

**North East High School  
Program of Studies  
2024 - 2025  
(814) 725-8671**

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*Dear Student / Parent:*

*This Program of Studies is supplied to assist you in creating an appropriate course schedule for next school year. Students and parents need to give consideration to choosing courses so that you satisfy graduation requirements, career objectives, and proper academic progressions. In addition, please be sure that you have the necessary prerequisites to be in the courses you have chosen.*

*Much consideration and effort is made by your high school principal and counselors to ensure that you have chosen and receive the best possible course schedule; therefore, student schedule changes are less likely to occur as the beginning of the school year approaches. Teachers and students are assigned to classes based on course selections made by the student in the previous spring. This is to ensure that class sizes are as balanced as possible. Schedule changes that occur after the school year has started only detract from the balance created in the school's master schedule. Your cooperation in maintaining a healthy academic program is expected. Parents and students should be aware that credit for a course taken and passed can only be awarded once for any given student, unless approved by the principal. Students should select 8 credits of required and elective courses. Most students will not receive all of the courses requested and need to select at least 2 credits of alternate courses. Also, please consult with teachers when selecting instructional levels (regular, honors, AP, CHS).*

*We encourage you to study this booklet carefully and to complete the scheduling form in a timely manner. If you have any questions about your choices please contact your school counselor. It is our wish that you obtain the best education possible during your high school years. Making good choices now plays a big part in your future.*

*Sincerely,*

**Dr. William Renne** (Principal)  
**Mrs. Dawn Coletta** (Counselor)  
**Mrs. Laura Panek** (Counselor)  
**Mr. Matthew Puskar** (Counselor)

## **North East High School 2024-25 Faculty**

### **Academic Learning Support**

Amy North  
Kyle Regan  
Leslie Shickler  
Samantha Szoszorek  
Tina Williams

### **Art**

Patrick Fordyce  
Victoria Knight

### **Business**

Natalie Lacy

### **Driver Education**

Shawn Humes

### **English**

Kira Borgia  
Morgan Gulley  
Kenzi Kuhn  
Emalie Nagle  
John Torrelli

### **Family and Consumer Science**

Connie Miller

### **World Language**

Timea Kardos  
Susan McElhinny

### **Guidance**

Dawn Coletta  
Laura Panek  
Matthew Puskar

### **Health Services**

Christie Austin

### **Industrial Arts**

Philip Blumer

### **Librarian**

Nicole Fitch

### **Mathematics**

Dan Hering  
Braden Lynn  
Samantha Jones  
Ryan Neal  
Demi Nelson  
Tyler Youschak

### **Music**

Stephan DeGrosky  
Michael Heid

### **Physical Education**

Shawn Humes  
William Mackin  
Paul Pennington  
Lexie Vath

### **Science**

Paul Becker  
Jamison Drab  
Jenna Kunst  
Noel Mraz  
Angela Parker  
Grisel Rater

### **Social Studies**

Adam Denevic  
Gregory Henning  
Mark Hughes  
Travis Pietkiewicz  
Erik Rizzo  
Jennifer Wilson

# **NORTH EAST SCHOOL DISTRICT STRATEGIC PLAN**

## ***CORE VALUES***

We believe that:

All people have equal worth and should be treated with dignity and respect.

Providing students and staff with a safe and supportive learning environment is a priority.

Positive family and community partnerships are fundamental to successful schools.

Lifelong learning is essential for self and society.

Understanding diversity, equity, and inclusion enriches all lives.

## ***MISSION***

The Mission of the North East School District is to Nurture and Empower lifelong learning and responsible citizenship.

## ***STRATEGIC OBJECTIVES***

All students will continually establish and achieve significant personal goals and experience the benefit of doing so.

All students will continually and enthusiastically express their love of learning to the world by their words and/or actions.

All students will choose to actively participate in self-designed and/or existing programs that enhance the community.

## ***STRATEGIES***

**We will:**

Empower all staff throughout the District to achieve all of our Strategic Objectives and Mission.

Create and sustain a solid foundation of trust extending from within the system outward to the community which will foster the unity essential to achieve our Strategic Objectives and Mission.

Collaborate with the community so that we all understand, support, and contribute to our Strategic Objectives and Mission.

We will develop, align, and implement an effective and comprehensive curriculum to ensure the attainment of our Strategic Objectives and Mission.

