DESCRIPTION:

Students will develop a clear understanding of the characteristics, the organization and the operations of many aspects of corporate America - including forms of business ownership, information and communication systems, production and marketing management, financial management and human resources management.

DECA

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Business Education

DESCRIPTION:

Students will have the opportunity to learn about marketing principles and projects focusing on the elements of the marketing mix—product, place, price, and promotion. Additionally, the DECA curriculum will be incorporated to help prepare students in the DECA club to compete in topics of their choice. Students not in DECA will learn marketing and entrepreneurship principles as preparation for future majors/minors in business or running their own business someday.

SPORTS MARKETING

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Business Education

DESCRIPTION

The marketing of sports and entertainment starts well before the game or the show even starts. This course will look into the many ways business topics intersect with sports and entertainment events to increase their profits and enhance the fan experience. Students will participate in hands-on marketing projects and look at sporting events and entertainment venues in a different way. There is an opportunity to participate in DECA sports/entertainment events.

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 Foods and Nutrition and in Baking & Pastries.

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

INTERNATIONAL FOODS

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Family & Consumer Science

PREREQUISITES:

- » Foods and Nutrition or Baking and Pastries and pass 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.

ADVANCED

ADVANCED ACCOUNTING

Grade: 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Business Education

PREREQUISITES:

- » Successful completion of Accounting

DESCRIPTION:

The major goal will be to integrate software into accounting and to learn advanced accounting principles. 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 major tool for the basic accounting procedures and also for the more refined tasks.

★ *This course has been approved for 4 articulated college credits if completed with a grade of B+ or better.*

ADVANCED DECA

Grade: 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Business Education

PREREQUISITES:

- » Successful completion of DECA

DESCRIPTION:

Students will manage and run the DECA school store, including all aspects of running a small business: inventory, staffing, financial statements, pricing, hours of operation, and marketing. Students will continue their DECA event preparation by writing a 30-page Entrepreneurship paper for competition at DECA Districts and State (1st semester) and write a business plan (2nd semester). The Advanced DECA students will also be on the DECA leadership team to coordinate club events.

ADVANCED FOODS

Grades: 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Family & Consumer Science

PREREQUISITES:

- » Pass Foods and Nutrition with at least a B.

DESCRIPTION:

We will explore challenging recipes to create meals that are sure to impress. The main focus of this class is meal planning and advanced food preparation techniques. ServSafe will be taught with the opportunity to take the test and receive certification. This is a major benefit for those interested in careers in the foodservice industry.

MARKETING/BUSINESS INTERNSHIP

Grade: 12

Length / Credits: 1 year / 2 credits (1 classroom / 1 job credit)

Academic Department: Business Education

DESCRIPTION:

Marketing/Business Internship is a two-credit course consisting of two parts:

The first credit is the classroom component, which focuses on workplace readiness issues including teamwork, problem solving, self-management, expectations of employers, workers' rights and responsibilities, getting along with customers and career planning. The second semester of the classroom component will be marketing principles and practices focusing on the elements of the marketing mix—product, price, place, and promotion.

The second credit involves working part-time at a business in the community under the supervision of a teacher/coordinator who makes quarterly visits for the purpose of performance evaluation. Students' schedules may include a work release so students can report to work in the afternoon. Students can take the class without earning the work credit also.

★ *Marketing has been approved for 3 articulated college credits with DCTC if completed with a grade of B+ or better.*

AREAS OF INTEREST

BUSINESS CAREERS HONORS PROGRAM

The Business Career Honors Program is a sequence of courses focusing on career pathways in business. The program combines technical, academic, and work-skills related to the business career path students choose. The program leads to a CAPSTONE course where students create a business plan and do an internship in the community. Entrance to the program is by application only, and applications can be obtained from a Business Department teacher.

