Northwestern Regional High School

PROGRAM OF STUDIES

2018 - 2019

Revised
12-21-2017

Northwestern Regional High School seeks to foster academic and personal excellence in every student. In partnership with families and communities, we create a safe learning environment dedicated to developing the skills of lifelong learning. Our dynamic and challenging educational programs prepare individuals to respect diversity and become responsible citizens in a rapidly evolving global environment. We are driven by our core values and beliefs and trust that the courses offered will help to assist you in becoming a lifelong learner.

January, 2018

Dear Parents and Students,

You are about to engage in a very important process in you high school career…course selection. The high school experience is designed to provide you with continuous academic and social growth. We encourage all students to challenge themselves and to take a rigorous course of study to prepare themselves for a post-secondary education. It is clear from evidence collected nationally regarding the preparedness of high school students for success in career and citizenship, that students who complete rigorous coursework in high school have better and increased options after graduating from high school. The more rigorous the course of study a student pursues the more equipped they are to access higher education, succeed in the workplace and military training programs, and change careers later in life. For all of these reasons, I encourage every student to take on the challenge of pursuing as rigorous a course of study as they can handle. We believe that through practice, study, persistence, hard work, and having a positive mindset all students can achieve at a high level. The courses that you select will assist you in achieving this goal.

The variety of courses offered in the high school are designed to challenge all learners and provide all students the opportunities for growth in academic, social, and civic competencies. In order to prepare our students to be change makers in a rapidly evolving global society all of Northwestern's courses prepare our students to demonstrate:

- critical thinking in reading
- critical thinking in writing
- critical thinking in problem solving
- effective communication skills
- interpersonal and collaborative skills
- global awareness
- creativity, innovation and adaptability

Many factors determine how students are assigned courses they take during the school year. Some of these include current teacher's recommendations for student placement, consideration of students' interests, and the willingness of the student to work hard to achieve their goals. We have discovered that students' ability, achievement, and motivation along with the demands of the curriculum are best known by the student's current teachers. Parents and students review the recommendations with their guidance counselor before the student's course selection is finished. Through this process, students take charge of their education with guidance from their parents and faculty members.

Academic planning is comprehensive, each year's achievement and decisions are built on the preceding ones. This process provides a foundation for the future. The faculty and staff of Northwestern are anxious to provide continuous assistance and information during this important selection process.

Sincerely,

Kenneth L. Chichester, Principal

INDEX

This booklet is intended for the parents and students of Northwestern Regional School to assist them in making the best possible educational choices for our students' futures.

Please read this booklet carefully before you make your decisions. Please keep in mind the requirements for graduation as well as your goals you set for yourself.

To assist you in making the best educational decisions for your child we have indicated the educational requirements for students interested in pursuing a 2 and 4 year college education and for students interested in various careers that do not demand further schooling.

Remember, these are MINIMUM REQUIREMENTS. They do not represent a complete high school program. Please work with your child's school counselor to make the selection which best suits your talents and needs.

Once your choices for the following year have been made, it will be extremely difficult to change them. Therefore, any questions you may have should be referred to your counselor and they will be happy to answer your questions and offer professional advice.

Consistent with the mandates of Federal Law, specifically Title VI of the Civil Rights Act of 1964, Public Law 90-202, Section 504 of the Rehabilitation Action of 1973, Title IX of the Education Amendments of 1972, and Section 10-153 of the Connecticut General Statutes, it shall be the policy of the Regional School District No. 7 Board of Education not to permit unlawful discrimination on the basis of race, color, religion, age, sex, gender identity, marital status, handicap or national origin in establishing and implementing hiring and employment practices and in establishing and providing educational programs and activities.

The Board of Education of Regional School District No. 7 has designated the following personnel to coordinate its efforts to comply with all non-discrimination requirements:

TITLE IX…….Mr. Kenneth Chichester…..379-8525 Principal
TITLE VI……....Mr. James Gaskins……..379-8525 Business Manager
HOUSE I OFFICE (A-K)…Mr. Joseph Masi……..379-7027 Housemaster
HOUSE II OFFICE (L-Z)…Mr. Gary Franklin……..379-7132 Housemaster
MAIN OFFICE…… ..Mr. Kenneth Chichester…..379-8525 Principal
CENTRAL OFFICE…….Dr. JudithPalmer...….……379-1084 Superintendent

Northwestern Regional High School

Core Values and Beliefs

Northwestern Regional High School fosters academic and personal excellence in every student. In partnership with families and communities, we create a safe learning environment dedicated to developing the skills of lifelong learning. Our dynamic and challenging educational program prepares individuals to respect diversity and become responsible citizens in a rapidly evolving global environment.

We value academic excellence

We believe in:

- High academic expectations for all students
- Commitment to lifelong learning
- Innovative and independent thinking

We value the pursuit of personal excellence in all aspects of our lives

We believe in:

- Acting responsibly with the interests of others in mind
- Allowing student choice in the learning process
- Giving students the opportunity to demonstrate their learning in a variety of ways

We value global awareness

We believe in:

- Taking an active role in a global society
- Demonstrate respect for diversity

We value partnership with families and communities

We believe in:

- Community involvement
- Social responsibility
- Open communication between the school and family

We value a safe learning environment

We believe in:

- Developing bonds between students and staff
- Demonstrating respect for ourselves and others
- Taking educational risks by challenging oneself
- Providing students the opportunity to be heard

Academic, Civic and Social Learning Expectations

Academic Expectations

- Demonstrate critical thinking in reading, writing, and problem-solving
- Demonstrate creativity, innovation, and adaptability
- Demonstrate effective communication skills

Civic Expectations

- Demonstrate an understanding of global awareness

Social Expectations

- Demonstrate effective interpersonal and collaborative skills

GRADUATION REQUIRMENTS

To graduate from Northwestern Regional High School a student must have earned a minimum of 23 credits and must have met the district's credits distribution requirements. Regulations regarding these requirements can be obtained from the guidance office or from the main office.

Required subjects by credit and number of years:

CLUSTER	CREDITS	YEARS
STEM **(Science, Technology, Engineering, Mathematics)**		
Mathematics	3	3
Science	3	3
(One credit must be Biology)		
HUMANITIES		
English	4	4
Social Studies	3	3
(One credit must be U.S. History & ½ credit in Civics)		
CAREER AND LIFE SKILLS		
Physical Education	1	4
Health Education	1	4
Arts / Vocational	2	2
(Includes Art, Music, Culinary, Tech. Ed., Business)		
OPEN ELECTIVES	6	6

Unless specifically stated in the Program of Studies credit may be earned only once in any given course.

****Beginning with the incoming freshmen class of 2013 grades earned in physical education and health will be counted in student's grade point average.***

1. Credits earned in Accounting I, Accounting II may be applied toward fulfilling the mathematics requirement. Credit for Personal Finance C or Applied Finance may be applied toward graduation requirements in either mathematics or business.

2. A maximum of one credit may be earned for graduation requirements in Social Studies by successfully completing the following courses: Economics, Business Law, UConn Microeconomics, and UConn Macroeconomics.

3. Students who successfully complete one year of Agriculture Education may apply this one credit toward the Arts or Vocational Education requirement.

4. Agricultural Education students who successfully complete certain courses in Agricultural Education will receive science credit. Those courses include: Introduction to Veterinary Science, Equine Science, Natural Resource Management, Fisheries & Aquaculture, and UConn Fundamentals of Agriculture.

5. The credit earned in Law and Justice or AP US Gov and Politics may be applied toward fulfilling the Civics requirement.

In pursuit of the above graduation policies and regulations, a student should follow the ***minimums*** in making course selections:

1. In grade nine a student should take 6.0 credits including English, Mathematics, Social Studies, Science, Physical Education, Health and an elective.
2. In grade ten a student should take a minimum of 6.0 credits English, Mathematics, Biology, Social Studies including Civics, Physical Education, Health and courses in one or more elective disciplines.
3. In grade eleven a student should take a minimum of 6.0 credits including English, Mathematics, U.S. History, Physical Education, Health and courses in one or more elective discipline.
4. In grade twelve a student must take a minimum of 5.5 credits including English, Physical Education and Health and complete all credit requirements for graduation. Seniors must carry at least 3 credits in academic core courses. Colleges are looking for students to pursue a rigorous course in their senior year, therefore we encourage a solid senior schedule.
5. Sequential courses in all subject areas require the student to pass the first course in the sequence before he or she may take the next course. For instance, grade ten English may not be taken until grade nine English has been passed.
6. One credit may be awarded for the successful completion of a full year of study in a World Language and/or Algebra I at the middle

school. The awarding of this credit will count toward the requirements that a student will earn 23 credits toward graduation in grades nine through twelve providing that the student earn a minimum grade of a C-, however, it will not be included in the cumulative GPA or class rank.

7. Upon prior approval of the Principal up to two credits earned from an accredited post-secondary institution may be counted toward the credits required to earn a diploma. Due to differences in crediting a typical college course which earns 3 college credits would be awarded ½ high school credit, however, it will not be included in the cumulative GPA or class rank.

PROGRESSION TOWARDS GRADUATION

Successful progression to each grade will be determined by the number of credits earned. Acquisition of these minimum number of credits each year will ensure that the student is on track to graduate with their class.

--progression to grade 10 will require five and one half (5.5) credits
--progression to grade 11 will require eleven and one half (11.5) credits
--progression to grade 12 will require seventeen and one half (17.5) credits

TRANSFER STUDENTS

A student who transfers into Northwestern Regional High School must meet the school's graduation requirements and earn at least three (3) credits of work at Northwestern Regional High School to be eligible to graduate with a NWR7 High School diploma. Only course work completed at Northwestern Regional High School is calculated into the student's GPA. Course work completed in other secondary schools will be included in the student's permanent record as copies of that school's transcript. These courses will be displayed on the Northwestern transcript for college application purposes even though they are not factored in to the GPA or class rank.

COLLEGE REQUIREMENTS (FOUR YEARS)

A student preparing to enter a two or four year college should plan his/her high school program with college entrance requirements in mind. Students should consult their School Counselor for assistance in pre-college planning and for help in selecting a program that will best meet individual needs and interests.

In general, a college preparatory program should include a minimum of the following, all at level 2 or above:

English – 4 credits, social studies – 3-4 credits, Mathematics – 3-4 credits, including Algebra I & II and Geometry; World Language – 2-3 credits; Science – 3-4 credits, and electives.

A student interested in science or engineering should plan to include four credits of mathematics and four credits of science. A student who is interested in nursing should include: college biology, chemistry, physiology, and three credits of mathematics. Some nursing, physical therapy, and occupational therapy programs require physics.

Students applying to competitive colleges should take a minimum of three years of the same World Language.

The following courses represent a typical program for a student thinking of attending a moderately selective four year college after graduation, all courses should be taken at honors/AP or college prep level:

GRADE 9	English
	World Civilization
	Algebra I or higher
	Integrated Science
	World Language
GRADE 10	English II
	Modern World History
	Civics
	Geometry or higher
	Biology
	World Language
GRADE 11	English III, or AP English Language
	U.S. History
	Algebra II or higher
	College Preparatory Science, (mostly typically Chemistry)
	World Language
GRADE 12	Senior level English Courses
	Math
	Science, and Social Studies and/or World Language depending on individual interest
	Electives

Note: Participation in course work from the arts, music, drama, business and technology education significantly enhances a student's high school experience and promotes his/her chances for successful admission to a college or university.

TECHNICAL SCHOOLS AND COMMUNITY COLLEGES

A student who is interested in attending a technical school or Community college should plan a program to include the following:

English - 4 credits; Mathematics - 3 credits through a minimum of Applied Algebra II; Social Studies - 3 credits; Science - 3 credits; electives

As with the four year college preparatory student, your school counselor should be consulted about the specific requirements of those schools which are being considered by the student or to help the student select an institution that best meets his/her needs.

MILITARY SERVICE

A student who is considering the military service after graduation should consult with the military liaison. He/she will be happy to arrange interviews and appointments with military recruiters who will be able to provide further information and offer suggestions for significant program selections.

POST HIGH SCHOOL EMPLOYMENT

A student who plans to seek employment directly after high school should consider course selection very carefully, taking into account career pathways and related courses leading to skills helpful in obtaining jobs. Businesses actively seek high school graduates who present themselves knowledgeably in work skills and responsibility, and who are capable of using their talents and abilities to the fullest for career success. Contact your school counselor to access work skills and interview training, as well as work-based learning opportunities and career exploration such as abilities and interest assessments, job shadows, career fairs, company tours and field trips.

MULTIPLE OPPORTUNITIES FOR LEARNING

Northwestern Regional High School is committed to providing extended opportunities for students to expand their education through access to approved programs not offered as part of our own curriculum. These offerings may include participation in the High School Partnership Program with Northwestern Connecticut Community College, Air Force Junior ROTC with Torrington High School, Hartford Magnet School for the Arts, Bristol Technical Education Center, and possible work/study opportunities. Students who participate in the High School Partnership Program courses earn college credits through this from NWCC that are transferable for most Connecticut colleges and many out of state colleges as well both of these programs students can earn college credits at no cost. Additional offerings may become available as they are approved.

ADVANCED PLACEMENT PROGRAM

Advanced Placement is a program of special college-level course work and examinations for high school students. Both Advanced Placement and UCONN ECE course work is available for eligible students at Northwestern. Many colleges will grant credit or advanced standing for satisfactory Advanced Placement exam grades. Students enrolled in AP courses at NWR are required to take the advanced placement exam. Note: Although AP exam fees are the responsibility of the student, the school may attempt to underwrite a portion of these costs in extraordinary circumstances. Advanced Placement Courses Offered: AP Literature and Composition, AP English Language and Composition, AP Modern Europe, AP American Government and Politics, AP Biology, AP Statistics, AP Calculus, AP U.S. History, AP Comparative Politics, AP Psychology, AP Computer Science, and AP Environmental Science. In general, students receive recommendations from their teachers to take these courses.

UCONN EARLY COLLEGE EXPERIENCE

UConn Early College Experience (ECE) provides academically motivated students with the opportunity to take university courses while still in high school. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and financial head-start on a college degree.

UConn ECE instructors, who are high school teachers certified as adjunct professors by UConn faculty, create a classroom environment that fosters independent learning, creativity and critical thinking – all pivotal for success in college. Northwestern Regional High School offers UConn ECE

courses in Biology, Business, Spanish, Italian, Music Theory, Physics and Vo-Ag. To support rigorous learning, University of Connecticut library resources are available to all UConn ECE students. UConn ECE students must successfully complete the course with a grade of C or above in order to receive University credit. If the student does not earn a grade of a C for University credit, the grade will appear as an AU (audit) on the college transcript. University credits are highly transferable to other colleges and universities. Students are charged a per credit fee. For additional program information visit: www.ece.uconn.edu. In general, students receive recommendations from their teachers to be eligible to take these courses.

NORTHWESTERN COMMUNITY COLLEGE PARTNERSHIP PROGRAM (For courses not offered through Northwestern Regional High School or dual enrollment)

As part of the Community College-High School Partnership Program, tuition and fees at Northwestern Connecticut Community College are waived for qualified juniors and seniors wishing to enroll in one or two community college courses during the school year. Students must have demonstrated sufficient scholastic ability to handle college level work (a B average or better). High school students wishing to enroll in community college courses must make arrangements through their high school counselor.
(Students may be required to achieve acceptable scores on the Accuplacer test to qualify for enrollment)

In addition to the college credit earned through the successful completion of NCCC courses, a student may apply the course(s) toward the high school graduation requirements upon meeting the following conditions:
1) The desired course is not offered at Northwestern Regional or the student cannot fit the desired course into his/her schedule prior to graduation from Northwestern Regional.
2) Approval of the Principal once course enrollment has been established.

EXTENDED LEARNING OPPORTUNITIES

Extended Learning Opportunities (ELOs) are provided to provide multiple pathways for learning beyond the classroom. Extended Learning Opportunities require at least 120 hours of learning for one credit and 60 hours of learning for a half credit. These hours are based on CT State Statute Section 10-221a of the general statues, Senate Bill 1059. In addition to meeting the minimum number of hours of class time students are required to demonstrate mastery of content and skills as evidence of the learning activities that the student participated in while pursuing an ELO. In

order to receive credit for an Extended Learning Opportunity students must complete an application form describing the learning experience. Once the student has formally applied for an ELO, a committee comprised of the school principal, House Master and student's school counselor will meet to determine whether or not that the learning experience planned by the student meets the requirements of an ELO.

Once the student has completed the ELO, credit may be granted by the Principal after a committee composed of the Principal, the student's Housemaster and School Counselor, meets to review the student's work and have affirmed that the student has met the minimum number of hours of work and confirmed that the student has demonstrated mastery of content or learning objectives in area(s) that they focused on during the ELO.