## **TABLE OF CONTENTS**

	Page
Graduation Requirements . . . . .	1
Graduation Portfolio Requirements . . . . .	2
Grading System . . . . .	3
Special Programs . . . . .	5
Glossary . . . . .	8
English Department . . . . .	10
Mathematics Department . . . . .	15
Science Department . . . . .	20
Social Studies Department . . . . .	26
World Language Department. . . . .	31
Business Department. . . . .	32
Technology Education Department. . . . .	34
Family and Consumer Science Department. . . . .	35
Fine Arts Department. . . . .	36
Music Department. . . . .	38
Health & Physical Education Department. . . . .	40
Erie County Technical School. . . . .	42
Communications Department. . . . .	42
Construction Department. . . . .	44
Human Services Department. . . . .	44
Manufacturing Department. . . . .	46
Transportation Department. . . . .	47
Extra-Curricular Activities. . . . .	49

## Graduation Requirements

- Credits**

Students who remain at **North East High School** on a full-time basis must successfully complete 27.0 credits in grades 9 – 12 as follows:

COURSE REQUIREMENTS	CREDITS
Mathematics	4.0
English	4.0
Social Studies	4.0
Science <i>biology is required</i>	4.0
Health	1.0
Physical Education	.5
Electives*	9.5
Career Portfolio	Successful Completion
<b>Total Credits</b>	<b>27.00</b>

\*Two credits of the required electives must be Arts and Humanities courses from any of the following departments: fine art, music, technology education, world language, family and consumer science, English and social studies. In addition, students must take and pass one computer course (0.5 credits). The computer course can be Intro to Computers, Digital Citizenship and Communications, or Computer Science Discoveries. Students who attend the **Erie County Technical School** must successfully complete 24.0 credits in grades 9 – 12 as follows:

COURSE REQUIREMENTS	CREDITS
Mathematics	3.0
English	4.0
Social Studies	3.0
Science <i>biology is required</i>	3.0
Health	1.0
Physical Education	.5
ECTS Lab Credits	9.0 lab credits for 3 year tech graduates 6.0 lab credits for 2 year tech graduates 3.0 lab credits for 1 year tech graduates
Electives*	Varies based on tech schedule
ECTS/Career Portfolio	Successful Completion
<b>Total Credits</b>	<b>24.00</b>

\*Two credits of the required electives must be Arts and Humanities courses from any of the following departments: fine art, music, technology education, world language, family and consumer science, English and social studies. The computer course can be Intro to Computers, Digital Citizenship and Communications, or Computer Science Discoveries.

- **Act 158: Pathways to Graduation**

Act 158 of 2018 prescribed multiple pathways for students to meet Pennsylvania's assessment requirement for graduation. These requirements affect the Class of 2023 and beyond. Pennsylvania students must now meet the criteria of one of the following pathways to achieve a diploma. The information below is not an exhaustive list. Please contact the high school office or refer to the following website for more information

<https://pdesas.org/Frameworks/DCEToolKit/Act158PathwaysToGraduationToolkit>

1. Keystone Proficiency (Refer to Act 158: Pathways to Graduation Toolkit website for more info)
  - a. Students achieving a minimum scaled score of 1500 or better in each of the three Keystone Exams (Algebra I, Biology, and Literature)
2. Keystone Composite (Refer to Act 158: Pathways to Graduation Toolkit website for more info)
  - a. Student must have taken all three Keystone Exams and must have at least one Keystone Exam score of Proficient or Advanced and no Keystone Exam score of Below Basic and earn a satisfactory composite score of 4452 or better in aggregate for the three Keystone Exams (Algebra I, Biology, and Literature).
3. Career and Technical Education (CTE) Concentrator (Refer to Act 158: Pathways to Graduation Toolkit website).
  - a. Attainment of an Industry-Based Competency Certification related to the CTE concentrator's program of study.
  - b. Demonstration of high likelihood of success on approved industry-based competency assessment as demonstrated by performance on benchmark assessments, course grades, and other factors consistent with the CTE concentrator's goals and career plan.
  - c. Demonstration of readiness for continued meaningful engagement in a CTE Concentrator Program of Study as demonstrated by performance on benchmark assessments, course grades, and other factors consistent with the CTE concentrator's goals and career plan
4. Alternative Assessment (Refer to Act 158: Pathways to Graduation Toolkit website for more info)
  - a. ACT - composite score of 21
  - b. ASVAB [Armed Forces Qualifying Test (AFQT)\*\*] - composite score of 31
  - c. PSAT - total score of 970
  - d. SAT - total score of 1010
  - e. Score a 3 or better on approved AP Exams
5. Evidence-Based Assessments (Refer to Act 158: Pathways to Graduation Toolkit website for more info)
  - a. Students must provide three pieces of evidence under this pathway regardless of the number of Keystone Exams in which the student achieved less than Proficient.