REQUIREMENTS FOR PROGRAM ENTRY:

- » Students apply before their sophomore or junior years (see instructor)
- » Students earn a B or higher in all Business Career Honors courses
- » Students complete the CAPSTONE course and present their portfolios in a business setting

Students will take required credits within the business department (2.5 credits) from the courses listed below. Students choose which courses they prefer and all take the Business Careers Honors Course their senior year. Once the student is accepted into the program, the instructor will keep track of qualifying courses.

- » Computer Applications (.5 credits)
- » Keyboarding (.5 credits)
- » Personal Finance (.5 credits)
- » Accounting (1 credit)
- » Business Management (.5 credits)
- » Marketing/Business Internship (1 credit)
- » DECA (.5 credits)/Advanced DECA (1 credit)
- » REQUIRED SENIOR YEAR:
Business Careers Honors Course (.5 credits)



ENGINEERING & MANUFACTURING

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

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

INTRODUCTORY

CARS 101

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

DESCRIPTION:

Most of us will own or lease a car someday. You don't need to be a "gear head" 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 engine operation and classifications, cooling and lubrication systems, vehicle maintenance and inspection, basic electrical, fuel and ignition systems and computer system basics. After this class you'll be ahead of the curve when it comes to owning and maintaining a vehicle!

COMPUTER-AIDED DESIGN (CAD)

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

DESCRIPTION:

This course would provide the necessary skill for students to design projects in all Technology and Engineering courses. Computer-Aided Design (CAD) software is used by architects, engineers, drafters, artists, and others to create precision drawings or technical illustrations. CAD software can be used to create two-dimensional (2-D) drawings or three-dimensional (3-D) models and three CAD softwares will be used in this course: AutoCAD (2-D), Inventor (3-D), and Revit (3-D) architecture).

INTRODUCTION TO ENGINEERING AND DESIGN (IED)

Grade: 9, 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Technology & Engineering

DESCRIPTION:

This course will offer students an opportunity to explore the world of engineering by engaging students in real world problems. Students will use 3-D computer modeling software (Inventor) for the design process, will solve design problems as they develop, analyze, and create product models, and will reverse engineer a product and make an innovation to the product. An open-ended design problem working with a team will be the final project and a prototype of the design will be developed.



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



Passing IED and the national exam will allow students to receive up to 3 college credits at over 70 colleges.

AREAS OF INTEREST

3D PRINTING, DESIGN, AND MANUFACTURING

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

DESCRIPTION:

Like to make things? Interested in 3-D printing? In this class you'll experience the magic of today's manufacturing! You'll use computer aided design (CAD) to design projects. Then, computer numeric controllers (CNC), will dictate cutting functions without any direct human assistance. You'll be introduced to cnc plasma cutting, cnc laser cutting, cnc milling, cnc routers, cnc lathes and 3-D printers. You'll make a unique geared candleholder or a chess set—or a similar project of your own choosing.

SMALL ENGINES

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & 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!

WELDING – METAL ART

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

DESCRIPTION:

This course is re-designed to emphasize the creation of metal art to be displayed in a student's home and outdoor space. The course will include an introduction to safety, project planning, welding techniques (Arc, Mig, Tig, and Oxyacetylene), and project work. Each student will have 12 weeks to work on an individual project.

DO IT YOURSELF (DIY) WOODS

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

DESCRIPTION:

Are you planning on living on your own? Do you have little or no experience in woodworking? If so, you need to take this class. DIY Woods will introduce you to basic construction tools, hardware, equipment and processes used in woodworking. You'll learn about buying lumber, furniture construction, gluing and finishing techniques. A practical, hands-on class chock full of DIY skills!

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

INTERMEDIATE

AUTO MECHANICS 1

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Technology & Engineering

PREREQUISITES:

- » Auto Maintenance with a C 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 shop safety, engine theory, oil changes, tire repair and balancing, cooling systems, brakes, dealer servicing, parts purchasing, computer diagnosis, emission controls, electrical system etc.

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

CIVIL ENGINEERING AND ARCHITECTURE (CEA)

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Technology & Engineering

DESCRIPTION:

The major focus of the CEA course is a long-term project that involves the development of a local property site. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of this property. In addition, students use Rivet, which is a state of the art 3D design software package from AutoDesk, to help them design solutions to solve their major course project.