ACADEMIC ENRICHMENT PROGRAM

Academic noncredit enrichment is offered through the Math Team, Debate Team, Mock Trial Team college courses for advanced students, Model UN, the Youth Health Service Corps, and a variety of seminars, workshops and lectures at area colleges, universities, and arts and science centers when they are available.

PEER MENTORING PROGRAM

Students who are enrolled in the peer mentoring program can earn a ¼ credit for providing literacy, writing, and numeracy support to other students during the school day. To be eligible for this program, students must be formally enrolled in the program, meet specific attendance, performance, and academic expectations and have the permission of the Principal to participate.

The amount of total credit earned each semester will be at the discretion of the program facilitator and determined by the number of total hours of participation.

DRIVER EDUCATION Grades 9-12

The Driver Education Program is offered each quarter after school on Wednesdays, and Thursdays. It is also offered during the summer. The program meets or exceeds all the Department of Motor Vehicles requirements. To enroll, students must be at least 16 years of age on the first day of class. During the 30 hours of classroom instruction, students will have the opportunity to discuss all different driving situations, such as winter driving, city driving, driving under the influence of drugs or alcohol,

etc. The eight hours of behind-the-wheel training will be scheduled after school and on weekends. Emphasis will be placed on defensive driving. Students who successfully complete the classroom component and/or the behind-the-wheel instruction will receive a certificate. For fees and additional information you may contact Mr. Giordano, Driver Education Coordinator at (860) 379-8525 ext. 5000.

EARLY GRADUATION COMPLETION REQUIREMENTS

Northwestern Regional does not encourage students to complete the high school program in less than four full years. Only situations of extreme and/or unusual circumstance will be considered by the school administration for possible early graduation. Petition for such early graduation must be made to the school principal through the student's school counselor prior to June 1 of the student's junior year.

COURSE LEVEL DESCRIPTIONS AND WEIGHTING

Class standing is determined by a weighted grading system. Within the weighted class ranking system there are five levels of course difficulty.

AP/UC: Advanced Placement and UCONN ECE courses prepare students for the highest levels of competitive college and career. These courses require the demonstration of a mastery of reading, writing, mathematics, science, communications, teamwork, critical thinking, and problem solving. **Successful AP/UC students are able to do prescribed college and university level work independently and find enjoyment in challenging themselves to complete assignments and other course requirements of the greatest difficulty.**

Level 1: Honors level courses prepare students for competitive college and career. These courses require the demonstration of a mastery of reading, writing, mathematics, science, communications, teamwork, critical thinking, and problem solving. Successful level 1 students are able to do prescribed college and university level work independently and find enjoyment in challenging themselves to complete assignments and other course requirements of the greatest difficulty.

Level 2: Courses prepare students for college and career and require the demonstration of a mastery of reading, writing, mathematics, science, communications, teamwork, critical thinking, and problem solving. **Successful level 2 students are able to work independently and are driven to complete assignments and other course requirements.**

Level 3: Courses prepare students for college and career and require the demonstration of a mastery of reading, writing, mathematics, science, communications, teamwork, critical thinking, and problem solving. **Level 3 courses offer students greater support and time in the classroom in attaining the skills necessary to be college and career ready.**

Level 4: Courses **prepare students for post-secondary vocational and educational opportunities** and require that students work toward mastery of reading, writing, mathematics, science, communications, teamwork, critical thinking, and problem solving. **Level 4 courses also reinforce basic skills and include special education and alternative education courses.**

GPA WEIGHTING AND CLASS RANK

The official student GPA is based on a **weighted** point system and is updated annually at the completion of the school year. Pass/fail grades are not included in determining GPA. For a chart of the points awarded for grades by course level see below.

Course levels and grade weighting.
Point values will be assigned for the grades and levels according to this chart:

Course Level	AP/UC	1	2	3	4
A+	5.3	4.8	4.3	3.8	3.3
A	5.0	4.5	4.0	3.5	3.0
A-	4.7	4.2	3.7	3.2	2.7
B+	4.3	3.8	3.3	2.8	2.3
B	4.0	3.5	3.0	2.5	2.0
B-	3.7	3.2	2.7	2.2	1.7
C+	3.3	2.8	2.3	1.8	1.3
C	3.0	2.5	2.0	1.5	1.0
C-	2.7	2.2	1.7	1.2	0.7
D+	2.3	1.8	1.3	0.8	0.3
D	2.0	1.5	1.0	0.5	0.25
D-	1.7	1.2	0.7	0.2	0.1
F	0	0	0	0	0

Class Rank for seniors is a numerical position value attached to the weighted GPAs when they are ordered from greatest to smallest. The weighted GPA will be reported on the student's transcript each year. Class rank and GPAs are calculated at the end of six semesters for the graduating class.

The Valedictorian/Salutatorian of the class will be established based on class standing at the end of the first semester of the senior year. To be eligible for class valedic-torian/salutatorian, a transfer student must have entered Northwestern by the middle of their sophomore year.

Summer school courses will be recorded as pass/fail only and will not count toward class rank and GPA.

INDEPENDENT STUDY POLICY

Independent Study is a possibility in the rare and unusual event that it is not possible to access a course when it is normally scheduled or when the student wishes to follow a line of inquiry which is not covered in the existing curriculum.

A student may request permission to undertake an Independent Study after conferring with an appropriate subject teacher who is willing to work with the student on the Independent course work. The student and the teacher will fill out an Independent Study Contract Request Form describing the work to be done, the number of hours to be spent on the course and the number of credits to be awarded on successful completion of the work outlined. This contract must be approved by the independent study teacher, that teacher's department chair, the student's counselor, and the principal.

Independent Study courses will be titled with "Independent (name of the department offering the course" i.e.; "Independent Math".

Independent Study courses will be offered at level 2 (college prep) or 3 (general) only.

A student may take only one Independent Study at a time.

COURSE WITHDRAWALS AND GRADE ASSIGNMENT

1. A student may withdraw from a semester course within the first 5 weeks and from a full-year course before the close of 1st quarter grades respectively without penalty or sanction assuming he/she has parental permission to do so within the allotted period of time.

2. Course withdrawal after the 5 week/1st quarter period will result in a grade of WF on the report card. Exceptions to this policy can only be made under exceptional conditions following a conference with the counselor and/or administrator.

3. Voluntary course changes requiring the addition of a course must be made in the first seven days of the course in question.

4. If the student and/or parent disagree with the decision regarding the withdrawal and/or the subsequent grade assignment, an appeal may be made in writing to the building principal within 5 working days subsequent to receiving notice of said decision for assigned grade.

ACADEMIC ELIGIBILITY FOR STUDENT ATHLETES

The following represents Northwestern's Athletic Academic Eligibility:

1. A student-athlete must be enrolled in at least five (5) classes or Carnegie Units of work or the equivalent. A Carnegie Unit of work is defined as a course that meets for "200 minutes of recitation during a period of five consecutive school days."
2. For fall sports eligibility for incoming 9th graders, a student-athlete must be a continuing student (eighth to ninth grade). A transferring student must have received credit for five (5) units or its equivalent toward graduation at the conclusion of the school year preceding the contest (Rule 1. A.).
3. A student –athlete must pass five (5) Carnegie Units of work or the equivalent to remain eligible for fall sports. Fall athletes not passing five (5) Carnegie Units of work or the equivalent in prior year may use summer school credit to maintain eligibility.
4. Marking period (quarter) grades are to be used in determining scholastic eligibility except for fall sports which use final grades from the previous year.

NCAA ELIGIBILITY CENTER QUICK REFERENCE GUIDE

Eligibility Center

NCAA Division I Initial-Eligibility Requirements

Core Courses: (16)

- **Initial full-time collegiate enrollment before August 1, 2016:**
  - **Sixteen (16) core courses** are required (see chart below for subject-area requirements).
- **Initial full-time collegiate enrollment on or after August 1, 2016:**
  - **Sixteen (16) core courses** are required (see chart below for subject-area requirements).
    - Ten (10) core courses completed before the seventh semester; seven (7) of the 10 must be in English, math or natural/physical science.
      - These courses/grades are "locked in" at start of the seventh semester (cannot be repeated for grade-point average [GPA] improvement to meet initial-eligibility requirements for competition).
  - *Students who do not meet core-course progression requirements may still be eligible to receive athletics aid and practice in the initial year of enrollment by meeting academic redshirt requirements (see below).*

Test Scores: (ACT/SAT)

- Students must present a corresponding test score and core-course GPA on the sliding scale (see Page No. 2).
  - **SAT:** critical reading and math sections.
    - Best subscore from each section is used to determine the SAT combined score for initial eligibility.
  - **ACT:** English, math, reading and science sections.
    - Best subscore from each section is used to determine the ACT sum score for initial eligibility.
- All ACT and SAT attempts *before* initial full-time collegiate enrollment may be used for initial eligibility.
- **Enter 9999 during ACT or SAT registration to ensure the testing agency reports your score directly to the NCAA Eligibility Center. *Test scores on transcripts will not be used.***

Core Grade-Point Average:

- Only core courses that appear on the high school's List of NCAA Courses on the NCAA Eligibility Center's website (www.eligibilitycenter.org) will be used to calculate your core-course GPA. Use this list as a guide.
- **Initial full-time collegiate enrollment before August 1, 2016:**
  - Students must present a corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.000) on Sliding Scale A (see Page No. 2).
  - Core-course GPA is calculated using the **best 16 core courses** that meet subject-area requirements.
- **Initial full-time collegiate enrollment on or after August 1, 2016:**
  - Students must present a corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.300) on Sliding Scale B (see Page No. 2).
  - Core-course GPA is calculated using the **best 16 core courses** that meet both progression (10 before seventh semester; seven in English, math or science; "locked in") and subject-area requirements.

DIVISION I
Core-Course Requirement (16)

4	years of English
3	years of math (Algebra I or higher)
2	years of natural/physical science (1 year of lab if offered)
1	year of additional English, math or natural/physical science
2	years of social science
4	years of additional courses (any area above, foreign language or comparative religion/philosophy)

DIVISION I – 2016
Qualifier Requirements
**Athletics aid, practice, and competition*

- 16 core courses
  - Ten (10) core courses completed before the start of seventh semester. Seven (7) of the 10 must be in English, math or natural/physical science.
    - "Locked in" for core-course GPA calculation.
- Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.300) on Sliding Scale B (see Page No. 2).
- Graduate from high school.

DIVISION I – 2016
Academic Redshirt Requirements
**Athletics aid and practice (no competition)*

- 16 core courses
  - No grades/credits "locked in" (repeated courses after the seventh semester begins may be used for initial eligibility).
- Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.000) on Sliding Scale B (see Page No. 2).
- Graduate from high school.

NCAA ELIGIBILITY CENTER QUICK REFERENCE GUIDE

Eligibility Center

Division II Initial-Eligibility Requirements

Core Courses

- **Division II currently requires 16 core courses.** See the chart below.
- **Beginning August 1, 2018,** to become a full or partial qualifier for Division II, all college-bound student-athletes must complete the 16 core-course requirement.

Test Scores

- **Division II** currently requires a minimum SAT score of 820 or an ACT sum score of 68. **Beginning August 1, 2018,** Division II will use a sliding scale to match test scores and core-course grade-point averages (GPA). The sliding scale for those requirements is shown on Page No. 2 of this sheet.
- The SAT score used for NCAA purposes includes **only** the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a **sum** of the following four sections: English, mathematics, reading and science.
- **When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.**

Grade-Point Average

- Be sure to look at your high school's List of NCAA Courses on the NCAA Eligibility Center's website (www.eligibilitycenter.org). Only courses that appear on your school's approved List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- The current **Division II** core GPA requirement is a minimum of 2.000. **Division II** core GPA required to be eligible for competition **on or after August 1, 2018,** is 2.200 (corresponding test-score requirements are listed on the Sliding Scale on Page No. 2 of this sheet).
- The minimum **Division II** core GPA required to receive athletics aid and practice as a partial qualifier **on or after August 1, 2018,** is 2.000 (corresponding test-score requirements are listed on the Sliding Scale on Page No. 2 of this sheet).
- Remember, the NCAA core GPA is calculated using NCAA core courses only.

DIVISION II
16 Core Courses

3	years of English.
2	years of mathematics (Algebra I or higher).
2	years of natural/physical science (1 year of lab if offered by high school).
3	years of additional English, mathematics or natural/physical science.
2	years of social science.
4	years of additional courses (from any area above, foreign language or comparative religion/philosophy).

Sliding Scale A

Use for Division I prior to August 1, 2016

NCAA DIVISION I SLIDING SCALE

Core GPA	SAT Verbal and Math ONLY	ACT Sum
3.550 & above	400	37
3.525	410	38
3.500	420	39
3.475	430	40
3.450	440	41
3.425	450	41
3.400	460	42
3.375	470	42
3.350	480	43
3.325	490	44
3.300	500	44
3.275	510	45
3.250	520	46
3.225	530	46
3.200	540	47
3.175	550	47
3.150	560	48
3.125	570	49
3.100	580	49
3.075	590	50
3.050	600	50
3.025	610	51
3.000	620	52
2.975	630	52
2.950	640	53
2.925	650	53
2.900	660	54
2.875	670	55
2.850	680	56
2.825	690	56
2.800	700	57
2.775	710	58
2.750	720	59
2.725	730	59
2.700	730	60
2.675	740-750	61
2.650	760	62
2.625	770	63
2.600	780	64
2.575	790	65
2.550	800	66
2.525	810	67
2.500	820	68
2.475	830	69
2.450	840-850	70
2.425	860	70
2.400	860	71
2.375	870	72
2.350	880	73
2.325	890	74
2.300	900	75
2.275	910	76
2.250	920	77
2.225	930	78
2.200	940	79
2.175	950	80
2.150	960	80
2.125	960	81
2.100	970	82
2.075	980	83
2.050	990	84
2.025	1000	85
2.000	1010	86

Sliding Scale B

Use for Division I beginning August 1, 2016

NCAA DIVISION I SLIDING SCALE

Core GPA	SAT Verbal and Math ONLY	ACT Sum
3.550	400	37
3.525	410	38
3.500	420	39
3.475	430	40
3.450	440	41
3.425	450	41
3.400	460	42
3.375	470	42
3.350	480	43
3.325	490	44
3.300	500	44
3.275	510	45
3.250	520	46
3.225	530	46
3.200	540	47
3.175	550	47
3.150	560	48
3.125	570	49
3.100	580	49
3.075	590	50
3.050	600	50
3.025	610	51
3.000	620	52
2.975	630	52
2.950	640	53
2.925	650	53
2.900	660	54
2.875	670	55
2.850	680	56
2.825	690	56
2.800	700	57
2.775	710	58
2.750	720	59
2.725	730	60
2.700	740	61
2.675	750	61
2.650	760	62
2.625	770	63
2.600	780	64
2.575	790	65
2.550	800	66
2.525	810	67
2.500	820	68
2.475	830	69
2.450	840	70
2.425	850	70
2.400	860	71
2.375	870	72
2.350	880	73
2.325	890	74
2.300	900	75
2.275	910	76
2.250	920	77
2.225	930	78
2.200	940	79
2.175	950	80
2.150	960	81
2.125	970	82
2.100	980	83
2.075	990	84
2.050	1000	85
2.025	1010	86
2.000	1020	86

For more information, visit www.eligibilitycenter.org or www.2point3.org.

DIVISION II COMPETITION SLIDING SCALE

Use for Division II beginning August 1, 2018

Core GPA	SAT Verbal and Math ONLY	ACT Sum
3.300 & above	400	37
3.275	410	38
3.250	420	39
3.225	430	40
3.200	440	41
3.175	450	41
3.150	460	42
3.125	470	42
3.100	480	43
3.075	490	44
3.050	500	44
3.025	510	45
3.000	520	46
2.975	530	46
2.950	540	47
2.925	550	47
2.900	560	48
2.875	570	49
2.850	580	49
2.825	590	50
2.800	600	50
2.775	610	51
2.750	620	52
2.725	630	52
2.700	640	53
2.675	650	53
2.650	660	54
2.625	670	55
2.600	680	56
2.575	690	56
2.550	700	57
2.525	710	58
2.500	720	59
2.475	730	60
2.450	740	61
2.425	750	61
2.400	760	62
2.375	770	63
2.350	780	64
2.325	790	65
2.300	800	66
2.275	810	67
2.250	820	68
2.225	830	69
2.200	840 & above	70 & above

DIVISION II PARTIAL QUALIFIER SLIDING SCALE

Use for Division II beginning August 1, 2018

Core GPA	SAT Verbal and Math ONLY	ACT Sum
3.050 & above	400	37
3.025	410	38
3.000	420	39
2.975	430	40
2.950	440	41
2.925	450	41
2.900	460	42
2.875	470	43
2.850	480	43
2.825	490	44
2.800	500	44
2.775	510	45
2.750	520	46
2.725	530	46
2.700	540	47
2.675	550	47
2.650	560	48
2.625	570	49
2.600	580	49
2.575	590	50
2.550	600	50
2.525	610	51
2.500	620	52
2.475	630	52
2.450	640	53
2.425	650	53
2.400	660	54
2.375	670	55
2.350	680	56
2.325	690	56
2.300	700	57
2.275	710	58
2.250	720	59
2.225	730	60
2.200	740	61
2.175	750	61
2.150	760	62
2.125	770	63
2.100	780	64
2.075	790	65
2.050	800	66
2.025	810	67
2.000	820 & above	68 & above

For more information, visit the NCAA Eligibility Center website at www.eligibilitycenter.org.