### **Career Education & Work Standards and the NEHS Graduation Portfolio**

Each school year students in grade 9 - 12 are required to complete a variety of career and higher education based activities (artifacts). Each activity is designed to assist students in developing an understanding of their interests, personality style, and aptitudes as they relate to careers. The many opportunities that exist beyond high school, and how to research careers and higher education options are also discussed.

The accumulation of artifacts is a Pennsylvania state requirement; the result of which is a culminating project, the NEHS Graduation Portfolio.

Many of the required artifacts are lessons found in Xello. Xello is a college and career readiness software program available to all NESD students in grades 6 - 12. In addition to Xello lessons, students will complete projects as designed by their School Counselor. Additionally, all 9th grade students will visit the Erie County Technical School, and all juniors will take the ASVAB (for career planning purposes).

Currently, the NEHS Graduation Portfolio consists of:

1. **Essay** -- 250 words detailing post graduation plans (requirements discussed in class).
2. **Resume** -- A finalized, current resume is required (requirements presented in 11th grade).
3. **Rep Visit evidence** -- Throughout the year various representatives from 2 & 4 year colleges, trade & technical schools, the military, and employers visit NEHS and ECTS. Students are required to participate in three of these events between their junior year and January of their senior year. Evidence of off campus visits are accepted, but off campus visits are not required. See your School Counselor for more information.

4. **NEHS Portfolio SlideShow (non ECTS)** -- Follow the slide instructions for content requirements. Use Google Slides. **EVERYONE** will be given class time to work on their slideshow.

5. **ECTS SlideShow** -- There is no breakdown of required slides, but you do need to create a slideshow. Get creative, take pictures of your lab, have a classmate take pictures of you in action, take pictures of a project (a hairstyle you created, a car you painted, a computer you rebuilt, etc.). Be prepared to discuss the following and incorporate some tech highlights utilizing pictures and information from ECTS.

- Why did you choose to attend ECTS?
- Which lab did you choose and why?
- What is your most memorable experience in your ECTS lab?
- Discuss the pros and cons of your ECTS lab/experience?
- What do you feel your strengths are in your lab area?
- Do your future plans relate to your lab? If not, why?
- Discuss your NOCTI experience.

### **Promotion Requirements Grades 9 – 12**

Promotion from one grade to the next depends upon credits earned. All full year courses are worth one credit; all semester courses are worth one-half credit. Students are expected to make yearly progress in their major academic subjects to ensure graduating in a timely fashion. Typically, students should follow these guidelines:

- From grade 9 to 10: A student must pass at least three of the four major subjects and earn at least 4.5 credits.
- From grade 10 to 11: A student must earn at least 11 credits.
- From grade 11 to 12: A student must earn at least 19 credits.

Students who fail to make yearly progress (as noted above) jeopardize the opportunity to graduate within four years.

### **Grading System**

North East High School uses a letter grading system based upon the following percentages:

A = 90 – 100%	I = Incomplete
B = 80 – 89%	WP = Withdrawal while Passing
C = 70 – 79%	WF = Withdrawal while Failing
D = 60 – 69%	P = Passing
F = Below 59%	MX = Medical Excuse

The final grade in all full year courses is the average of all four academic quarters (at a value of 22.5% each quarter), and the final exam (which carries a weight of 10%) to equal 100% of the grade.

If a student withdraws from a course for any reason prior to its completion, a grade of WP or WF will be given based upon actual academic progress in the course at the time of withdrawal. This grade will be reflected on the transcript.

### **Quality Point Average and Rank\***

Quality Point Average (QPA) is computed on a weighted scale, using letter grades earned in all courses in the high school. Quality Point Average determines a student's rank in class, is cumulative from year to year and appears on a student's transcript. Courses are assigned levels for QPA purposes as follows:

- Level 1: Regular and Basic Courses
- Level 2: Honors Courses, Second and Third Year ECTS Courses, Dual Enrollment Courses, & online Advanced Placement courses
- Level 3: In person NEHS Advanced Placement & CHS Courses
- The following point scale is used to compute QPA:

\*This section is under development. The high school is considering moving away from valedictorian and salutatorian, and moving to the latin honors system (e.g. suma cum laude, magna cum laude, and 3.8-4.0 cum laude). This would be phased in over time.