★ *Passing CEA and the national exam will allow students to receive up to 3 college credits at over 70 colleges.*

PRINCIPLES OF ENGINEERING (POE)

Grade: 10, 11, 12

Length / Credits: 1 year / 1 credit

Academic Department: Technology & Engineering

DESCRIPTION:

This is the second engineering class for the Project Lead the Way program, and students will succeed best in the class if they have taken Introduction of Engineering Design, although it is not required. This course will explore various technology systems and manufacturing processes to help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course involves working with the Autodesk Inventor Software, fisher techniques kits, and other types of technologies.

★ *Passing POE and the national exam will allow students to receive up to 3 college credits at over 70 colleges.*



WOODWORKING II

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Technology & Engineering

PREREQUISITES:

» Woodworking I and at least a “C” average.

DESCRIPTION:

Expanding on the woodworking skills learned in Woodworking I, 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.

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

ADVANCED

FIRST ROBOTICS

Grade: 9, 10, 11, 12

Length / Credits: 1 year (mid-November through mid-April evenings and weekends) / 1 credit

Academic Department: Technology & Engineering

DESCRIPTION:

Do you like computer games? In this class you’ll go way beyond the gaming screen and into the real world of programming and design. First, you’ll learn electronics, programming, pneumatics and the teamwork skills necessary to create a robot. Once this year’s robotic competition is introduced, your team will have seven weeks to take your robot from concept to completion. At the end of March your creation will compete against robots from across the United States at the FIRST Robotics competition at the University of Minnesota. This exciting course meets evenings and weekends from mid-November through mid-April. This course is not just for guys—anyone who’s creative and innovative will be a great member of the Robotics team!

This is a non-traditional course that meets evenings and weekends before (starting mid-November) and during the seven week robot build season (January-February). Students will spend approximately 12–18 hours a week on evenings and weekends during that time working on the robot.

AREAS OF INTEREST

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	

INTRODUCTORY

FOODS AND NUTRITION

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 methods for grains, dairy, proteins, fruits and vegetables. Cooking labs include: Apple Crisp, Salsa, Omelets, Tacos, Meatballs, Chicken Nuggets, Homemade Pizza and Sweet Treats. You will learn about nutrition and how to plan and shop for meals, and you will eat the foods you are making.

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, obesity, cancer, health insurance, tissue and organ donation, gender identity and expression, doctor-patient relationships, and more. The course will utilize lectures, laboratories, activities, readings, videos, research, and small and large group discussions.

COMMUNITY FIRST AID AND HEALTH ISSUES

Grade: 11,12

Length / Credits: 1 semester / .5 credits

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.

MORE HEALTH

Grade: 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Physical Education / Wellness

PREREQUISITES:

» Health (10th Grade)

DESCRIPTION:

Students will help pick the content topics. We will analyze the influence of social media, media, culture, relationships, stereotypes and technology related to current health topics. We will develop leadership skills to help influence positive changes in our community. Topic areas may include: mental health, conflict resolution, communication skills; stress management: analyzing/preventing domestic violence, analyzing/preventing chemical use/abuse, and analyzing/preventing sexually transmitted infections and pregnancy; consumer health, environmental health, and disease and disorder awareness and prevention.

NURSING ASSISTANT TRAINING COURSE

Grade: 11, 12

Length / Credits: 1 semester / 1 credit

Academic Department: Physical Education / Wellness

DESCRIPTION:

This course provides training to become a Certified Nursing Assistant. To obtain certification, students must pass the required test at the end of training. This course is held at the Northfield Retirement Community Center, students must provide their own transportation, and students will commit two hours of their schedule for one semester to complete the course

SUMMER NURSING ASSISTANT TRAINING COURSE

Grade: 11, 12

Length / Credits: 3 weeks in summer / 1 credit

Academic Department: Physical Education / Wellness

DESCRIPTION:

This is the same course as the one offered during the school year *except* it runs in the summer. Attendance at every session is mandatory, and students will need to provide their own transportation. Further details will be provided to those who request this course. There will be a selection process involved as space is limited.