REPORT CARD GRADES

A+=97-100	B+=87-89	C+=77-79	D+=67-69	F=59 or below
A =93-96	B =83-86	C =73-76	D =63-66	INC=Incomplete
A-=90-92	B-=80-82	C-=70-72	D-=60-62	P=Pass -60or above
WF=Withdrawn-Failing		WP=Withdrawn-Passing		M=Medical Excuse

HONOR ROLL

Through hard work and perseverance students may acquire excellent academic records that earn them Honor Roll status. Honor Roll designation is determined at the end of each marking period based upon marking period grades. The Honor Roll is computed using an un-weighted simple average. School policy allows students ten school days from the end of the marking period to complete missing course work that resulted in a grade of Incomplete ("I"). The Honor Roll is established at the end of this period of time. Honor Roll lists are published on the school web site and in the local newspapers (at their discretion) for each of the four marking periods. Honors will be determined by the grades given in those periods.

Honor Roll status will be noted quarterly under the following conditions:

- **Quarterly Average for Academic Excellence**= 95-100 (May include only one "B+" and all other grades "A-" or above)

- **Quarterly Average for High Honors**= 90-94 (All grades must be "B-" or above)

- **Quarterly Average for Honors**= 84-89 (All grades must be "C" or above)

Pass/Fail courses (Internship, Independent Career Exploration, etc.) **are not** included.

Courses taken through extended educational opportunities offered off campus are not included in the Honor Roll computation.

PROGRAM OF STUDY KEY

The semester(s) a course is offered can be found in parentheses on the same line as the course title. The KEY is as follows:
S1 - a course offered first semester
S2 - a course offered second semester
S1, S2 - a semester course offered both semesters
Y - a year-long course

CHANGES IN COURSE OFFERINGS

The courses presented and described in this booklet will be offered subject to budgetary consideration, enrollment, and scheduling factors.

All courses offered in Northwestern's Program of Studies lead students to achieve Northwestern's academic, civic and social expectations.

Further, graduates from Northwestern are expected to demonstrate respect and knowledge about the values and contributions of people with differing cultural orientations and beliefs, be able to use technology to solve real world problems, demonstrate the persistence required for success, demonstrate a sense of ethics and personal responsibility and demonstrate research skills that all students need to formulate questions, evaluate data and support interpretations with evidence.

The following tables indicate the learning expectations for student performance that are the focus of each department.

AGRICULTURAL EDUCATION PROGRAM

The Agricultural Education Program is designed for any student who expresses an interest in any of the following areas: plant science, animal science, natural resources, forestry, mechanics, food science, biotechnology, career exploration, business management and leadership. The program is intended to prepare students for college as well as for employment immediately following high school. All courses in this program combine theory and hands-on experience to provide technical skill training and knowledge in a wide variety of careers. Students who successfully complete certain courses in Agricultural Education will receive science credit. Those courses include: Introduction to Veterinary Science, Equine Science, Natural Resource Management and/or Fisheries & Aquaculture. Classes available to sophomores, juniors and seniors will be offered in a two year rotation. State regulations require all students to participate in a work experience program; this program should be related to agriculture and involves a time commitment outside of school hours. Students must also participate in certain local activities of the FFA which is a national student leadership organization. Any student interested in this program should contact his/her guidance counselor or the Agricultural Education staff for information and an application packet. Applications are due early January. (Program offerings subject to approval by the State Board of Education.)

FFA/SUPERVISED AGRICULTURAL EXPERIENCE PROGRAM Grades 9-12, (Y) Level 3, ½ Credit

Prerequisite: Approval of written application to the program and participation in another Agricultural Education course.

This course is required of all students taking courses in the Agricultural Education Program. The course is designed to help students locate and obtain successful work experience involved in agriculture in order to obtain skills and experiences not available in the traditional school setting. Additionally, this course grants credit for involvement in the local, state and national FFA associations.

EXPLORING AGRICULTURE Grade 9, (Y) Level 3 1 Credit

Prerequisite: Approval of written application to the program and participation in SAEP/FFA.

This course provides an overview of the agricultural industry in Connecticut and throughout the United States with an emphasis on career exploration. In this course the student will acquire basic skills and knowledge and gain practical hands-on experience in all areas of agriculture (leadership, plants, animals, natural resources, equipment operation and mechanics).

AGRICULTURAL LAB Grades 10-12, (Y) Level 3 ½ Credit

The Agricultural Lab, a one-half credit course, is taken in addition to another Agricultural Education course of the student's choice. Lab will provide time necessary for practical experience, special projects and enterprise management. Labs will meet four times in the seven day cycle. [Physical education courses may be scheduled in conjunction with agricultural labs.]

AGRICULTURAL ENGINEERING & TECHNOLOGY Grades 10-12, (Y) Levels 1/2 1 Credit

This course will present an examination of technologies and emerging trends in agricultural mechanics. Concepts such as global positioning systems, surveying and site prep, excavation, biofuels and alternative fuels in agriculture, and resource conservation systems will be covered. Students will study the role of mechanics in these emerging industries while learning about the career clusters associated with agricultural engineering. Students will gain hands-on experiences in several shop and outdoor projects.

FRUIT & VEGETABLE PRODUCTION Grades 10-12, (Y) Levels 1/2 1 Credit

This class will explore the production of Northeast fruit and vegetable crops. Conventional production practices will be explored as well as hydroponic and season extending practices. Students will get hands-on experiences in concepts of soil science, irrigation, Integrated Pest Management (IPM) and marketing and promotion of locally grown foods. Exploration and safe use and operation of technologies, facilities and equipment used in the fruit and vegetable industry will provide students with understandings of industry practice and procedures. Use of the Ag Ed greenhouse and plant science areas will provide students with hands-on skill development activities based in industry and educational standards.

FLORAL DESIGN Grades 10-12, (Y) Level 2 1 Credit

This course provides in-depth coverage of the skills and knowledge required to own and operate a florist business. The students will grow and care for a wide variety of greenhouse crops, design floral arrangements for all occasions and learn the business management aspects (planning, budgeting, sales and marketing) of the floriculture industry. Students will also learn to use and maintain horticultural equipment including greenhouse structures and florist supplies and materials.

UCONN FLORAL DESIGN Grades 10-12, (Y) Level AP/UCONN, 1 Credit

This course provides an introduction to the production, maintenance and use of plants to enhance human environments. The study of flower arrangement as an art form, with emphasis on historical background, artistic principles, color harmony and care of perishable media. Individual expression is encouraged in the creation of floral composition. This class will also cover topics listed in the Floral Design Level 2 course. Students successfully completing this course may be eligible to receive 3 college credits from UCONN.

EQUINE SCIENCE Grades 10-12, (Y) Levels 1/2 1 Credit

This course will deal with the proper handling, care and management of horses, including all areas of the equine industry and those employment opportunities associated with them. Anatomy, physiology, health, nutrition and breeding are among the topics to be covered. Local farms will be visited to offer examples of these applications, and horses will be made available for students to work with. Incorporation of numerous "hands-on" activities and lab experiences are to be expected. Students successfully completing this course will earn 1 credit which may fulfill their graduation requirements for science. Students successfully completing this course may be eligible to receive 3 college credits from S.U.N.Y. Cobleskill.

COMPANION ANIMAL SCIENCE Grades 10-12, (Y) Level 2, 1 Credit

This course is designed to provide students with basic skills used in companion animal related businesses today. These skills will include handling, health care, feeding and general management of companion animals. Emphasis will be placed on the various applications in small animal science (grooming, humane care & restraint, etc.) and how to secure successful employment in these types of businesses. Students will use, manage and maintain the small animal laboratory facilities. Students successfully completing this course may be eligible to receive 3 college credits from S.U.N.Y. Cobleskill.

UCONN COMPANION ANIMAL SCIENCE Grades 10-12, (Y) Level AP/UCONN, 1 Credit

This course will introduce students to basic concepts of nutrition, physiology, health and management of companion animals. This class will also cover topics listed in the Companion Animal Science Level 2 course. Students successfully completing this course may be eligible to receive 3 college credits from UCONN or S.U.N.Y. Cobleskill.

FISHERIES & AQUACULTURE Grades 10-12, (Y) Levels 1/2 1 Credit

In this class, students will learn about the history and methods of farming finfish for ornamental purposes, human consumption, and enhancement of wild and recreational stocks. They will develop skills in the classification and identification of finfish. Time will be devoted to studying the life history and ecology of different finfish species, their anatomy, morphology and physiology. They will cover extensive and intensive culture methods, water quality management, bio-remediation, pathology, nutrition, reproduction, aquaculture and the environment, as well as commercial operations. Students will construct and maintain small-scale aquaculture systems, as well as collect and analyze data. Students successfully completing this course will earn 1 credit which may fulfill their graduation requirements for science.

ELECTIVE COURSE OFFERINGS IN AGRICULTURAL EDUCATION

Application to Ag Ed Program is **NOT** required for this course.

UCONN Grades 10-12, (S1, S2) Level AP/UCONN ½ Credit
FUNDAMENTALS OF HORTICULTURE

This course will introduce students to the science and practice of horticultural plant propagation and culture; Basic concepts of plant structure, growth, and function; integrated pest management; impact of new technology; horticulture and the environment. Students successfully completing this course may be eligible to receive 3 college credits from UCONN. Students successfully completing this course will earn ½ credit which may fulfill their graduation requirements for science.

ART DEPARTMENT

In all Art courses the development of individual expression is emphasized. Students consistently explore original concepts to solve a myriad of visual problems, expanding and developing primary ideas to their highest level. Diverse media, tools, and techniques combine to aid the inquisitive, artistic mind to innovate and render unique craft and fine art. Although the school supplies basic materials, individuals will be asked to buy certain supplies. In addition, students will assist in the care and maintenance of studios and equipment.

INTRODUCTION TO ART Grades 9-12, (S1, S2) Level 2 ½ Credit
CLUSTER: Humanities

The introduction to Art course is Northwestern's initial studio course, designed to prepare students for higher level art classes. This course takes a more in depth look at the Elements and Principles of Design, drawing skill basics, color theory, the workability of clay, and includes both two and three-dimensional design projects.

FINE ART DESIGN 1 Grades 9-12, (S1, S2) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Introduction to Art (Senior Exempt)
Seniors do not need to have taken Introduction to Art.

Fine Art Design will begin with a study of basic design, which will be applied to three-dimensional projects in leather tooling, stained glass, metal soldering and jewelry, and more. Although the school provides basic supplies, quality materials are costly. Students should bring a $15 lab fee to the first class.

PAINTING 1 Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Introduction to Art
Seniors do not need to have taken Introduction to Art.

This is an introductory course including instruction in water colors and acrylics, Special emphasis will be placed upon drawing capabilities and expression as a sound foundation to painting. Basic traditional techniques of painting form the core of the course.

CERAMICS 1 Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Humanities

Students learn basic hand building and wheel throwing techniques in pottery. These techniques will be used in assigned projects designed to meet each student's creative interests. Use of the Kiln and glazing techniques will also be taught.

FINE ART DESIGN 2 Grades 10-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: A grade of "C" or higher in Fine Arts Design 1

This is an advanced program for those students who excelled in Fine Art Design 1. Students will work independently on long-term projects and develop an understanding of more complicated techniques.

PAINTING 2 Grades 10-12 (S2) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Painting 1

The student will be given an opportunity to continue his/her work in all areas of painting with an emphasis on development of technical skills and individual expression using acrylic paint. The computer will be used to explore basic color and design problems.

CERAMICS 2 Grades 10-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: A grade of "C" or higher in Ceramics 1

This advanced course in the use of clay will give students a chance to further develop their skills. With an emphasis on personal expression, students will create various forms and apply a variety of decorative techniques on clay surfaces. Students will develop a working vocabulary of ceramic terms as well as study the historic aspects of pottery and how they influence pottery design, construction and aesthetics.

HONORS CERAMICS Grades 11-12 Level 1 ½ Credit
CLUSTER: Humanities
Prerequisite: Permission of Instructor

This course is designed to engage students in advanced ceramics techniques and projects. By gaining an expanded knowledge of tools and through an increased exposure to artisans currently involved in ceramics, students will develop and enhance their skills learned in Ceramics I and II, as well as

refine and experiment with new materials and surface treatments. This course is for students who have a serious interest in ceramics and are self-driven and active learners.

HONORS ART SPRING 1 Grades 11- 12 (S2) Level 1 ½ Credit
HONORS ART FALL 2 Grades 12 (S1) Level 1 ½ Credit
CLUSTER: Humanities
Prerequisite: Permission of Instructor

This course is designed for students who have a serious interest in art or are intending to pursue a post-secondary major in art. Any student completing two and one-half credits in art may enroll in the Honors Program. A student who has developed a recent, serious interest in an art career may be exempt from these prerequisites. Honors Art 1 will focus on drawing methodology and the practice of "Learning to See" which develops the skill set to create quality works and supports conceptual development. Students with a mature attitude and a strong work ethic can take the Honors Art 1 course with the instructor's permission. It is suggested that this course be taken in the junior year, or before, in order to develop the skills necessary for additional art study.

Honors 2 students will focus on building a concentration in one of the following areas such as portfolio preparation for college applications or a concentration in a specific field of art such as ceramics, painting, and crafts. Each student will be required to maintain a schedule of reading and drawing throughout the course. For those students unable to schedule a full year, one semester study may be arranged. This course has been restructured to allow a student who is planning a major in art to begin work on their portfolio in the spring of their junior year and finish work on it by mid-year of their senior year, in time for senior portfolio reviews.

This course has been restructured to allow a student who is planning to major in art in college to begin work on their portfolio in the spring of their junior year and finish work on it by midyear of their senior year, in time for college portfolio reviews.

SCULPTURE 1 Grades 9-12, (S1) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Introduction to Art (Senior Exempt)

This is an introductory course focusing on the basic methods of constructing a piece of sculpture: reductive and additive. Students will create personal works of art using a variety of materials. New tools and techniques will be used to make pieces structurally sound.

JEWELRY 1 Grades 9-12, (S1) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Introduction to Art

This course designed for the student who has already learned the basic metal working skills such as piercing, soldering and finishing. Students will design and create complex pieces of metal jewelry and/or tiny metal sculptures. Fabricating and setting stones, repousse, wire crochet, inlays and enamel are techniques to be covered. Although the school provides basic supplies, a $30 Lab Fee is required to help offset the cost of quality tools and materials. When using sterling Silver stock, students will pay market price.

INTRODUCTION TO COMPUTER ANIMATION Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Humanities, Career and Life Skills

In this course you will learn the process of computer model making and animation using the same professional level software used by today's film and gaming industries. With a solid understanding of these basic elements, you will have the opportunity to create your own short animated movie by the end of the semester. Students will also have the opportunity to experiment with character animation.

This course is an excellent opportunity for students interested in careers in engineering, architecture, and the sciences by learning to work in a 3D computer environment using the very latest software.

INTRODUCTION TO PHOTOGRAPHY Grades 9-12 (S1) Level 2 ½ Credit
(No prerequisite) **Can be taken for Art Credit**
CLUSTER: Humanities, Career and life Skills

This course introduces students to the fundamentals of digital photography. Students will explore composition, camera technique, and editing with professional software. Students will research, study, and apply the style of photographers from the past and present. Using project-based lessons, each unit takes students through the creation of a specific project, building on the student's growing knowledge of the editing software program. NOTE: Students should supply their own digital camera (2 megapixel or greater) for assignments that require taking pictures outside of school.

DRAWING 1 Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Humanities

This course is offered to serious students of art and those who wish to improve their skills and expressive capabilities through the medium of drawing. The class seeks to develop the student's ability to draw from observation. Observational drawing involves cultivating the perceptual skill set that translates the three dimensional subject into a two-dimensional drawing. This process is often referred to as "learning to see." This technique of seeing enables the individual to successfully execute an accurate representation of the observed subject. Learning to see is a process learned from various exercises and rigorous hands-on practice. These skills will be developed both in and out of class.