Grade	Reg(Lev1)	Hon(Lev 2)	AP/CHS(Lev 3)
A+	4	5	5.5
A	4	5	5.5
A-	3.67	4.67	5.17
B+	3.33	4.33	4.83
B	3	4	4.5
B-	2.67	3.67	4.17
C+	2.33	3.33	3.83
C	2	3	3.5
C-	1.67	2.33	2.67
D+	1.33	1.67	1.83
D	1	1	1
D-	0.67	0.67	0.67
F	0	0	0

### **Scheduling Corrections**

#### **Schedule corrections will only be considered for the following reasons:**

- An obvious error was made - Example: the student is scheduled for English 10 but is in 9th grade, or a student is scheduled for band but they don't play an instrument.
- Summer school - A course was made up through a credit recovery program and is not needed in the schedule.
- Course sequence – Student is missing a course prerequisite.
- Balance the load - All required classes ended up on the same day and the student wishes to have a more balanced distribution of coursework.
- Upgrading schedule - The student decided to take a more challenging course.

#### **Schedule changes will NOT be considered for the following reasons:**

- Arbitrary changes to student chosen electives - If a student requested an elective on their scheduling form no change will be made.
- Specific teachers - changes will not be made in order to select a different teacher.
- Non-academic reasons.

Any student enrolled in an honors, AP, or CHS course, who feels they wish to drop down a level must first meet with their teacher to communicate their concern. A formal drop request can only be made after efforts have been made to improve the situation. Such drops are not taken lightly. It is likely that a dialogue between the student, parents/guardians, the teacher, school counselor and school administration will take place prior to a decision being made. Ideally, such changes will be made prior to mid quarter of quarter one, and by the end of the first quarter at the latest.



## **Course Failure**

Students must pass all courses required for graduation to earn credit. If a student fails a course, the course may be repeated during the next school year or it may be remediated in an approved remediation program, either at North East School District or at another accredited school district. Course remediation requirements are as follows:

1.0 credit = 120 hours of instruction	<i>Remediation must equal 60 hours of instruction</i>
0.5 credit = 60 hours of instruction	<i>Remediation must equal 30 hours of instruction</i>

Information regarding district approved remediation options (summer school) is mailed home at the end of each school year. Students may also be tutored privately to remediate failed coursework. Private tutors must be certified teachers approved by the principal. All financial arrangements for private tutoring take place directly between the student's family and the tutor. A formal signed statement indicating the subject, dates, and total hours of the actual remediation, outline of topics covered, and grade given, will be submitted to the principal at the conclusion of the coursework. The course, grade, and assigned credit will then be added to the student's transcript.

## **Are you planning to go to college?**

There is a big difference between getting accepted to college and being successful in college. With college costs being what they are it's very important to take every possible step to prepare yourself for the rigors of college academics. So, what does it mean to be college ready? Anyone pursuing a four year bachelor's degree will take a general education course series, these "gen eds" are usually your traditional math, English, science, and social studies courses, as well as whatever your chosen college/university deems appropriate; you could also take, fine arts, religion or philosophy courses, or be required to earn a predetermined number of credits that are considered writing intensive, etc. Being college ready means that you have challenged yourself in both academically rigorous courses and have explored a wide variety of academic electives.

Honors courses at North East High School are challenging and college preparatory in nature—requiring students to think critically, write, and extend their knowledge beyond the minimum requirements. Any student considering attending college is *strongly encouraged* to take the available honors courses in each of the core subject areas. As an incoming freshman, if you were not recommended for an honors course, that's OK! The challenge for you is to work hard during your 9<sup>th</sup> grade year and strive to take honors courses during your sophomore year.

Mobility between regular and honors classes is possible; however, it is easier to move from honors to regular classes than from regulars to honors classes. Students should make a commitment to honors and give it their best effort. There is nothing wrong with earning a B or a C in an honors class!

Colleges want to see rigor and progression. If you are capable of earning an A in a regular class, take an honors class the following year. If you pass level one of a sequence, move on to the second level. Ask yourself, am I being challenged? Am I giving my brain a workout? If so, you're on the right track!