SPORTS MEDICINE LOWER BODY

Grade: 11, 12

Length / Credits: 1 semester / .5 credits

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 credits

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 find young children interesting and enjoyable and are interested in working with children or plan on being a parent someday, this class will give you a solid foundation to build on. You will learn the fundamentals of child development from pregnancy to age 6 as well as investigate the physical, intellectual, social and emotional aspects of children. We explore child development theorists, the impact of families on child development, parenting styles, and work to understand the remarkable, enjoyable and complex lives of children. This is the class where students have the *option* to take home a baby (simulated) or wear a pregnancy belly!

INTERMEDIATE

CHILD PSYCHOLOGY AND EDUCATION

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Family & Consumer Science

DESCRIPTION:

Students will further explore the fascinating mind of the child from birth to age 12 with an emphasis on the preschool and school age child. Students will learn about mental health issues in children, positive guidance strategies, how children learn best and the many career opportunities open to people interested in bettering the lives of children. Students will participate in observing children as well as developing strategies for teaching, nurturing and better relating to kids. This class will have a variety of learning opportunities including projects, research, independent reading, lectures and class activities.

LAW

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Business Education

DESCRIPTION:

This course in practical law is designed to develop in students the knowledge and problem-solving skills necessary for survival in our society. Areas covered will include: need for rules and integrity, rights vs. responsibilities, types of law, courts and law enforcement, crimes and torts, contracts, alternative forms of dispute resolution, and laws specific to juveniles and businesses. This course especially attracts those interested in legal careers, business, law enforcement, and public service.

SERVICE LEARNING

Grade: 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Social Studies

DESCRIPTION:

This course begins with a study of exemplary worldwide community service for alienated peoples of the world and continues with a thorough study of our community in and around Northfield and the needs therein. A development of a service plan of action and the execution of that plan will complete the course. The course includes research, literature and action in a reflective process that is student driven.

STRATEGIES FOR PERSONAL, FINANCIAL & CONSUMER SUCCESS

Grade: 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Family & Consumer Science

DESCRIPTION:

Preparing to leave home and manage your own daily life? This class will prepare you for success by giving you practical skills for life tasks. Topics covered include preparing for a job, choosing a roommate, buying furniture, being a wise consumer and communicating well in a variety of situations. This class allows for flexibility so that the information you learn can be applied to your life as we work our way through the course.

PSYCHOLOGY

Grade: 11, 12

Length / Credits: 1 semester / .5 credits

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.

ADVANCED

DIRECT SUPPORT PROFESSIONAL

Grade: 10, (must be 16 at beginning of course), 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Family & Consumer Science

DESCRIPTION:

Students will gain exposure to careers in human services and training to provide direct care to people with disabilities. Learning activities include video training, classroom, on-site observation, other experiential learning components (may take place outside of regular class hours), reflection paper and guided future planning. Upon successful completion, employment application and interview for some students. This course is offered in partnership with Laura Baker Services Association.

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 credits

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 Constitution, civil rights and liberties, political institutions, campaigns and elections. Students will engage in respectful debate and discussion of the current political issues of the day.

★ *Dual credit opportunity*

AREAS OF INTEREST

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

INTRODUCTORY

COMPUTER APPLICATIONS

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Business Education

SUGGESTED PREREQUISITE:

- » Keyboarding

DESCRIPTION:

This course will teach students Microsoft Office software using critical thinking skills and problem-solving skills for “real world” activities in Word (creating, editing, and formatting letters, awards, column, tables, and newsletters), Excel (spreadsheets, graphs, and charts), PowerPoint (slides and presentations), Access (database activities to create forms, queries, and tables), and web page development. This course will end with an integration unit that combines these activities.