The skills that are acquired from perceptual drawing practice are essential to the conceptual process of creating inventive work and necessary for portfolio development. Fundamental drawing processes and concepts are applied to the other disciplines within the art field such as animation, visual communication, product design, technology based art, as well as disciplines outside of the art field such as science and engineering.

BUSINESS AND FINANCE TECHNOLOGY DEPARTMENT

The primary purpose of Business and Finance Technology at Northwestern Regional School is to provide the students with the skills and knowledge needed to perform successfully in today's high performance workplace. Educational goals focus on developing skills to effectively utilize resources, information systems and technology. A branch of Northwest Community Bank is open on campus to provide students with employability skills, work ethics and money management skills. A chapter of Future Business Leaders of America is open to students in grades 9-12, and a new Internship Program is available to students in grades 11 and 12.These resources, along with the business courses offered, will give students the competitive edge in today's job market or in preparation for the rigors of college coursework.

COMPUTER APPLICATIONS Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Career and Life Skills

Learn all applications of Office 2016-Word, Excel, Access, and Publisher in this half-year course. Learn skills to create business documents, spreadsheets, databases, desktop publishing projects for use in any educational and professional setting. Reinforce keyboarding, proofreading, and editing skills.

ACCOUNTING I Grades 10-12 (Y) Level 1, 2 1 Credit
CLUSTER: Career and Life Skills

This course is designed to introduce the accounting cycles for sole proprietorships, partnerships, and corporations as types of business ownership. Students will develop competence in the interpretation and preparation of accounting journals, ledgers and financial statements.

ACCOUNTING II Grades 11-12 (Y) Level 1, 2 1 Credit
CLUSTER: Career and Life Skills
Prerequisite: Accounting I

This is an advanced course covering in depth the topics of corporate, cost, tax accounting, etc. This is a must for students who passed Accounting I and are going to college or straight into the work force. Computer applications in accounting will also be covered.

NOTE: *Credits earned in Accounting I, Accounting II may be applied toward fulfilling the mathematics requirement. Accounting I and II may offer an honors challenge component.*

BANKING PRINCIPLES Grades 10-12 (Y) Level 2 1 Credit
CLUSTER: Career and Life Skills

In this course, students will understand how a bank functions as a business and the role it plays in the U.S. economy. Everyone must make financial decisions. This course will give the students the knowledge to make those decisions. Banking Principles will provide immediate useful banking and financial knowledge as well as the foundation for new learning and enhanced career opportunities.

HONORS BANKING PRINCIPLES Grades 10-12 (Y) Level 1 1 Credit
CLUSTER: Career and Life Skills
Prerequisite: Permission of the Instructor

Honors Banking Principles is a course offering open to students in Grades 10-12. In this course, students will understand how a bank functions as a business and the role it plays in the U.S. economy. Everyone must make financial decisions. This course will give the students the knowledge to make those decisions. Honors Banking will provide immediate useful banking and financial knowledge as well as the foundation for new learning and enhanced career opportunities. The real-world experience provided as part of this course will enable students to be employable in our on-site branch of Northwest Community Bank. Whether the student chooses to do the on-the-job training or not, each student will take away a valuable work experience and new knowledge to serve him or her in future endeavors. The curriculum was the first of its kind in the state of Connecticut.

ENTREPRENEURSHIP AND E-COMMERCE Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Career and Life Skills

Students will identify the characteristics of today's successful entrepreneur and measure the impact of small business on the U.S. economy. Students will learn key elements in crafting a business plan from setting goals and objectives to sales forecasting and financial planning. Each student will undertake a research project to conceive, propose, plan, develop and market their own online business enterprise. Students will utilize a variety of Internet-based technologies.

INTERNATIONAL BUSINESS Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Career and Life Skills

Students will learn about the expanding global economy, including international business strategies and concepts related to business **principles**

and cultural diversity. The course introduces the role and impact of international business, geography, career opportunities, travel, social and cultural factors, communications, the political and legal environment, economics, exporting and importing, and trade relations. International business is everywhere. Consumers use products imported from countries around the world every day, and U.S. companies manufacture and send American products to other countries regularly. Many businesses are expanding into global markets, which means many jobs now and in the future will involve international business.

MARKETING Grades 9-12 (S1, S2) Level 2 ½ Credit
PRINCIPLES AND APPLICATIONS
CLUSTER: Career and Life Skills

This course is designed to introduce students to the processes and functions involved in providing products and services that meet consumers' wants and needs. Marketing concepts are important to everyone because they impact individuals, business, and society. These concepts are influenced by changing technologies and emerging economies across the globe. In this course, students will investigate, analyze, and apply the principles, processes, and functions involved in meeting the demands of the consumer by exploring different industries including: sports, entertainment, health care, engineering, fashion, banking, insurance, agriculture, and small business. Students will choose the most effective marketing strategies to employ in exploring an industry of their choice.

BUSINESS LAW Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: Career and Life Skills

Students will develop and apply knowledge of legal terms and concepts relating to ethical and legal principles and their manifestations in common law, the law of torts and the basis of contract law. Students will develop and apply knowledge of contract law and its applications to consumer issues such as the sale and purchase of goods and services, warranties and consumer protection, personal property and bailment, and the business formation of sole proprietorships. A must have course for young entrepreneurs.

PRINCIPLES OF ECONOMICS Grades 11-12 (S1, S2) ½ Credit
Level 1, 2
CLUSTER: Career and Life Skills

This course is designed to enhance students' understanding of economic principles and give them the tools to make choices they face in their daily lives and the choices they will face as members of the workforce, and as consumers, savers, and investors. **Not offered 2018-2019**

Note: *Economics may offer an honors challenge component.*

UCONN MICROECONOMICS Grades 11-12 (S1, S2) ½ Credit
Level AP/UCONN
CLUSTER: Career and Life Skills

This course is designed to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. The course introduces microeconomic concepts and analysis, supply and demand analysis, theories of the firm and individual behavior, competition and monopoly, and welfare economics. Students will also be introduced to the use of microeconomic applications to address problems in current economic policy throughout the semester. Students satisfying the UCONN requirements for admission and successfully completing the course will earn college credit.

UCONN MACROECONOMICS Grades 11-12 (S1, S2) ½ Credit
Level AP/UCONN
CLUSTER: Career and Life Skills

This course is designed to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. The course analyzes the determinants of aggregate economic activity and the effects of government policies intended to achieve full employment, price, stability and economic growth. Topics include inflation, unemployment, interest rates, fiscal policy and public debt, monetary policy, the balance of payments, and exchange rates. It also introduces the economic analysis of international trade, comparative advantage and selected current economic problems. Students satisfying the UCONN requirements for admission and successfully completing the course will earn college credit.

BUSINESS PRINCIPLES Grades 9-12 (S1, S2) ½ Credit
Level 2
CLUSTER: Career and Life Skills

Students will investigate the characteristics and functions of business and examine the fundamental nature of a free market economy. Students will be introduced to topics in the world of business to determine an area of interest they would like to pursue in the Business and Finance Technology Department. These topics include: economics, entrepreneurship, ethics/law, stock market, and financial management. Each student will undertake a research project to analyze and report on a major public corporation and the market and industry segments it represents.

NOTE: A maximum of two half-credits may be earned for graduation requirement in Social Studies by successfully completing the following courses: Economics, Business Law, UCONN Microeconomics and UCONN Macroeconomics.

PERSONAL FINANCE Grades 10, 12 (S1, S2) Level 2 ½ Credit
CLUSTER: Career and Life Skills

This course is a college-prep (level 2) course designed to give students real-world financial applications of the business and mathematics involved in topics such as taxes, mortgages, loans, credit, banking, investing, the stock market, financial management, etc. The course will use computers, calculators, financial software and the Internet to investigate these topics. Finance is a project-based course designed to provide financial literacy and money management skills to participants a "must have" course in this economy!

NOTE: *Credit earned in Personal Finance may be applied toward fulfilling a Mathematics or Business and Finance Technology credit.*

BUSINESS INTERNSHIP Grades 11 & 12 (3 Months. - ½ Credit)
PROGRAM
CLUSTER: Career and Life Skills
Prerequisite: Permission of the Business Dept.

A program offered as a partnership with New Hartford Business Council; students will gain real-world experience by completing a minimum of 15

hours "shadowing" in the student's field of interest. Requirements for the course must be completed outside the school day and in addition to a student's regular course load. Students will learn employability skills such as resume writing and interviewing, collaborating with business professionals, presenting, and completing a portfolio. Participating businesses offer experiences in the fields of accounting, insurance, marketing, municipal/civic, engineering, manufacturing, and entrepreneurship. Build your resume, establish business contacts, and/or earn possible future employment. Final course grade will be a pass/fail.

YEARBOOK Grades 10-12 (S1) Level 2 1/2 Credit
CLUSTER: Humanities

Students on the High School Yearbook staff will be part of preserving the history of their classmates and telling the complete story of experiences shared together. While producing a 200-page yearbook, students will develop skills in basic photography, graphic design, and technology through a current web-based publication software. Students will also learn the ethics of journalism and essential business skills including time/project management, communications with business/community leaders, and the creation of a custom marketing plan. **This course is offered only in the fall and students can elect to continue their work into the spring for independent study credit (see below).**

YEARBOOK INDEPENDENT STUDY Grades 10-12 (S1) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Completion of Yearbook class

Students in this independent study course will work on their own time finalizing the yearbook including proofreading and editing of pictures and blurbs. Although students will collaborate with the yearbook advisor, self-discipline and motivation are necessary for these final stages of yearbook completion. **This course is offered only in the spring as an independent course.**

CULINARY ARTS

The Culinary Arts program provides an opportunity for students to learn the basics of food preparation with an emphasis on kitchen safety and safe food handling. More and more students are in a situation where they may be required to assist a parent, guardian or older sibling in preparing some or all meals in the household. The objective of the culinary arts program is to introduce the student to culinary technique and the language of the kitchen as they learn to prepare nutritious dishes. Students are required to purchase a specially formatted notebook for recipes and food information for each course which they will keep as a permanent personal recipe book upon completion of the course.

CULINARY ARTS – CUISINE 1 Grades 11-12 (S1, S2) Level 3 ½ Credit
CLUSTER: Career and Life Skills

This one semester course offers students an opportunity to learn the fundamentals of culinary arts. The student will acquire skills in areas of equipment use, recipe management and culinary technique as they prepare foods under the direction and supervision of the chef/instructor. Upon successful completion of this course, the student should be able to demonstrate an ability to prepare, present, taste and discuss modern cuisine.

CULINARY ARTS - PASTRY & BAKING 1 Grades 11-12 (S1, S2) Level 3 ½ Credit
CLUSTER: Career and Life Skills

This one semester course offers students an opportunity to learn the fundamentals of pastry and baking. The student will learn how to understand and use baking formulas as well as choosing ingredients, proper measuring, mixing and baking techniques. They will acquire skills in areas of equipment use and finishing techniques as they prepare pastries and baked products under the direction and supervision of the chef/instructor.

CULINARY ARTS - WORLD CUISINE Grades 11-12 (S1, S2) Level 3 ½ credit
CLUSTER: Career and Life Skills

Prerequisite: Cuisine 1 students must have a B average or higher to enroll in this course.

This course will explore the culinary landscape of the world, its similarities and differences. Emphasis is on use of ingredients and dishes based on

culture, geography and economics of food. Students will spend time in the media center computer lab exploring food and cultures of countries of the world, then translate this knowledge in food labs that bring these cultures to life under the direction and supervision of the chef/instructor. Students are also required to complete a food project based on their own ethnic background as part of the requirements for successful completion of this course.

ENGLISH DEPARTMENT

During their four years in high school students in the English department will learn to:

- read, write, speak, listen, and view to construct meaning from varied texts;
- read and respond thoughtfully to written, oral, and visual texts;
- speak and write English proficiently;
- use language arts to create written, oral, and visual texts;
- choose and apply appropriate strategies that enhance fluent and proficient communications;
- understand and appreciate texts from many historical periods and cultures;
- employ the language arts for lifelong learning, work, and enjoyment.

English courses are presented on four levels.

AP/UC: Advanced Placement and UCONN ECE courses prepare students for the highest levels of competitive college and career. These courses require the demonstration of a mastery of reading, writing, mathematics, science, communications, teamwork, critical thinking, and problem solving. **Successful AP/UC students are able to do prescribed college and university level work independently and find enjoyment in challenging themselves to complete assignments and other course requirements of the greatest difficulty.**

Level 1: Honors level courses prepare students for competitive college and career. These courses require the demonstration of a mastery of reading, writing, mathematics, science, communications, teamwork, critical thinking, and problem solving. Successful level 1 students are able to do prescribed college and university level work independently and find enjoyment in challenging themselves to complete assignments and other course requirements of the greatest difficulty.

Level 2: Courses prepare students for college and career and require the demonstration of a mastery of reading, writing, mathematics, science, communications, teamwork, critical thinking, and problem solving. **Successful level 2 students are able to work independently and are driven to complete assignments and other course requirements.**

Level 3: Courses prepare students for college and career and require the demonstration of a mastery of reading, writing, mathematics, science,

communications, teamwork, critical thinking, and problem solving. **Level 3 courses offer students greater support and time in the classroom in attaining the skills necessary to be college and career ready.**

9th GRADE COURSES

ENGLISH I Level 2, 3 (Y) 1 Credit
CLUSTER: Humanities
Prerequisite: Grade 8 English, teacher recommendation

Reading and responding to literary, informational, and persuasive texts are emphasized in this course. Responses range from initial reaction to interpretations, explanations, and reflections; and these responses are in oral, visual, and written formats. *Animal Farm, The Odyssey, Of Mice and Men, To Kill a Mockingbird,* and a Shakespearean play are among the classic and contemporary works explored. Understanding and applying advanced vocabulary and grammar are presented in context.

ENGLISH I H Level 1 (Y) 1 Credit
CLUSTER: Humanities
Prerequisite: Grade 8 English, teacher recommendation, grade of 90 or better in English 8

In addition to activities described in English I above some freshmen will be recommended to join an interdisplinary program designed to approach traditional liberal arts subject matter in a new format. Participating students will begin their studies by examining various artistic, literary and scientific works or objects pertinent to a specific historical era or cultural area. These items will serve as a starting point for exploring the thoughts and experiences of people in the period or culture to which these objects belong. Throughout the year, students will discover how these objects relate to each other and to the lives in that time period/culture and in their own. Faculty advisors will work closely with students to consider how the objects are both a product of their own time and place, yet worthy of study today.

During the summer, each student eligible for the Honors course will be given a reading list of books that offer a background to the time period or culture to be the focus during the academic year. This summer reading must be completed before the school year begins, at which point students will select one of the objects for further study. The Honors course is then divided into two parts, one for gathering materials and one for synthesizing them. The students will meet as a whole group throughout the year to share and integrate what they have learned.

10th GRADE COURSES

ENGLISH II Levels 1, 2, 3 (Y) 1 Credit
CLUSTER: Humanities
Prerequisite: English I

This course continues the study of world literature and continues to develop critical reading, writing, and speaking skills. Language study includes a review of significant grammatical principles and correct language convention practices. The research process is highlighted and applied in the creation of one or more research based projects, papers, or presentations.

11th GRADE COURSES

ENGLISH III Levels 1, 2, 3 (Y) 1 Credit
CLUSTER: Humanities
Prerequisite: English II

This course considers several major themes in American Literature from personal, historical, and critical perspectives. Students write expressive, narrative, informative, and persuasive pieces based on personal experience, literature, and visual texts. They create projects related to themes discussed. Major full-length works are read to supplement a wide selection of subject-related writings and visual texts.

AP ENGLISH LANGUAGE AND COMPOSITION Level AP/UCONN (Y) 1 Credit
CLUSTER: Humanities
Prerequisite: An A- average in Honors English II and current instructor recommendation.

This course engages students as critical readers of texts written from a variety of disciplines and rhetorical contexts. It also engages them as skilled writers who can compose for a variety of purposes. Students study the interactions among a writer, audience, and message. They also examine how rhetorical strategies contribute to the overall effectiveness of prose. The course prepares student for the mandatory AP English Language and Composition examination in the spring. Summer projects are required.

12th GRADE COURSES

To fulfill the senior year requirements, all students must take a full year of English but can do so in a few ways. Seniors can select semester pairings; they all take Writing Workshop in the fall and select either Public Speaking or Experiences in Literature in the Spring. Seniors could also take full year honors and AP options: Honors British Literature, Honors Shakespeare Seminar, AP English Language & Composition, or AP English Literature & Composition. Seniors can also take Public Speaking and Experiences in Literature in addition to their full year requirement for elective credit as well.

AP LITERATURE AND COMPOSITION Level AP/UCONN (Y) 1 Credit
CLUSTER: Humanities
Prerequisite: AP English Language and Composition or an A- average in Honors English III and/or instructor recommendation.