## **Special Programs**

### **1. Advanced Placement Courses**

North East High School students have the opportunity to complete college-level courses at the secondary level and may obtain college credit and/or advanced placement through the Advanced Placement Program (College Board). Students enrolled in Advanced Placement courses may elect to take an Advanced Placement Exam for the subject(s) in which they are enrolled. There is a fee for each exam. Exams consist of multiple choice and free response sections. Every examination receives an overall grade on a 5-point scale:

5-Extremely well qualified

4-Well qualified

3-Qualified

2-Possibly qualified

1-No recommendation

Students send the grades received on the exams to colleges and universities nation-wide. Each college decides which AP Exam score it will accept for credit and/or advanced placement. Many institutions accept scores of "3" and above, which is the recommendation of the American Council on Education (ACE).

North East High School offers in person Advanced Placement courses in the following:

English Language (English 11 AP)

English Literature (English 12 AP)

European History

Chemistry II

Physics II

## **2. College in the High School Courses (CHS)**

High School students have the opportunity through CHS to earn both high school and University of Pittsburgh: Bradford credit in courses taught right in their classrooms, within a supportive high school environment, at a fraction of the cost of normal tuition. CHS student grades are generated from assessment throughout the course rather than a one-time assessment. Students earn top-quality and low-cost University of Pittsburgh: Bradford credits, which are highly transferable to colleges and universities across the country. CHS courses are accessible to students of varying ability and financial means and prepare students to go on to college while building the skills they will need to succeed once they are there.

CHS-certified high school teachers work closely with Pitt: Bradford's faculty to ensure course alignment. Students use college-level textbooks, take college-level exams, and upon successful completion of the class, earn college credit that is recorded on an official University of Pittsburgh: Bradford transcript.

North East High School offers College in the High School Courses (CHS) in the following:

College American Political Process

College Calculus 1

## **3. Honors Courses**

North East High School students have the opportunity to enroll in Honors courses, which provide a rigorous academic experience. Students enrolling in Honors classes should have a "B" average or better in the subject area. The pace is accelerated and the workload is demanding.

North East High School offers the following Honors courses:

Algebra I Honors

Algebra II Honors

American History II Honors

Biology Honors

Calculus Honors

Chemistry I Honors

Contemporary World Cultures Honors

Dissection of Life Honors

Earth and Environmental Science Honors

English 9, 10, 11, 12 Honors

Spanish III, IV

Human Anatomy and Physiology Honors

Modern Geometry Honors

Organic/Biochemistry Honors

Physics I Honors

Pre-Calculus Honors

Principles of Democracy Honors

Probability and Statistics Honors - Part B

Trigonometry and Advanced Math Honors

Western Civilization Honors

Erie County Technical School (ECTS)

Students in their second and third year at ECTS will earn honors weight

Advanced Placement Cyber Courses

#### 4. Dual Enrollment and College Course information and prerequisites

In order for students to request enrollment in any of the dual enrollment programs supported by North East High School, students must meet the guidelines below for consideration for entry in the program.

1. Students must have a history of taking Honors level courses and earning an 80% or higher for their final grade.
2. Students must have met proficiency on all three Keystone exams (Algebra 1, Literature, and Biology) prior to the semester in which they are seeking enrollment in Dual Enrollment courses.
3. Students must have taken the PSAT in either 10<sup>th</sup> or 11<sup>th</sup> grade or have taken their SAT's and/or ACT's.
4. Students must have less than 5 (five) unexcused absences or 10 (ten) total unexcused/excused absences and less than 5 (five) tardies in the prior semester of school.

Guidelines and credits for dual enrollment courses at North East High School are as followed:

1. All Dual Enrollment and college courses will be weighted as Honors (Level II) on a student's transcripts.
2. Dual Enrollment courses will not replace core course requirements (Math, English, Science, Social Studies). Any college course taken will be reflected as an elective on NEHS transcripts.
3. Students will receive 1-credit for each college course taken. Students may not exceed 32 total credits towards graduation requirements. Should a student exceed 32 credits, NEHS courses will take precedence over Dual Enrollment courses being reflected in credit count, GPA, and class rank.
4. **Courses taken on a college campus:** Students will only be approved for college courses offered on a college campus during our 1<sup>st</sup> or 4<sup>th</sup> blocks (or after school). Students will be replacing their 1<sup>st</sup> or 4<sup>th</sup> block courses on both A and B days at NEHS with the college courses and will not be scheduled for any courses here at NEHS. Students will have the option to either work remotely from home, on a college campus, or public library on their off-days from their college course OR choose to attend NEHS and report to our library.
5. **Courses taken through an accredited online college:** Students will replace 2 (two) elective periods per semester per college course. Depending on the periods in which students will be replacing electives, students will have the option to leave during 4<sup>th</sup> block and work remotely on their online college courses or report to NEHS library.