- ★ *Students passing this class with a B+ or better are eligible for articulation college credit.*

IT EXPLORATION

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Business Education

DESCRIPTION:

This course will allow students interested in technology to learn about various computer-related avenues and careers, connect with MnSCU colleges to perform networking and hardware functions not available at NHS, hear from speakers in the different units and learn about building apps for Android devices. Content will include the following web-based modules:

- » **Systems Administration** (including networking, operating systems, and configurations)
- » **Software Development** (including Java language, HTML, Javascript, and Scratch software)
- » **Information Security** (including Firewalls, desktop security, network security, and cyber security)
- » **Analytics** (Excel data analysis)
- » App and game development

KEYBOARDING/WORD PROCESSING

Grade: 9, 10, 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Business Education

DESCRIPTION:

When you don't have to think about which key to press or look at your hands/keyboard, you can focus your attention more fully on the task. This course consists of mastery of the keyboard using the correct touch-typing technique. In addition, students will use Microsoft Word in editing and formatting of written data into letters, tables, and business reports.

- ★ *This course has been approved for articulated college credits if completed with a grade of B+ or better, 45 wpm with 5 or fewer errors (5 minute timing).*

INTERMEDIATE

3D ANIMATION

Grade: 9, 10, 11,12

Length / Credits: 1 semester / .5 credit

Academic Department: Business Education

SUGGESTED COMPLEMENTARY COURSES:

- » Web Design and IT Exploration

DESCRIPTION:

This course introduces graphics and animation software used in product design, medical exploration, film effects, and gaming careers. This high-end, fast-paced course will use the software 3ds Max, used by the film industry to model and develop its animated movies. Units will include:

- » Planetary modeling (solar system)
- » Archeological reconstruction of the Parthenon
- » The digestive system
- » Weather systems and tornadoes
- » Forensics and facial reconstruction
- » One independent study final exam project

- 🌀 *This course can earn passing students .5 Art credit towards graduation requirements.*

- ★ *Students earning a B+ or higher will receive 3 articulation credits with the Arts Institute – Minnesota or DCTC*

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.

AREAS OF INTEREST

SCIENCE AND THE ENVIRONMENT

Grade: 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:

The course is designed to increase understanding of how living organisms interact with their surroundings. Subject areas include studying the Earth, ecological interactions, energy resources, and the human impact on the environment.

WEB DESIGN

Grade: 9, 10 11, 12

Length / Credits: 1 semester / .5 credits

Academic Department: Business Education

SUGGESTED PREREQUISITES:

- » Keyboarding or Computer Applications

DESCRIPTION:

This course is intended to familiarize students with aspects of internet analysis, web coding, and design and layout of web pages. Students will design web pages using HTML, javascript and CSS coding, and Dreamweaver software.

- ★ *Students passing this class with a B+ or better are eligible for articulated college credit.*

ADVANCED

ADVANCED 3D ANIMATION

Grade: 10, 11, 12

Length / Credits: 1 semester / .5 credit

Academic Department: Business Education

PREREQUISITES:

- » 3D Animation

DESCRIPTION:

This course will allow students who have completed 3D Animation to work independently on self-designed projects to create a portfolio for art or college interest.

- 🌀 *This course can earn passing students .5 Art credit towards graduation requirements.*

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*



SUPERINTENDENT

Dr. Matt Hillman

PRINCIPAL

Joel Leer

ASSISTANT PRINCIPALS

Jeff Eckhoff

Marnie Thompson

COUNSELORS

Kathy Wiertsema-Miller (A-G)

507.663.0638

kwiertsema-miller@northfieldschools.org

Mark Ensrud (H-O)

507.663.0639

mensrud@northfieldschools.org

Deborah Rasmussen (P-Z)

507.663.0637

drasmussen@northfieldschools.org

SCHOOL CODE: 241-855



NORTHFIELD HIGH SCHOOL
1400 Division Street South • Northfield, MN 55057
PH 507.663.0630 • FAX 507.645.3455
northfieldschools.org