This course is designed to provide the student with an in-depth study of works of recognized literary merit from various genres and periods. Writing assignments analyze literature in expository, analytical, and argumentative modes. Assistance is provided to help each student refine his/her unique voice. The AP Literature and Composition examination and a summer assignments are course requirements.

AP ENGLISH LANGUAGE AND COMPOSITION Level AP/UCONN (Y) 1 Credit
CLUSTER: Humanities
Prerequisite: An A- average in Honors English II or III, and/or current instructor recommendation.

This course engages students as critical readers of prose written from a variety of disciplines and rhetorical contexts. It also engages them as skilled writers who can compose for a variety of purposes. Students study the interactions among a writer, audience, and message. They also examine how writing conventions and language usage contribute to the overall effectiveness of prose. The course prepares student for the mandatory AP Language and Composition examination in the spring. Summer projects are required.

WRITING WORKSHOP Level 2 (S1) ½ Credit
CLUSTER: Humanities, Career and Life Skills

The first semester of this course allows students to write in a variety of forms - narrative, expository, exploratory, argumentative - and on a variety of subjects. The ability to observe the world, vividly recreate experiences, and logically present ideas is emphasized. The over-arching purpose of this course is to enable students to be prepared to write effectively and confidently to real audiences for real purposes.

PUBLIC SPEAKING Level 2 (S2) ½ Credit

This second semester course puts students in a comfortable and friendly environment, and through dynamic interpersonal conversation by way of impromptu and prepared speech, students practice the art of rhetoric by examining, discussing, and performing essential skills declared by the American Communication Association using online learning modules. This blended learning environment maximizes students' ability to foster confidence in speaking in the public setting, whether formal or informal. Students will also learn to critically evaluate author's intention by examining word meaning, his/her point of view and reasoning, and to focus on critical listening, persuasive and figurative language, connotative and implied meaning, and adapting a speech for a variety of purposes.

EXPERIENCES IN LITERATURE Level 2 (S2) 1 Credit
CLUSTER: Humanities

Just as Writing Workshop intensely focuses on writing, this second semester focuses on reading. The students engage in self-selected texts within units that expose them to varieties of different literature, including historical fiction, memoir, literary nonfiction, podcasts, and graphic novels. Students use the literature as a basis to explore various cultures, human experiences, and personal connections. Instead of traditional formal essays, students will have the opportunity to be assessed through collaborative discussions, journaling, projects, and other creative means.

SHAKESPEARE SEMINAR Level 1 (Y) 1 Credit
CLUSTER: Humanities

This course is designed to hone reading and writing skills through the study of Shakespeare's plays. The plays are studied with an emphasis on the conventions of tragedy, history, and comedy. By spending a full year engaged in the plays, students will discover the theatrical elements,

subtleties of language, and historical alterations made by Shakespeare. In addition to creative projects and presentations, students will consult literary criticism in addition to reading the plays, which will greatly prepare them for college. The college essay will also be covered.

BRITISH LITERATURE Level 1 (Y) 1 Credit
CLUSTER: Humanities

This course moves chronologically, covering the major periods of Great Britain's literature; it will begin with the Anglo-Saxon and Medieval periods, into the Elizabethan era, then to the Victorians, ending with the modern era. In addition to reading critically, students will take a humanities approach, learning the historical and cultural influences of England and comparing these to their own experiences. While students will be writing some formal literary analysis, they will also be assessed through creative independent projects and presentations. The close reading skills and critical literary analysis writing will greatly prepare students for college.

Not offered in 2017-2018

JOURNALISM & MEDIA LITERACY Grades 9-12 Level 2 (Y) 1 Credit
CLUSTER: Humanities

Students in this course are introduced to the concepts, purposes, and vocabulary of journalism and journalism ethics while learning about the importance and uses of a variety of media formats. Students will use their knowledge of the writing process for the purpose of developing a school newspaper. Since the course is dependent upon student leaders as editors, this course can be taken repeatedly over the course of four years.
This elective course does not satisfy the English graduation requirement.

Not offered in 2017-2018

SENIOR SEMINAR Level 3 (Y) 1 Credit

CLUSTER: Humanities

Senior Seminar is a survey course in the genres of literature and types of writing students have been exposed to throughout their Language Arts career. This course includes curriculum from Writing Workshop, linking the major essays to novels read during the course. Reading will include a variety of material: short fiction, nonfiction, poetry, the novel, and (if time allows) drama/comedy. The writing in the course is extensive as students prepare to communicate effectively post-secondary school. Students will be given the opportunity to improve their ability to listen and speak publically to further develop communication skills. The course objectives are designed to align with the Common Core standards for Language Arts for grades 11-12 and students are expected to make gains in the following 21st century skills: critical thinking in reading and writing, creativity, oral communication, and collaboration.

WORLD LANGUAGE DEPARTMENT

It is recommended that a student take a three to five year sequence in one language.

SPANISH I Grades 9-11 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills

Students will have the opportunities to develop a foundation for skills in listening, speaking, and reading and writing topics related to themselves, and their daily lives and the sentence structure necessary to do this. Correct pronunciation will be stressed and students will also begin to learn about the culture of Spanish-speaking countries.

SPANISH II Grades 9-12 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Spanish I

Short dialogues, simulated real-life situations, and paired activities will be used to continue the development of the skills begun in Spanish I. Vocabulary and structure studies will be those necessary to communicate about topics relating to the students' interests and to survive in a Spanish speaking country.

SPANISH III Grades 10-12 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Spanish II

This course continues the development of listening, speaking, reading and writing skills. Emphasis will be given developing speaking skills. **Course is taught primarily in Spanish. Students are expected to remain in target language on a daily basis.**

HONORS SPANISH IV Grade 11-12 (Y) Level 1 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Spanish III

This course emphasizes more speaking and writing related to readings. Students will read current articles and discuss them and other literature to further develop listening, reading, writing and speaking skills. Conversation and compositions are based on sets of vocabulary and themes embedded in each unit. Readings will include modern short stories, poetry and articles. **Course is taught primarily in Spanish. Students will be expected to communicate exclusively in Spanish.**

HONORS SPANISH V Grades 11-12 (Y) Level 1 1 Credit
(may also be taken as UCONN Spanish V - see below)
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Honors Spanish IV

UCONN SPANISH V Grade 12 (Y) Level AP/UCONN 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Permission of instructor and recommendation of current Spanish instructor.

This course provides advanced studies in all aspects of Spanish closely paralleling one semester of work at the University of Connecticut. Students satisfying the UCONN requirements for admission and successfully completing the course will earn 3 college credits. **Course is taught primarily in Spanish. Students will be expected to communicate exclusively in Spanish.**

The Advanced Placement examination may be taken in Spanish, if appropriate arrangements are made with the teacher and guidance counselor.

Please consult with your counselor for more information on the AP program.

ITALIAN I Grades 9-11 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills

Italian I is designed to teach students about the Italian Language and culture, through the development of reading, writing, listening and speaking skills. Topics such as family, school, houses, clothing, weather, food and holidays will be used for vocabulary building. Attention to pronunciation through interactive speaking activities will assure a solid foundation as students advance to the next level.

ITALIAN II Grades 9-12 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Italian I

Italian II is a continuation of the skills developed in Italian I. Students build on the vocabulary acquired through short dialogues and paired activities. Students will have the opportunity to make comparisons to Italian television programming, holidays, and businesses while paying closer attention to language structure as well as cultural differences.

ITALIAN III Grades 10-12 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Italian II

This course continues the development of listening, speaking, reading and writing skills with the emphasis on reading. Additional verb tenses will be studied so that students can progress to reading an easy-reader novel such as Pinocchio. **Course is taught primarily in Italian. Students are expected to converse in target language on a daily basis.**

HONORS ITALIAN IV Grades 11-12 (Y) Level 1 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Italian III or IV

Italian IV continues to develop and refine the skills of listening, reading, writing and speaking Italian. Students will read short stories, poetry, articles and other works by Italian authors. Students will study and evaluate some major works of Italian art. Conversation and compositions are based on the readings and newly acquired vocabulary. **Course is taught primarily in Italian. Students will be expected to communicate exclusively in Italian.**

UCONN ITALIAN V Grade 12 (Y) Level AP/UCONN 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Permission of instructor and recommendation of current Italian instructor.

This course provides advanced studies in all aspects of Italian closely paralleling one semester of work at the University of Connecticut. Students satisfying the UCONN requirements for admission and successfully completing the course will earn 3 college credits. **Course is taught primarily in Italian. Students will be expected to communicate exclusively in Italian.**

CHINESE I Grades 9-11 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills

This course will introduce greetings, professions, the Chinese calendar, Pinyin (Americanization of Chinese writing), Chinese characters, in addition to other vocabulary and structures.

CHINESE II Grades 9-12 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Chinese I

This course is a continuation of the skills developed in the introductory course. Development will focus on reading and writing Chinese characters, as well as on pinyin (use of the English alphabet). In addition, conversational skills will be expanded to prepare students on both a social and professional level.

CHINESE III Grades 10-12 (Y) Level 2 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Chinese II

In Chinese III students will continue to develop listening and speaking skills through short conversations and grouped activities. Students will read and write passages about daily life. Students will continue to learn about the life and culture in China.

HONORS CHINESE IV Grades 11-12 (Y) Level 1 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Chinese III

Chinese IV will continue to develop and refine vocabulary and characters as they read and study short stories. Group activities will offer more advanced opportunities for conversation. **Course is taught primarily in Chinese.**

HONORS CHINESE V Grades 11-12 (Y) Level 1 1 Credit
CLUSTER: Humanities, Career and Life Skills
Prerequisite: Chinese IV

Chinese V will continue to develop and enhance skills acquired in Chinese IV. Special emphasis will be placed on students' ability to apply previous knowledge when speaking and writing. This course will offer students the ability to develop more sophisticated and elaborate speech and written expression. **Course is taught primarily in Chinese.**

CULTURAL STUDIES SPANISH Grades 9-12 (S1) Level 3 ½ Credit
CLUSTER: Humanities, Career and Life Skills

This course provides a framework for students to visit, examine, and analyze Spanish speaking countries/regions both inside and outside the United States to learn about the places and people. Emphasis is placed on the distinctive cultural characteristics of a country or region. Upon completion, students should be able to identify similarities/differences, discuss the impact of one or more cultural

elements and express basic ideas in Spanish related to the topics. In this course, students will explore the art, history, music, holidays, myths, legends and geography, as well as learn foundational vocabulary in Spanish associated with each topic.

Students who have successfully completed another language course are not eligible to take this course.

This course may not fulfill the language requirement for most colleges.

CULTURAL STUDIES ITALIAN Grades 9-12 (S2) Level 3 ½ Credit
CLUSTER: Humanities, Career and Life Skills

This course provides a framework for students to visit, examine, and analyze Italian culture both inside and outside the United States to learn about the places and people. Emphasis is placed on the distinctive cultural characteristics of Italy and its regions. Upon completion, students should be able to identify similarities/differences, discuss the impact of one or more cultural elements and express basic ideas in Italian related to the topics. In this course, students will explore the art, history, music, holidays, myths, legends and geography, as well as learn foundational vocabulary in Italian associated with each topic.

Students who have successfully completed another language course are not eligible to take this course.

This course may not fulfill the language requirement for most colleges.

MATHEMATICS DEPARTMENT

The following is a list of courses offered by the mathematics department. Accompanying each listing is a short description. Please note: College bound students should complete at least Algebra I, Geometry, and Algebra II; any student interested in a technical career should complete four years of mathematics. Level 3 courses prepare students for community colleges and vocational school.

A graphing calculator is required for all math courses.

APPLIED ALGEBRA IA Grades 9 (Y) Level 3 1 Credit
CLUSTER: STEM

This course is designed to cover the first half of a basic Algebra 1 curriculum. It explores algebraic operations and properties with an emphasis on linear functions.

ALGEBRA I Grade 9 (Y) Level 2 1 Credit
CLUSTER: STEM

This course helps the student to gain an understanding of the basic properties of our number system as well as the techniques of algebra and the process of deductive reasoning as it applies to algebraic concepts.

HONORS ALGEBRA I Grade 9 (Y) Level 1 1 Credit
CLUSTER: STEM

This is an accelerated math course designed for strong math students who were not selected in grade eight for Honors Algebra. The course covers the same concepts as Algebra 1, but in a deeper and broader context. A ninth grader who successfully completes this course has the opportunity to continue in the Honors math program.

HONORS GEOMETRY Grade 9, 10 (Y) Level 1 1 Credit
CLUSTER: STEM
Prerequisite: A grade of C or better in Honors Algebra I or permission of the department head.

This is an accelerated math course. Topics such as coordinate geometry, angle measurement, similarity and transformation are studied. Inductive and deductive reasoning are emphasized.

APPLIED ALGEBRA 1B Grade 10 (Y) Level 3 1 Credit
CLUSTER: STEM
Prerequisite: Applied Algebra 1A

This course is designed to cover the second half of a basic Algebra 1 curriculum. It will focus on algebraic operations and properties of non-linear functions.

APPLIED GEOMETRY Grades 10-11 (Y) Level 3 1 Credit
CLUSTER: STEM
Prerequisite: Applied Algebra 1B

This course introduces students to geometric concepts and applications through an inductive approach. Topics include perspective drawing, angle relationships, coordinate geometry, circumference, area, and volume.

GEOMETRY Grades 10 (Y) Level 2 1 Credit
CLUSTER: STEM
Prerequisite: Algebra I or permission of department head

This course introduces the student to the elements of geometry and to induction as a method of discovery. It includes such topics as angle relationships, parallel lines, congruent triangles, trigonometry, circles and arcs, construction and loci, and coordinate geometry.

HONORS ALGEBRA II Grades 10-12 (Y) Level 1 1 Credit
CLUSTER: STEM
Prerequisite: A grade of C or better in Honors Geometry or permission of department head.

This is an accelerated math course. The usual topics as listed under Algebra II below are studied, but to a greater degree. The student is expected to demonstrate a great degree of critical thinking.

FOUNDATIONS OF ALGEBRA II Grades 11-12 (Y) Level 3 1 Credit
Students will earn Level 2 credit for earning a B- average for the course.
NWCC MATH 137
CLUSTER: STEM
Prerequisite: At least a D average in Algebra 1 and Geometry or at least a B- average in both Applied Algebra and Applied Geometry.

This course is designed for students who need further study in Algebra for college preparation, but are not sufficiently prepared to take the more rigorous Algebra II. This course covers the basics of the Algebra II content

at a slower pace. Any students in this class who maintain at least a B-average for the year will not only receive NWR7 credit for the course, but in addition, will receive three college credits from Northwestern Connecticut Community College for Intermediate Algebra (MAT 137). Math 137 would also transfer to any college that currently takes accepts it.

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ALGEBRA II Grades 10-12 (Y) Level 2 1 Credit
CLUSTER: STEM
Prerequisite: Algebra I and Geometry

This course offers the student a deeper understanding of the real numbers through a study of axioms of real numbers, solutions of first and second degree equations, exponents, logarithms and the concepts of relations and functions.

PRE-CALCULUS Grades 11-12 (Y) Level 2 1 Credit
CLUSTER: STEM
Prerequisite: Algebra II

This course is designed for seniors who have completed Algebra I, Geometry, and Algebra II. The course includes an in-depth study of functions, trigonometry, and their applications.

HONORS PRE-CALCULUS Grades 11-12 (Y) Level 1 1 Credit
CLUSTER: STEM
Prerequisite: Honors Algebra II or permission of Department Head

This course is designed to prepare students for a course in analytic geometry and calculus. Emphasis is placed on an understanding of the mathematical structure of our number system, a mastery of the techniques of algebra, and application of algebra to the solution of complex problems, and the study of trigonometry.

AP CALCULUS AB Grade 12 (Y) Level AP/UCONN 1 Credit
CLUSTER: STEM
Prerequisite: Honors Pre-Calculus or permission of department head

This is an accelerated math course. The content of the course is similar to a freshman college course in mathematics and can earn, for students who complete it, credits toward a college degree. It is expected that students who take this math course will take the Calculus AB Advanced Placement examination of the College Board.

APPLIED STATISTICS I Grades 11- 12 (S1) Level 3 ½ Credit
CLUSTER: STEM
Prerequisite: Applied Geometry

This course is designed to give a basic foundation in the study of probability and statistics. The course will focus on real world applications. Topics include averages, variance, standard deviation, probability theory, sampling, and one-variable graphs.

APPLIED STATISTICS II Grades 11, 12 (S2) Level 3 ½ Credit
CLUSTER: STEM
Prerequisite: Applied Statistics I

This course is a continuation of the study of probability and statistics from Applied Statistics I. The course will focus on real world applications. Topics include expected value, sampling distributions, confidence intervals, and hypothesis testing.