#### 5. Social and Emotional Learning (SEL)

The North East School District believes that basic human needs must be met before students can reach their highest academic potential (Maslow/Pearlman). We believe that students will be more motivated to achieve academically if they are healthy, feel safe, and are valued. Through SEL we will prioritize personal connections, demonstrate relentless care for our students, staff, and families.

We will utilize the Collaborative for Social-Emotional Learning (CASEL) five core competencies to promote a movement here in the North East SD to assist students, support staff, and families by addressing social, emotional, academic, and behavioral needs. These five competencies include:

1. Self-Awareness - understand one's own emotions, thoughts and values
2. Self-Management - manage one's emotions, thoughts, and behaviors
3. Social Awareness - understand the perspectives of others
4. Relationship Skills - establish and maintain health and supportive relationships
5. Responsible Decision-making - ability to make caring and constructive choices

Please visit the district website for more information about our SEL program.

<https://www.nesd1.org/social-emotional-learning>

#### 6. Academic Awards Program

Each department in the school awards academic certificates to one outstanding student and three commendable students in all subjects taught. These awards are distributed during a formal awards ceremony at the end of the academic year. The recipients are determined utilizing the following criteria:

1. Academic performance in the subject area during the current school year.
2. In case of a tie, subtest scores on the most recent standardized test are used.

Senior awards for outstanding achievement are given to one senior in every department who has the highest cumulative grade average in that department's course offerings over the four years of high school. In addition to a certificate, the senior's name is engraved on a brass plate and attached to the department's walnut plaque, which is displayed in the gym/auditorium lobby.

## **7. Academic Letters**

Students who excel in their honors and academic coursework, academic extracurricular activities and standardized test scores may receive an academic letter. To receive an academic letter, students must earn a predetermined number of points based on grades, standardized test scores, rank, and individual academic awards. Students may apply for the letter during the second semester each year beginning in 10<sup>th</sup> grade. Letters are awarded during the spring of each year.

## **8. National Honor Society**

In the second semester, all sophomores and juniors who have a cumulative 3.5 grade point average will be invited to apply for membership in the North East High School chapter of the National Honor Society. A faculty committee then reviews each application for performance in four areas: academics, leadership, character, and service.

A late spring induction ceremony takes place at the school. Students who have been inducted into the NHS remain members unless their GPA drops, they fail to meet the community service requirements or they have been involved in any serious disciplinary action.

## **9. Honor Roll**

Honor roll recognition at North East High School is determined by all grades received for all courses each quarter. All students have an equal opportunity for local recognition, regardless of their course levels. Honor Roll is offered at two levels: High Honors and Honors. The student must meet one of the following requirements to qualify:

High Honors: All "A's"      Honors: All "A's" and "B's"

## **10. College Athletics-NCAA**

Playing a sport for a Division I or Division II college/university team takes more than just skill on the court or field – high school academics play a major role in your ability to be recruited by a D1 or D2 athletic team. One aspect of athletic eligibility is a student's core grade point average, determined by NCAA approved core courses, and a student's SAT/ACT scores. High School students interested in playing on the D1 or D2 level should make their intentions known to both their coach and their school counselor. Registration with the NCAA Eligibility Center ([www.eligibilitycenter.org](http://www.eligibilitycenter.org)) in your junior or senior year of high school is also necessary. Prospective college athletes are encouraged to visit the Eligibility Center website for additional information. The Eligibility Center website has a list of North East High School's NCAA approved core courses—core courses are also identified in this catalog (NCAA). **Please note:** It is the students responsibility to track their own approved NCAA courses. Students attending the Erie County Technical School must pay close attention to their NCAA core course credit requirements, as your overall earned NEHS credits are reduced. Students who fail a course(s) must make a careful plan for remediation. NEHS school counselors will assist with tracking NCAA courses if requested.

## **Glossary**

### **Advanced Placement Courses (AP):**

These courses, always designated by the letters AP, refer to college-level courses taught according to the syllabi prescribed by the College Board Advanced Placement program. AP courses are rigorous in nature. Successful performance on the AP exam may lead to college credit and/or advanced placement on the college level. For more information visit [www.collegeboard.org](http://www.collegeboard.org). NEHS in person AP courses are level 3 in the computation of QPA and class rank.

### **Basic Courses:**

Basic courses are required courses in major subject areas for students who are designated as learning support (IEP).

### **College in High School (CHS): University of Pittsburgh: Bradford**

Students can earn college credits while in high school. NEHS teachers work throughout the year with Pitt-Bradford faculty member liaisons, whether it is course-specific or about student achievement in general. The high school teachers give grades for the courses, which are based on assignments, quizzes and tests determined by both faculty members, and also by a final exam that is provided by the university. CHS courses are level 3 in the computation of QPA and class rank.

### **Course Sequence:**

A course sequence is the preferred progression of courses in a single department, from the beginning level to the more advanced, which a student is advised to take in preparing his/her schedule from year to year. Course sequences are listed at the beginning of each department's outline of courses.

### **Credits:**

One credit is earned upon successful completion (passing grade) of a full year course (120 hours of instruction). One-half credit is earned for the successful completion of a semester-long course (60 hours of instruction).

**Elective course:**

Electives are courses that students choose to take. By definition, they are not required. North East High School students are required to take 9.5 credits of electives, two of which must be in the area of Arts and Humanities and complete the .5 computer requirement.

**Honors (H) Courses:**

Honors courses provide a solid foundation for admissions to most colleges and universities. As the name implies, the pace is accelerated and the workload is demanding. Honors courses, second and third Year ECTS courses, and AP cyber courses are level 2 courses in the computation of GPA and class rank.

**Prerequisite:**

A prerequisite is a course or a requirement that a student must complete in order to qualify for entry into another course. For example, before students can take Painting I, they must successfully complete Studio I.

**Regular Courses:**

Regular courses (courses not designated honors, AP or CHS) prepare students to meet graduation requirements, seek immediate employment after high school, enter the military, or to further their education. The pace accommodates the individual needs and abilities of the average student. These are level 1 courses in the computation of GPA and class rank.

**Required course:**

A required course is one which must be taken by all students to receive a North East High School diploma. Please refer to the graduation requirement section of this catalog.

**Semester:**

A semester is half of a school year and includes two of the four marking periods. Many elective courses are one semester in length. Semester I begins in late August or September and ends in mid/late January. Semester 2 ends in June.

## ENGLISH SEQUENCES

### Regular

Grade	Subject
9	English
10	English
11	English
12	English

### Honors

Grade	Subject
9	English Honors
10	English Honors
11	English Honors
12	English Honors

### Advanced Placement Sequence

Grade	Subject
9	English Honors
10	English Honors
11	English Advanced Placement
12	English Advanced Placement

### Electives

Grade	Subject
9-12	Creative Writing I
10-12	Creative Writing II
9-12	Dramatic Performance I
10-12	Dramatic Performance II
9-12	Journalism I
10-12	Journalism II
9-12	Oral Communications I
10-12	Oral Communications II
10-12	Publications Seminar I
11-12	Publications Seminar II

## ENGLISH DEPARTMENT

Course Title: **ENGLISH 9-NCAA**

Grade/Course #: 9 (0020)

Course Length: Full year (One credit)

**Description:** The focus of this course is to develop vocabulary, to review the fundamentals of grammar and usage, to enhance writing skills, and to introduce students to basic literary types such as the short story, the novel, the epic and drama. Library skills are reviewed to promote effective library usage.

Course Title: **ENGLISH 9 HONORS-NCAA**

Grade/Course #: 9 (0025)

Course Length: Full year (One credit)

**Description:** The honors course focuses in greater depth on grammar/usage, composition, literature, and vocabulary. The writing component stresses the development of informative, descriptive, and narrative paragraphs. The study of literature includes an understanding of the elements of basic literary forms. This course prepares students for college level reading and writing. **Summer assignment is required.**

**Prerequisite:** B+ average in Eighth Grade ELA, Proficient or advanced on the ELA PSSA; teacher recommendation will be considered

Course Title: **ENGLISH 10-NCAA**

Grade/Course #: 10 (0030)

Course Length: Full year (One credit)

**Description:** The main emphasis in this course is to study world authors and enhance skills in reading comprehension and analysis. Vocabulary development through reading fiction and non-fiction is stressed and accompanied by formal vocabulary study. The writing process is exercised and complemented by grammar instruction.