STATISTICS Grade 11/12 (S1, S2) Level 2 ½ Credit
CLUSTER: STEM
Prerequisite: Algebra II

This course will provide a thorough study of probability and statistics with an emphasis on real-world applications. Topics include averages, variance, standard deviation, normal curve, probability theory, sampling, one and two variable graphs.

HONORS STATISTICS Grades 11-12 (S1) Level 1 ½ Credit
CLUSTER: STEM
Prerequisite: Algebra II

This course will provide a thorough study of probability and statistics from both theoretical and real-world perspectives. Topics include averages, variance, standard deviation, normal curve, probability theory, sampling, one and two variables graphs, random variable, and hypothesis testing.

AP STATISTICS Grade 11-12 (Y) Level AP/UCONN 1 Credit
CLUSTER: STEM
Prerequisite: Algebra II

This is an advanced placement math course. The content of the course is similar to a freshman college level course in Statistics and students can earn college credit for completing the course. It is required that students who take this math course will take the Statistics Advanced Placement exam.

OFFERED IN 2018-2019

INTRO TO COMPUTER SCIENCE **Grade 9-12 (S1, S2) Level 1 or 2** ½ Credit
CLUSTER: STEM
HONORS LEVEL AVAILABLE
Prerequisite: Algebra 1

Offered every other year opposite AP Computer Science A starting 2016-2017. This elective course is designed for students who have an interest in computer programming but have minimal experience. Students will learn and apply concepts of logic, algorithms, and functions. Students will program animations and games through SCRATCH and begin to learn the language PYTHON. Students may elect to complete more challenging projects to earn honors credit for the course.

MATH CLASSROOM MENTORSHIP Grades 11-12 Level 2 ½ Credit
CLUSTER: STEM
Prerequisite: Algebra II and permission of the department head

This is an independent study course designed for juniors and seniors who are interested in mentoring Algebra I and Geometry students within those students' math classes. The mentor's responsibilities include helping to facilitate group work, working one on one with students, and helping the teacher with daily classroom activities. This course is offered on a pass/fail basis with options to participate every day for ½ credit or every other day for ¼ credit. This course may be taken repeatedly for a maximum of one full credit. In lieu of credit, service hours can be awarded for this work.

BC CALCULUS Grade 12 (Y) Level AP/UCONN ½ Credit
INDEPENDENT STUDY
CLUSTER: STEM
Prerequisite: AP Calculus I and permission of Department Head

This is an independent study course designed for students who have successfully completed Calculus I and passed the Advanced Placement Calculus I exam with a score of 4 or higher. The content of the course is similar to a second semester college course in mathematics and students who complete it can earn credits toward a college degree. Students are required to take the practice Calculus BC Advanced Placement exam and score at least a 4 on the exam to receive credit for the course. Students will take the AP BC Calculus exam in May.

NOTE: ***Credits earned in Accounting I and Accounting II may be applied toward fulfilling the mathematics requirement.***

NOTE: ***Credit earned in Finance may be applied toward fulfilling a Mathematics or Business and Finance Technology credit.***

NOT OFFERED IN 2018-2019

MATH SKILLS SEMINAR Grades 9-12 (S1, S2) Level 3 ¼ Credit
CLUSTER: STEM

Prerequisite: Students must have a recommendation from their math teacher to take this class.

This course is designed to help the general level student achieve success in Applied Algebra 1A, Applied Algebra 1B, or Applied Geometry. The student will attend this class in addition to his/her regular math class. Math Skills Seminar meets every other day. The student will review concepts from recent math lessons and receive one-on-one help to strengthen skills needed for class. Students will receive help in completing assignments for their main math course and also complete individualized extra practice. Students will be enrolled in the class for a semester and may continue for a full year (for ½ credit) based on teacher recommendation. This class does not count towards the math graduation requirement.

NOT OFFERED IN 2018-2019

AP COMPUTER SCIENCE A Grades 10-12 (Y) Level AP/UCONN 1 Credit
CLUSTER: STEM

Prerequisite: Introduction to Computer Science or Algebra 2 which can be taken concurrently or permission of Department Head.

This course is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, data structures, algorithms, analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem solving and design using the JAVA language. It is required that students who take this course will take the Computer Science A Advanced Placement exam in May.

AP Computer Science A is offered every other year opposite Introduction to Computer Science.

MUSIC DEPARTMENT

INTRO TO GUITAR Grades 10-12 (S1) Level 3 ½ Credit
CLUSTER: Humanities

This course is for students who wish to begin the study of the guitar. Students will work independently and collaborate with others to learn and practice guitar technique. Standard notation as well as chord chart reading will be introduced/reinforced. Students will learn music theory elements including scale patterns, chord structure and harmonic progressions. Students can pay a $50 course fee or provide a working, maintained guitar, along with a case or gigbag, tuner, strap, cords, picks, and strings.

MUSIC TECHNOLOGY Grades 10-12 (S2) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Permission of Instructor

Music Technology I is a course designed for students interested in current methods of music creation and production. Students will discover and explore introductory concepts used in real-world music sequencing, notation, and recording. No prior musical experience is needed, however, having training on an instrument or voice is helpful. Students will create music using sequencing/editing software and synthesizers. Projects include creating simple music tracks, podcasts, and movie soundtracks.

CHOIR Grade 9 (Y) Level 3 1 Credit
CLUSTER: Humanities

The Northwestern Concert Choir is an academic class of 9-12 graders which meets daily and may be taken on three levels. While there is no audition entrance requirement, a commitment to consistent effort, positive attitude and willingness to explore the voice and choral repertoire is presupposed. A wide variety of repertoire is performed with emphasis on developing healthy vocal techniques and sight-reading. By audition, students may participate in an ensemble of select singers, regional, all-state and New England choral festivals, in addition to winter and spring concerts.

CONCERT CHOIR Grades 10-12 (Y) Level 2 1 Credit
CLUSTER: Humanities

In addition to the description above (CHOIR), students are strongly encouraged to study voice privately. Upperclass students are asked to take leadership roles and demonstrate proper vocal technique and rehearsal preparation.

CONCERT CHOIR SPLIT Grades 9-12 Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Permission of Music Department Chair

Available to students enrolled in band. Students are in class every other day opposite their assigned band period or potentially opposite Gym, Ag Ed for those enrolled in Honors Wind Symphony. Please see description of Concert Choir for a more detailed description of the class.

CONCERT BAND SPLIT Grades 9-12 Level 2 ½ Credit
CLUSTER: Humanities

Available to students enrolled in Concert Choir. Students evenly split their time (every other day) between band and choir, but are expected to fulfill the full class requirements for both classes. Please see description of Concert Band or Advanced Concert Band for a more detailed description of the class.

HONORS CONCERT CHOIR Grades 10-12 (Y) Level 1 1 Credit
CLUSTER: Humanities

In addition to all expectations stated for other sections of choir, students must audition for an honors festival (Regional's/New Englands) and/or participate in a choral group such as the Connecticut Yankee Chorale, Chorus Angelicus/Gaudeamus, Greater Hartford Youth Chorale.

CONCERT BAND Grades 9 (Y) Level 3 1 Credit
CLUSTER: Humanities
Prerequisite: Must have the approval of the instructor

The concert Band is an introductory level high school band with a concentration on individual performance skills. Students will be tested both during rehearsal time and before/after school. Mandatory rehearsals and performances will take place outside of the school day (and school year), so students entering the program must commit to these dates when entering the class. Placement in the ensemble is only accepted with permission of the instructor after successful completion of the Northwestern Regional Middle School Band Program, or it's like, and an acceptable performance score on the Watkins-Farnum Assessment. There is a yearly usage fee for uniforms and rental instruments. Special clothing may be required for performances.

ADVANCED CONCERT BAND Grades 10-12 (Y) Level 2 1 Credit
CLUSTER: Humanities

Advanced Band is designed to develop, in a sequential pattern, those skills learned in Concert Band during the student's freshman year. Emphasis will be on good ensemble playing and improvement of a student's playing ability and music interpretation. Music selected for this class will be taken from representative band work for students at this level. Students at this level will often be asked to take on leadership roles within the organization, both for efficiency and effectiveness. It is a performance-oriented class in which all members must participate. Attendance at scheduled rehearsals and performances is mandatory. There is a yearly usage fee for uniforms and rental instruments. Special clothing may be required for performances.

HONORS WIND SYMPHONY Grades 9-12 (Y) Level 1 1 Credit
CLUSTER: Humanities

The Wind Symphony is a selective advanced level wind band with concentration on ensemble development and performance. Students are placed each spring by audition with the instructor. Students are required to maintain a rigorous practice schedule, audition for the Regional or New England Band Festival, and meet weekly in sectional rehearsals. Students are ***strongly*** encouraged to study privately to maintain individual performance. Students must commit to mandatory rehearsals and performances outside of school time before enrolling in the ensemble. Exemplary students may be given the option to take this course at the honors level. Students are strongly encouraged to be studying with a private instructor and practicing daily. Students must participate in at least one voluntary festival (e.g. Berkshires or ASBDA), and one audition (e.g. Northern Region Auditions).There is a yearly usage fee for uniforms and rental instruments. Special clothing may be required for performances.

JAZZ BAND Grades 9-12 Level 2 ½ Credit
(Pass-Fail)
CLUSTER: Humanities

All students must audition for this ensemble Students work independently and in small groups during studyhall/commons (opposite gym). This work leads to full ensemble rehearsals, which take place in-between sports seasons.

Jazz Band is a study of the literature, rehearsal and performance of past and current popular jazz music with emphasis on techniques of improvisation and style. It is open to selected students of advance proficiency through

audition by the instructor. Instrumentation will be left to the discretion of the director; however, standard big band instrumentation (5-4-4) will guide auditions and choice of repertoire. Students must be willing and able to perform with the band at out-of-school functions. Attendance at scheduled performances and rehearsals is mandatory and will be a defining factor in the student's grade. Participation in Concert Band or Wind Symphony is required to be in the Jazz Program.

INDEPENDENT STUDY Grades 10-12 (Y) Level 2 1 Credit

Any class offered in the music department has the potential to be offered as an independent study. Students will only be considered for this alternative if 1) a class is not being offered in the current year and is necessary for collegiate music studies OR 2) if after the scheduling process has been completed an unavoidable scheduling conflict has arisen. For example, students may determine in their senior year that they want to audition to become a music major which requires training in Music Theory. That same year, the Fundamentals of Music course may not be offered. In this case, we may accept a student to take Independent Study: Music Theory. Independent Study can be completed as a Level I (Honors) or Level II (College Prep) class.

Students in the ensemble classes (e.g. Choir or Honors Wind Symphony) will be expected to attend all class meetings, performances, and rehearsals outside of class time and must complete all of the same assessments completed by their peers in the normal ensemble classes. Students maintaining a private lesson each week are more likely to be considered for Independent Study. Honors level students are required to participate in Berkshires and Region Auditions. Failure to adequately prepare for concerts will also result in exclusion from performance. Students are required to pay all fees associated with the ensemble class.

Students may only enroll in Independent Study one of their four years in high school.

COURSES NOT OFFERED IN 2018-2019

MUSIC THEORY I Grades 10-12 (S1) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Must have approval of instructor

This course will provide a study of the theoretical fundamentals involved in the composition and performance of music. Covers clefs, keys, scales, intervals, triads, 7th cords, sight singing, rhythm, interval, triad and melodic dictation and transposition.

COURSES NOT OFFERED IN 2018-2019

MUSIC THEORY II Grades 10-12 (S2) Level 2 ½ Credit
CLUSTER: Humanities
Prerequisite: Music Theory I or consent of instructor
Music Theory I and II is offered every other year opposite Popular Music

This course offers sight singing, ear training, and composition in the contrapuntal style of Bach. It also touches upon arranging for instrumental ensembles.

UCONN FUNDAMENTALS OF MUSIC I GRADES 11, 12 ½ Credit Level AP/UCONN (S1)
CLUSTER: Humanities
Prerequisite: Permission of the instructor, significant instrumental or vocal experience (e.g. flute, trumpet, guitar, piano, voice, etc.)

Fundamentals will cover the same material as Music theory I with more difficult sight-singing, rhythm reading, and ear training requirement. Students with the ability to easily match pitch and read rhythms should sign up for this course.

UCONN FUNDAMENTALS OF MUSIC II Grades 11, 12) ½ Credit Level AP/UCONN (S2)
CLUSTER: Humanities
Prerequisite: Fundamentals of Music I

Students signed up for the course must take Fundamentals first semester and earned a grade of C or higher each quarter. The fourth quarter will concentrate on a large composition project. Previous composition projects have included musical production including libretto & music, pieces for jazz band, wind ensemble, or choir, and film scoring.

PHYSICAL EDUCATION/HEALTH DEPARTMENT

Physical education will individualize a developmentally appropriate, personally challenging, instructional program that will advance the knowledge, confidence, skills, and motivation needed to engage in lifelong, healthy, active lifestyle. Physical education courses not only meet the Northwestern expectations of recognizing, developing and maintaining behaviors that promote lifelong health through a healthy lifestyle, but also help develop the expectation of demonstrating respect for themselves and others, demonstrating a sense of ethics and taking responsibility for their actions through fair play and interaction. Research shows that children who participate in quality physical education programs fare better physically and mentally than children who are not physically active.

PHYSICAL EDUCATION Grade 9 Level 2 .09 Credit
CLUSTER: Career and Life Skills per quarter

This ninth grade physical education program is designed to give students a strong foundation in the concepts of health related fitness as well as basic skills and knowledge of yoga, invasion games, racket sports, fitness and resistance training. The importance of personal fitness will be stressed. This class meets every other day for three marking periods.

PHYSICAL EDUCATION Grade 10 Level 2 .09 Credit
CLUSTER: Career and Life Skills per quarter

The tenth grade students will participate in the state wide Physical Fitness Test. They will be tested in the areas of cardiovascular endurance, muscular, strength, muscular endurance, and flexibility. Lifelong fitness in these four areas is stressed. Students will participate in a variety of activities for lifelong fitness. This class meets every other day for three marking periods.

PHYSICAL EDUCATION Grades 11 & 12 Level 2 .09 Credit
CLUSTER: Career and Life Skills per quarter

The eleventh and twelfth grade physical education program is designed to give students the opportunity to apply the basic skills and knowledge gained in previous years. Health related fitness skills continue to be stressed. Students will also be given opportunities to achieve higher levels of strategies and physical skills in team and individual activities. This class meets every other day for three marking periods.

ATHLETIC TRAINING INTERNSHIP Grade 12 Level 2 .09 Credit
Initial registration through Traditional PE per quarter
CLUSTER: Career and Life Skills

Students interested in the field of athletic training are invited to sign up for this course. Students will learn basic skills of athletic injury care. Independent reading will be required. This class will run after school with the trainer. Maximum enrollment will be five students. Students will sign up for the internship in September. Physical Education should be chosen at registration.

PHYSICAL EDUCATION TEACHING ASSISTANT Level 2 .09 Credit per quarter
Department Approval Required – Grade 12 Students Only Initial registration PE
CLUSTER: Career and Life Skills

Advanced physical education students may apply to be a physical education assistant. Students selected will be assigned a PE class in a lower grade where he/she will assist the PE teacher with the organization of the class. Student assistants will help lead fitness activities and help with skills. Maximum enrollment is 14 students. If necessary, students will be chosen by recommendations and applications. Students will sign up for this internship in September. They should choose Physical Education registration.

HEALTH EDUCATION

The health education program strives to recognize and reflect the needs of today's society and provide the opportunity and resources to help meet these needs. This program is articulated through a comprehensive curriculum in Grades 9 & 10 and specific topic courses in Grades 11 &12.

Health courses are integrated into the PE course selection and do not need to be scheduled separately.

HEALTH Grade 9 Level 2 ¼ Credit
CLUSTER: Career and Life Skills

Grade 9 Health will continue to build upon the skills gained in middle school including decision making, diversity, communication, self-esteem, and conflict resolution. The curriculum also includes units on mental health (stress, depression and suicide), heart disease, eating disorders, and substance abuse.

HEALTH Grade 10 Level 2 ¼ Credit
CLUSTER: Career and Life Skills

Grade 10 Health will continue with important foundations. Topics to be included are decision making, contraception choices, disease prevention-sexually transmitted disease, dating violence, social & legal issues, sexual assault, sexual harassment, implications of alcohol use, and HIV/AIDS.

HEALTH Grade 11 Level 2 ¼ Credit
CLUSTER: Career and Life Skills

Grade 11 Health will be CPR, First Aid and safety training. They will have the option to take the tests for Red Cross certification. Personal safety issues will also be presented.

HEALTH Grade 12 Level 2 ¼ Credit
CLUSTER: Career and Life Skills
Senior Topics

Students will explore a variety of topics that will be relevant as they get ready to graduate. Some topics include skin cancer, nutritional choices, chiropractic, health issues/risks effecting students between ages 18-24, alcoholism and drug addiction, legal issues and safety, distracted driving, several assault and lifestyle diseases. Students will also be required to plan,

design and present a power point presentation on a current health topic affecting society today.

CHILD DEVELOPMENT Grade 12 Level 2 ½ Credit
HEALTH ELECTIVE
CLUSTER: Career and Life Skills

This semester course will provide students with an understanding of the aspects of human growth and development. Parenting skills will be developed as positive guidance techniques and child-related issues would be studied. Students will learn about the physical, emotional, social, and intellectual development of infants, toddlers, preschoolers and school-age children as well as learning about their own growth as an individual. Students will also learn about the impact they will have as caregivers.

Seniors enrolled in this course will be exempt from physical education during this semester.

SCIENCE DEPARTMENT

A wide range of science courses are available at Northwestern and students are encouraged to study science each of their four years in high school. The minimum graduation requirement for all students is 3 credits in science, one of which must be Biology.

HONORS INTEGRATED SCIENCE Grade 9 (Y) Level 1 1 Credit
CLUSTER: STEM
Prerequisite: Student should have completed Algebra 1 and earned an A average for the year in middle school science.

This laboratory course is designed for the student who has higher level math skills, the ability to work independently and intends to take advanced courses in science. The course is the study of the physical world and human impact on it. The study includes Earth's history, structure, atmosphere, and human consumption of resources and energy. The course is challenging due to an accelerated pace, increased emphasis on a quantitative approach to understanding science concepts and an increase in the depth and quantity of material studied.

INTEGRATED SCIENCE – C Grade 9 (Y) Level 2 1 Credit
CLUSTER: STEM

This laboratory-based course is a study of the physical world and human impact on it. The study includes Earth's history, structure, atmosphere, and human consumption of resources and energy. This course challenges students to build science skills and explore their interest in science.

HONORS BIOLOGY Grade 10 (Y) Level 1 1 Credit
CLUSTER: STEM
Prerequisite: Permission of course instructor and recommendation of ninth grade science teacher. The student must also be taking geometry or Algebra II concurrently.

This laboratory course is a challenging course designed for the student who anticipates a science-based career and desires an accelerated, comprehensive program and intends to take advanced courses in science. The course provides an introduction to the science of living things through the study of topics ranging from molecules of life, cell structure and processes, genetics, evolution classification of organisms, plant and animal systems and ecology. The course is challenging due to an accelerated pace and an increase in the depth and quantity of material studied.

BIOLOGY C Grade 10 (Y) Level 2 1 Credit
CLUSTER: STEM

This laboratory course provides a unified approach to the study of life through cell structure and chemistry. Topics including the molecules of life, cell structure and processes, classification of organisms, plant and animal systems are explored. Genetics and evolution are presented as sources of unity and variety. Students also become aware of the interrelationships of the living and nonliving components of our world. This course challenges students to continue to build science skills and explore their interest in science.

CHEMISTRY – C Grades 11-12 (Y) Level 2 1 Credit
CLUSTER: STEM
Prerequisite: A grade of C or better in Algebra I and currently enrolled in Algebra II

This is a laboratory course with major emphasis on traditional topics including chemical nomenclature, the mole concept, the structure of matter, periodicity of the elements, chemical bonding, solution chemistry, matter-energy relationships, acid-based theory and oxidation-reduction.

HONORS CHEMISTRY Grades 11-12 (Y) Level 1 1 Credit
CLUSTER: STEM
Prerequisite: Algebra II and permission of Honors Chemistry Science instructor and recommendation of current Science teacher.

This is a fast-paced, challenging physical science course stressing the study of fundamental chemical topics such as chemical nomenclature the chemical bond, the structure of matter and matter-energy relationships, the periodicity of the elements, the mole concept, equilibrium, acid-base theory and oxidation-reduction reactions. Descriptive chemistry is treated as an outgrowth of these topics. A unit on organic chemistry is also included.

ASTRONOMY Grades 9-12 (S1 or S2) Level 2 ½ Credit
CLUSTER: STEM
Prerequisite: Must register with NCCC

This class is an introduction to astronomy. The class will explore the universe including the stars, our sun and other galaxies. It will also explore the moon and our solar system. There will be many hands-on opportunities including learning to use a telescope. *This class meets in the evenings.* High school credit will be awarded, but will not be factored into GPA or class rank.

ENVIRONMENTAL SCIENCE I Grades 11-12 (S1) Level 2 ½ Credit
Seminar in Science concepts in Earth's Systems
CLUSTER: STEM
*Required for any students not taking a chemistry class in their junior years. Seniors may enroll in this class.

This course is designed to provide students with an understanding of basic scientific principles as they relate to a variety of topics within the environmental sciences. The goal is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships found in the natural world, to apply sustainability concepts across topics, to identify and analyze environmental problems of both natural and man-made origins, to evaluate risk factors, and to evaluate alternative solutions for resolving or preventing them. Emphasis is placed on science as a process, energy conversions underlying all environmental processes, interconnectedness of Earth's systems, integration of physical and life sciences in the real world, and case studies in human's place in the environment. Whenever appropriate, social, cultural, economic, and public policy context will be included in our studies. These concepts and goals will be addressed across a wide range of topics, to include; water as an irreplaceable resource, climate and ecological change, our growing waste problem and how to sustain our energy needs.

ENVIRONMENTAL SCIENCE II A/B Grades 11-12 (S2) Level 2 ½ Credit
CLUSTER: STEM
This course is an extension of Environmental Science I. This course is run on a two year cycle, wherein one year will consist of an "A-year" curriculum and the following year will be a "B-year" with its own unique curriculum. Students may earn a ½ credit for each semester of Environmental Science II in sequential years.

Each course will continue the themes of sustainable resource use and the relationships between science, society, economics, personal choice, and public policy as they apply to specific realms of Earth's systems and resources.

- Environmental Science II A will consist of investigations in forestry, ecology, evolution of biodiversity, marine science, and pollution.
- Environmental Science II B will consist of investigations in fresh water systems, fisheries management, wildlife management, and land use. **NOT OFFERED 2018-2019.** A field trip may be required.

FORENSIC SCIENCE Grades 11-12 (S1, S2) Level 2 ½ Credit
CLUSTER: STEM
Prerequisite: Biology

Forensic science is the application of science to the law and encompasses various scientific principles. This course will introduce various applications and methodologies used by forensic scientists. Some of the topics include analysis of physical evidence, principles of serology, DNA analysis, and fingerprint analysis.

AP /UCONN BIOLOGY Grades 11-12 (Y) Level AP/UCONN 1 Credit
CLUSTER: STEM
Prerequisite: Permission of instructor, and recommendation of current science instructor, must have taken chemistry and Algebra II. Sophomores may take this biology class by department head recommendation ONLY.
This course provides advanced studies in all aspects of biology closely paralleling two semesters of work at the University of Connecticut. Students satisfying the University of Connecticut requirements for admission and successfully completing the course will earn eight credits and fulfill their freshman biology requirement for many colleges. Students completing this course are expected to take the Advanced Placement examination of the College Board. See your counselor for further information. **Course offered 2018-2019 and 2020-2021.**

PHYSICS Grades 11-12 (Y) Level 2 1 Credit
CLUSTER: STEM
Prerequisite: Algebra II

This course offers a study of elementary principles in mechanics, heat, light, sound, and electricity. All traditional branches are united in the introduction of the nature of matter and the concepts of energy. This course focuses on the concepts of physics, but students will need a strong math background to use these concepts.

UCONN PHYSICS Grades 11-12 (Y) Level AP/UCONN 1 Credit
CLUSTER: STEM
Prerequisite: Algebra II and permission of instructor
Concurrently taking pre-calculus or higher is strongly encouraged

This course offers a study of elementary principles in mechanics, electromagnetism, thermodynamics and modern physics. All traditional branches are united in the introduction of the nature of matter and concepts of energy. The approach to these principles is primarily mathematical involving elementary algebra, plane geometry, and basic trigonometry.

This course provides advanced studies in physics closely paralleling two semesters of work at the University of Connecticut. Students satisfying the University of Connecticut requirements will earn 8 credits upon registering with UCONN and completing the course.

HONORS HUMAN ANATOMY & PHYSIOLOGY Grades 11-12 (Y) Level 1 1Credit
CLUSTER: STEM

Prerequisite: A grade of B or better in college preparatory biology and permission of the instructor and recommendation of current science instructor. One year of chemistry is preferred.

This laboratory and research oriented course involves the study of both anatomy, the study of the structures of the body as determined by dissection, and physiology, the way our body functions on molecular, cellular, and organ system level. Additionally, the body is examined in health and disease in an attempt to understand the disorders of homeostasis. Principles are applied to nursing, medical technology and related biomedical fields as well as the general field of health and nutrition. This is an advanced level course.

SEMINAR IN BIOTECHNOLOGY Grades 11-12 (S1) Level 2 ½ Credit
CLUSTER: STEM, Career and Life Skills
Prerequisite: Biology, ability to complete tasks independently, and ability to read instructions.

This course will examine the foundations of biotechnology. It is a hands-on course that includes the study of DNA, manipulating DNA to be recombined into bacteria, and other techniques that are currently being used in biotechnology labs today. Additionally, controversial societal issues such as cloning and genetic selection will be discussed and analyzed.

GEOLOGY OF CONNECTICUT Grade 11-12 (S1, S2) Level 2 ½ Credit
CLUSTER: STEM
Prerequisite: Have taken integrated science and biology

This course will look into the geology of Connecticut by interpreting the forces and materials of rocks and other geological structures. They will also learn about the history of the Earth and how people that have played a role in this process. Off-campus experiences will be part of the curriculum.

Students are encouraged to get excited to learn about the geologic structures around them.

BIOTECNOLOGY/PHARMACEUTICALS
CLUSTER: STEM, CAREER AND LIFE SKILLS

Bringing A Pharmaceutical to Market Grades 11-12 (S2) Level 2 ½ Credit
Prerequisite: Biology, ability to complete tasks independently, and ability to read instructions.

This course introduces students to the process of how to bring a pharmaceutical to market. It will include a variety of concepts from aseptic techniques to the upstream and downstream process of making a new pharmaceutical. We will also explore nanotechnology, quality control and the clinical trial process.

ADVANCED PLACEMENT Grades 11-12 (Y) Level AP/UCONN 1Credit
ENVIRONMENTAL SCIENCE (APES)
CLUSTER: STEM
Prerequisite: Permission of instructor and recommendation of current science instructor, B or better in biology, and must have taken chemistry or taking it concurrently.

AP Environmental Science will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. The course is structured thematically, each unit addressing several of the following theme including scientific process, energy pathways, human impact, environmental problems, and sustainability.
Course offered 2019-2020 and 2021-2022.

SOCIAL STUDIES DEPARTMENT

An adequate background in the social studies will encourage citizens to exercise their responsibilities as well-informed members of society. Each student must have three credits of Social Studies in order to graduate. One of these credits must be in U.S. History and one-half credit of Civics is required.

Students successfully completing Level 3 course work during the first three years are encouraged to consider a Level 2 course for the senior year.

FOUNDATIONS OF WORLD CIVILIZATIONS Grade 9 (Y) Level 3 1 Credit
CLUSTER: Humanities

Foundations of World Civilizations is designed to introduce the history of the World Civilizations with the objective of making connections between the past and the present world around us. This course has a heavy emphasis on both skill development and hands-on projects. Major topics are the Ancient World, the Middle Ages, the Islamic World, the Renaissance, the Enlightenment, the Scientific and Industrial Revolutions, 20th Century conflicts, and the Holocaust.

WORLD CIVILIZATION Grade 9 (Y) Level 1 or 2 1 Credit
HONORS LEVEL AVAILABLE
CLUSTER: Humanities

World Civilization is the first part of a two part history of the western world. In this course, we will trace the development of cultures from prehistoric times to the nineteenth century. During the study of world civilization, students will learn about the people, ideas, inventions, and events that changed history. The study of the past is designed to equip students for citizenship today. In this course students will examine government, economics, technology, geography, war, peace, religion, ethics, philosophy, literature, art, and cultural diffusion With the understanding that history is an interpretation of the past, students will become historians by asking questions, searching for and using evidence to support interpretations. This course also helps students develop reading, writing, and critical thinking skills.

Students recommended by their 8th Grade Social Studies teachers may elect to become a part of the Honors Challenge program. This program is intended for highly motivated learners who have a great interest in history and seek to be judged by the most rigorous standards.

MODERN WORLD HISTORY Grade 10 (S1) Level 1 or 2 ½ Credit
HONORS LEVEL AVAILABLE
CLUSTER: Humanities

This course includes significant events and developments during the 20th century. Major topics are World War I, the Communist Revolution in Russia, the rise of totalitarianism in the Soviet Union, Germany and Italy, the World War II, the Cold War, tensions in the Middle East, African independence and nationalism, continuity and change in Asia (India, China and Japan), recent revolutionary changes in the 1980's and prospects for the world in the 21st century. Students enrolled in 20th Century World History may elect to accept an Honors Challenge. Students with an A- or better in World Civilization may elect to become a part of the Honors Challenge program. The Honors Challenge Program is intended for highly motivated learners who have a great interest in history and seek to be judged by the most rigorous standards. Students in the Honors Challenge Program will receive honors credit. Students will decide if they will accept the Honors Challenge during the first week of the course. However, once this choice is made, the student is committed to the program.

CIVICS C Grade 10 (S2) Level 1 or 2 ½ Credit
HONORS LEVEL AVAILABLE
CLUSTER: Humanities

This course is designed to prepare students for citizenship in the 21st Century. Civics provides students with an in-depth study of how their school, community, state, nation, and world are governed. Using the knowledge and skills gained in the course, students will help resolve real problems which confront us today. Students enrolled in Civics may elect to accept an Honors Challenge. Students with an A- or better in World Civilization or 20th Century World History may elect to become a part of the Honors Challenge program. The Honors Challenge Program is intended for highly motivated learners who have a great interest in government and seek to be judged by the most rigorous standards. Students in the Honors Challenge Program will receive honors credit. Students will decide if they will accept the Honors Challenge during the first week of the course. However, once this choice is made, the student is committed to the program.

GLOBAL ISSUES Grade 10 (S1) Level 3 ½ Credit
CLUSTER: Humanities

Global Issues is about you and your life in the 21st century. It is fairly certain that two trends already present in the world will continue throughout

your life. First, you will live in an age of increasing communication and broader access to information. Second, the problems that you will face will be increasingly tied to forces distant to your hometown. Therefore, the future demands that you are able to gather, interpret, and act upon information about the world. This course is designed to prepare you for the future. To do this, the teacher and students will work together to study a series of global issues that impact our lives with the objective of gaining the skills needed to understand the world of tomorrow.

U.S. HISTORY C Grade 11 (Y) Level 2 1 Credit
CLUSTER: Humanities

This course involves the period of time which begins with the 1820's and ends with contemporary America. Major topics which are studied include sectionalism and growth toward a democracy, division and reunion, the emergence of modern America, the early 20th Century, the U.S. becoming a world leader, changing American society, and the contemporary world.

HONORS U.S. HISTORY Grade 11 (Y) Level 1 1 Credit
CLUSTER: Humanities
Prerequisite: Permission of the instructor. B average or better in Honors Challenge as a sophomore or an A average in College Level 20th Century World History and Civics along with teacher recommendation.

This accelerated course is planned to give superior students a thorough background in American history. Great emphasis is placed on reading, writing, research skills, and independent study.

U.S. HISTORY G Grade 11 (Y) Level 3 1 Credit
CLUSTER: Humanities

This is a study of United States history from the 1820's to modern times, with emphasis on ideas, institutions, and movements in American culture. Efforts are made to acquaint the student with his/her rights and responsibilities as a citizen.

PSYCHOLOGY Grades 11-12 (Y) Level 2 1 Credit
CLUSTER: Humanities
Psychology is the scientific study of human behavior. This course will introduce students to the major psychological theories and concepts. Topics include research methods, approaches to psychology, learning theories, connections between the brain and behavior, theories of personality, human development, sociocultural influences, gender roles, and psychological

disorders and treatments. Students will be able to use information from this course to develop a better understanding of themselves and others.

LAW AND JUSTICE Grades 12 (Y) Level 2 1 Credit
HONORS LEVEL AVAILABLE
CLUSTER: Humanities

Law and Justice is about you and the American legal system. It provides students with an opportunity for concentrated study of the legal, judicial, law enforcement, and correction systems of the United States. Students will learn and understand basic concepts of law that include civil, criminal, constitutional and family law. There is a heavy emphasis on the role of the advocate within the legal system and in providing students the tools to become effective advocates for themselves and others. Students will engage in simulated and factual experiences in the legal and justice systems in order to develop the knowledge and skills necessary to effectively advocate for their rights and viewpoints. Since law evolves constantly and specific law concepts are often controversial, class participation and discussion is a major component of the course. In addition, students will be required to participate in a statewide mock trial competition assuming the roles of plaintiff, defendant, attorney or witness. This course fulfills the one-half credit Civics requirement in Social Studies.

CONTEMPORARY ISSUES Grades 11-12 (Y) Level 2 1 Credit
CLUSTER: Humanities

This course introduces students to recent problems both foreign and domestic. Time magazine is used as a basic text in the study of such problems as crime, prejudice, inflation, unemployment, and international trouble spots which threaten world peace.

A.P. U.S. HISTORY Grade 11 (Y) Level AP/UCONN 1 Credit
CLUSTER: Humanities
Prerequisite: Teacher recommendation

This course is taught at the college level and will provide an intensive survey of American history. Students will be provided with content knowledge of U.S. History, practice in critical thinking activities, and experience in effective writing techniques that will better prepare them for not only the AP exam but also their future educational endeavors in all subject areas. Skill development will include the interpretation of maps, graphs, charts, political cartoons, primary documents, and other social studies tools. This course will involve both a chronological and thematic approach to historical study. Through lecture, assigned readings, and class

discussion students will examine the basic ideas, people and events that shaped American history from exploration and colonization to America in the 21st century. Strong reading and writing skills, along with a willingness to devote considerable time to homework and study are necessary to succeed. Students will take the Advanced Placement examination. Please consult with your counselor for more information.

A.P. U.S. GOVERNMENT AND POLITICS Grade 12 (Y) Level AP/UCONN 1 Credit
CLUSTER: Humanities
Prerequisite: Recommendation of Social Studies Department

American Government and Politics is designed to be an advanced placement course that examines how the United States government is structured and how it operates. The institutions, participants, and processes which make up our system of government are analyzed. Both general political concepts and specific cases are studied. Emphasis will be placed on current issues, trends, and events that are part of modern politics. Students will take the Advanced Placement examination. Please consult with your counselor for more information on the AP programs. This course satisfies the Civics graduation requirement.

A.P. EUROPEAN HISTORY Grades10-12 (Y) Level AP/UCONN 1 Credit
CLUSTER: Humanities
Prerequisite: Recommendation of the Social Studies Department

European History is an honors level history course designed to prepare students for the AP exam; it is similar to a college freshman course in its design and difficulty. Using the text and primary documents, you will gain a detailed understanding of the people, ideas and events that have shaped Europe from the Renaissance to the present. In addition to content review, you will develop the critical thinking, reading, and writing skills that you will need on the AP exam and in your academic future; a particular emphasis is placed on analyzing primary sources.

Students will take Advanced Placement examination. Please consult your counselor for more information on AP programs.

A.P. COMPARATIVE GOVERNMENT& POLITICS Grades 10-12 (Y) Level AP/UCONN 1 Credit
CLUSTER: Humanities

Comparative Politics is an elective course designed for students who seek a greater understanding of how the world works beyond the borders of the United States. The political systems and policies of the United Kingdom, Russia, Nigeria, Mexico, Iran, and China are studied with the objective of comparing how different nations are facing the challenges of the 21st Century. These comparisons will lead to the study of enduring questions such as why are some nations stable democracies but not others? What factors lead to economic well-being? How are authoritarian regimes able to survive in an age of globalization? What is the just society and can it be realized? This course requires the recommendation of a student's sending teacher and will be offered only if sufficient staffing is available. Students will take the Advanced Placement examination. Please consult with your counselor for more information about this assessment.

A.P. PSYCHOLOGY Grade 12 (Y) Level AP/UCONN 1 Credit
CLUSTER: Humanities

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, and evaluate claims and evidence, and effectively communicate ideas.

Students will take the Advanced Placement examination in May. Please consult your School Counselor for more information on AP programs.

MYTHBUSTERS OF HISTORY: Grades 10-12 (Y) Level 2 1 Credit
HISTORY AND TECHNOLOGY ½ History, ½ Technology
CLUSTER: Humanities, STEM

Mythbusters of History: History and Technology is a project-based course that relies heavily on self directed learning from the students. The course is broken down into modules that examine some of the most important technological innovations throughout human history from Stone Age tools to Cold War spy gear. Each Module is broken down into 3 phases:

Phase1Historical background- The students research the history surrounding the innovation. No technology that becomes important to a society happens

by accident. Even those rare innovations that are stumbled upon don't become useful unless they fulfill some need of a culture. Historical background information can take the form of textbooks, magazine or online articles, primary sources, literary sources, or documentaries.

Phase 2-Replication and analysis of the innovation- This is the hands-on phase of the module. Using the wood shop or Cad Lab the students replicate the invention or innovation. The students collect data, analyze it and assess how the advance in technology could impact human society.

Phase 3- Evaluation- Students combine the historical information with their first hand analysis to explain why an innovation became so important to the evolution of human society.

MEDIA & YOU Grades 9-12 (S1, S2) Level 2 ½ Credit
CLUSTER: STEM, Humanities

Digital and Media literacy is the ability to access, analyze, evaluate, and **create** media. This course offers a creative and new way to approach being a critical consumer of media while encouraging students to understand how media messages shape our culture and society. We need to know how media influences us and how we, in turn, can influence others through the construction of our own media.

This course will focus on the basics of identifying the role of Media as the "fourth estate" in the United States, providing another layer of checks and balances on our government and society. We will explore article, image, and news analysis-searching for what is promoted or left out and its effect on the consumer. Most importantly, while navigating the many levels of media in our lives, we will become members of our own news organization and produce various media including documentary filmmaking. This is an exciting opportunity for students to investigate issues of interest and participate in the creation of appropriate media to communicate their ideas to a broad audience.

INTERNATIONAL STUDIES Grades 10-12 (Y) Level 2 1 Credit
Primary Indicators: Global Awareness and Critical Thinking
CLUSTER: Humanities

International Studies is a course designed for students interested in how the world is changing today and what choices we should be making now in order to create a better future. We will study a series of issues that are impacting the globe today such as nuclear weapons, immigration, foreign

aid, genocide, energy, human rights, the environment, the war in Afghanistan, terrorism, international trade, and relations with China. Central to the course will be the use of debates in which students will examine the various policy options that have been offered to solve the problem raised in each unit of study. Students of this course can expect wide-open discussion, simulations, and critical thinking activities.

NOT OFFERED 2018-2019

ASIAN STUDIES Grades 11-12 (Y) Level 2 1 Credit
CLUSTER: Humanities

Focusing on China, Japan and India, this course will explore the roots of the classical orient including the beliefs and traditions of Buddhism, Hinduism, Taoism and Confucianism. The history of the major powers of the East and their place in the modern world will be studied.

NOT OFFERED IN 2018-2019

ECONOMICS Grades 11-12 (S1, S2) Level 2 ½ Credit
Honors Level Challenge Available
CLUSTER: Humanities

This course is designed to enhance students' understanding of economic principles and give them the tools to make choices they face in their daily lives and the choices they will face as members of the workforce, consumers, savers, and investors. Through a case study approach, students learn how to apply economic theory by analyzing financial information, current events, research journals and other real world publications. A long-term simulated investment exercise will also be implemented. Students enrolled in Economics may elect to accept an Honors Challenge. The Honors Challenge Program is intended for highly motivated learners who have great interest in economics and seek to be judged by the most rigorous standards. Students in the Honors Challenge Program will receive honors credit. Students will decide if they will accept the Honors Challenge during the first week of the course. However, once the choice is made, the student is committed to the program.

NOT OFFERED IN 2018-2019

LOCAL HISTORY PROJECTS Grades 11-12 (Y) Level 2 1 Credit
CLUSTER: Humanities

Learners in this course will become history detectives. Acting as a coach, the instructor will train students in the methods of historical inquiry and then challenge them to uncover the history that has shaped our local communities through a series of case studies. The class will create projects which will communicate the history we discover to an audience beyond our school. While students with artistic and computer skills are needed, anyone with an interest in history and who enjoys solving mysteries about the past is urged to become a part of this innovative course. Local History Projects will be cancelled if sufficient staffing and resources are not available.

TECHNOLOGY EDUCATION DEPARTMENT

The technology Education Department offers diverse areas of study in technical and industrial fields to all students. The courses are organized in such a manner as to help students meet their avocational and vocational needs. Students will also gain an understanding of how industry functions in our society and how technology affects their daily life.

INTRODUCTION TO PHOTOGRAPHY Grades 9-12 (S1) Level 2 ½ Credit
CLUSTER: Humanities, Career and life Skills
(No prerequisite) **Can be taken for Art Credit**

This course introduces students to the fundamentals of digital photography. Students will explore composition, camera technique, and editing with professional software. Students will research, study, and apply the style of photographers from the past and present. Using project-based lessons, each unit takes students through the creation of a specific project, building on the student's growing knowledge of the editing software program. NOTE: Students should supply their own digital camera (2 megapixel or greater) for assignments that require taking pictures outside of school.

GRAPHICS TECHNOLOGY I Grades 9-12 Level 3 ½ Credit
CLUSTER: STEM, Career and life Skills

The focus of this course is digital design for the production of printed media. Students will develop skills in digital imaging, composition, typography, page layout, printing, and simple binding techniques. Several software programs will be explored. Projects may include (but are not limited to) logo design, business cards, letterheads, invitations, advertisements, note paper, and small books.

GRAPHICS TECHNOLOGY II Grades 10-12 Level 2 ½ Credit
CLUSTER: Career and life Skills
Prerequisite: B or better in Graphics Technology I

Students will continue to refine their skills developed in Graphics Technology I and apply them to a small business enterprise. This is an opportunity for students to put their skills to realistic use while developing an effective work flow by producing in-house print jobs.

VIDEO PRODUCTION Grades 9-12 Level 2 ½ Credit
CLUSTER: STEM, Career and life Skills

Students will explore the technology and art of digital video production. Projects may include (but are not limited to) school news, public service announcements, commercials, satires, how-to's, and creative mini-dramas. Though there are many types of movie projects, they all go through the same process. Students will plan, produce, edit, and output their work. Finished projects may be broadcast on the school TV system and online. With approval, students may compress their finished video for delivery to their mobile phones, iPods, or PSPs. Note: Students may repeat this course for additional credit having earned an A or better.

CONSTRUCTION I Grades 9-12 Level 2 ½ Credit
CLUSTER: Career and life Skills

Construction I is the study of processes, properties, and procedures for working with wood. The course begins with basic measuring and layout concepts followed by a series of projects to get each student familiar with woodworking. The course then changes pace to include simple design projects and culminates with a project of the student's choice related to the material. Projects include but are not limited to shelves, chairs, racks, and boxes.

CONSTRUCTION II Grades 10-12 Level 2 ½ Credit
CLUSTER: Career and life Skills
Prerequisite: Construction I

This course is a continuation of the skills learned in Construction I with an emphasis on larger and more in-depth projects. Students will be required to develop and later market one of the items that they produce in class to the school community. Advanced tools and processes will be taught in addition to the construction aspect of the class.

CONSTRUCTION III Grades 11-12 Level 2 ½ Credit
CLUSTER: Career and life Skills
Prerequisite: Construction II and instructor approval

This course is for the independent woodworker. Each student will present a project proposal which includes detailed plans. Students will further develop their woodworking skills as they create their projects after instructor approval. NOTE: Students must pay for their own supplies beyond the average student supply of pine or red oak and fasteners (special fasteners, hardware, and/or specialty woods).

MASONRY Grades 9-12 Level 3 ½ Credit
CLUSTER: Life Skills

Students will be introduced to the concepts and skills required to work with pavers, stone cutting, building walls, footings, mining cement, and brick & block work. The class may be commissioned to create or maintain structures for the NWR7 school and community. NOTE: Students may enroll in this course more than once only with the permission of the instructor.

3D HOME DESIGN Grades 9-12 Level 2 (S1, S2) ½ Credit
CLUSTER: STEM, Career and Life Skills

This course will introduce students to architectural computer aided design using 3D software. Students will create virtual home environments in which the look and feel can be changed instantly. Students will learn about efficient and effective home design and American architecture while they explore changing wallpaper, doors styles, siding, furniture, and more. Design challenges are an integral part of students demonstrating what they have learned.

3D HOME DESIGN II Grades 9-12 Level 2 (S1, S2) ½ Credit
Prerequisite: Earning a B or higher in 3D Home Design

Group and independent projects will be emphasized while students continue to develop their skills acquired in 3D Home Design. Students learn more details and intricacies of the software used in the course.

INTRODUCTION TO WEB DESIGN Grade 9-12 Level 2 ½ Credit
CLUSTER: STEM, Career and life Skills

This course exposes students to the foundations of Web design, development, and animation for Web enhancement. Students will use a leading professional Web design software program. Each unit in this course culminates with a project that builds upon the student's growing knowledge of the software. Students will learn how to customize their digital workspace, apply cascading style sheets, enter headline and body text, insert graphics and rollovers, and add links to a page. Students will also learn how to add interactive elements to their site, such as behaviors, effects, and video; and publish their finished site to the Web. **Not offered 2018-2019**

ELECTIVE COURSES NOT OFFERED IN 2018-2019

INTRODUCTION TO CAD Grades 9-12 Level 3 (S1, S2) ½ Credit

This course is designed to introduce to the student the proper use of a CAD system, the scale, multi view and pictorial projection, and the shape and size description of objects. An overview of the drafting industry and its importance as the "prime communication tool" to all technologies will be emphasized

CAD I Grades 10-12 Level 3 ½ Credit
Prerequisite: Introduction to CAD (Juniors and Seniors exempt)

This course provides study and experience in sectioning, pictorial drawing, machine detail, machine fastening, threads and bolts, intersections and developments, and rotation of objects. Much of this course will be devoted to hands-on experiences utilizing CAD software.

CAD II Grades 10-12 Level 3 ½ Credit
Prerequisite: CAD I (Juniors and Seniors exempt)

This is an introductory course in architectural design and drawing. The student will examine residential designs and construction from the past and the present. Students will design and draw detailed plans for small structures such as garages, vacation cabins, and additions. The student will also construct a scale model of their structure.

CAD III Grades 11-12 Level 3 ½ Credit
Prerequisite: CAD II (Juniors & Seniors exempt)

A continuation of CAD II with the addition that students will use professional three dimensional CAD software to design homes to create full working drawings, construction documents, and scale models. This course fully uses the virtual environment to help students visualize the finished home, complete with decorated interiors (wallpaper, paint, furniture, floors, cabinets, etc.)

ELECTIVE COURSES NOT OFFERED IN 2018-2019

CAD IV Grades 11-12 Level 3 ½ Credit
Prerequisite: CAD III (Juniors & Seniors exempt)

This is a course in modern residential architecture. The design, plan views, plot plan, section views, framing plans, elevations, and mechanical plans for a single family residence will be studied and drawn by the student. Much emphasis is placed on model-making, construction techniques, building codes and construction materials.

TRANSPORTATION I Grades 9-12 Level 2, 3 ½ Credit

In this class, students will study, design, and construct various land and sea projects. The emphasis on the class will be to develop problem solving skills around challenges in land and water transportation. Projects include but will not be limited to maglev trains, CO2 cars, boats of various materials, and cable cars. NOTE: This class is offered separately from and is not a prerequisite for Transportation II.

TRANSPORTATION II Grades 9-12 Level 2, 3 ½ Credit

This class touches upon several concepts related to air and space transportation. Each unit of transportation will have a problem solving project related to it. Projects will include but are not limited to airplanes made from various materials, rockets, and multi-stage projects. NOTE: This class is offered separately from Transportation I and does not have a prerequisite.

ROBOTICS Grades 10-12 Level 2 ½ Credit

The robotics class is an introduction to concepts of automation. Topics include electronics, automation, mechanics, power transfer, programming, and engineering. As the course unfolds, the challenges become progressively more involved concluding with a large group project finishing off the course. Projects include but are not limited to soccer playing robots, drag racing robots, trebuchets, and interactive programs.

KEY TELEPHONE NUMBERS TO DIAL FOR EFFICIENT SERVICE:

Dr. Judith Palmer, Superintendent……860-379-1084
Kenneth L. Chichester, Principal…….860-379-8525
Joseph Masi, Housemaster, High School, House 1
Students with last names beginning with A-K…… 860-379-7027
Gary Franklin., Housemaster, High School, House 2
Students with last names beginning with L-Z…….. 860-379-7132
Amy Dressel, School Counselor (Grade 10-12)……..860-379-7027
Johanna DeZurik, School Counselor (Grade 10-12)……860-379-7027
Trina McHugh, School Counselor (Grade 10-12)……860-379-7132
Thea Davidson, School Counselor (All Grade 9)……860-379-7027
Chris Fray, Computer Operations……860-379-8525