Course Title: **ENGLISH 10 HONORS-NCAA**

Grade/Course #: 10 (0035)

Course Length: Full year (One credit)

**Description:** Included in this course is a survey of world literature with an attempt to correlate reading with geography and history. The structure and critical analysis of short stories, novels, essays and plays are studied with an emphasis on novels. Challenging vocabulary is also studied through the use of a vocabulary book for the college bound. Paragraph development and formal essay writing are accompanied by grammar instruction. This course prepares students for college level reading and writing. **Summer reading is required.**

**Prerequisite:** B+ average in regular Eng 9, B average in Honors Eng 9, and teacher recommendation.

Course Title: **ENGLISH 11-NCAA**

Grade/Course #: 11 (0040)

Course Length: Full year (One credit)

**Description:** This course is primarily a survey of American literature from colonial to modern times. Vocabulary study is formal and prepares students for the SAT. Essay writing is practiced through analysis of fiction and non-fiction as well as through persuasive and informative compositions.

Course Title: **ENGLISH 11 HONORS-NCAA**

Grade/Course #: 11 (0045)

Course Length: Full year (One credit)

**Description:** Designed to prepare students for college, this course covers the effects of changing social conditions and philosophies on the various literary genres (short story, essay, novel, drama, and poetry) represented in American literature. Emphasis is on vocabulary development, effective research, precise composition, and appropriate language usage. Extensive reading and writing are required. **Summer reading is required.**

**Prerequisite:** B+ average in regular English 10, B average in Honors Eng 10, and teacher recommendation.

Course Title: **ENGLISH 11 ADVANCED PLACEMENT-NCAA**

Grade/Course #: 11 (0044)

Course Length: Full year (One credit)

**Description:** Designed for the exceptional student in English, this course provides students experiences and intensive instruction in prose reading and writing that will encourage motivated students to become skilled readers and writers. Students will be able to distinguish a writer's purpose, audience expectations, and subjects as well as the way language conventions and the structures of language contribute to meaning. Students must be capable of independent study and research on a college level. This course prepares students to take the AP Language and Composition examination. Advanced placement exams are given upon request. This course has been authorized by the College Board to use the "AP" designation. **Summer reading is required.**

**Prerequisite:** Honors English 10 (B+ average) and teacher recommendation.

Course Title: **ENGLISH 12-NCAA**

Grade/Course #: 12 (0050)

Course Length: Full year (One credit)

**Description:** This course is designed to guide students through a brief survey of historically significant British Literature from the English Renaissance to the present. Emphasis is given to the genres of poetry, novel, short story, drama, and essay. Students develop new vocabulary, review grammatical concepts, and apply sound and ethical research practices. Attention is placed on making connections between literary selections and the nature of humankind. Individual reading and writing are required.

Course Title: **ENGLISH 12 HONORS-NCAA**

Grade/Course #: 12 (0055)

Course Length: Full year (One credit)

**Description:** Designed to prepare students for college, this course surveys historically significant British Literature from the English Renaissance to the present in the genres of poetry, novel, short story, drama, and essay. While new vocabulary is developed and grammatical concepts are reviewed, emphasis is placed on thinking critically about literature, developing advanced writing skills, and understanding how various historical events and writing styles relate, impact, and foreshadow literary movements. Extensive individual reading, writing and research are required. **Summer reading is required.**

**Prerequisite:** B+ average in regular English 11, B average in Honors Eng 11, and teacher recommendation.

Course Title: **ENGLISH 12 ADVANCED PLACEMENT-NCAA**

Grade/Course #: 12 (0065)

Course Length: Full year (One credit)

**Description:** Designed for the exceptional student in English. This course includes a survey of British literature from the sixteenth century through the modern age, with an emphasis on the development of the short story and novel in contemporary literature. Extensive reading and writing are required; therefore, students must be capable of independent study and research on a college level. Advanced Placement examinations are given upon request. This course has been authorized by the College Board to use the "AP" designation. **Summer reading is required.**

**Prerequisite:** Honors or AP English 11, B+ average or higher and teacher recommendation

## ELECTIVES

Course Title: **CREATIVE WRITING I-NCAA**

Grade/Course #: 9, 10, 11, 12 (0046)

Course Length: Semester (.5 credit)

**Description:** This introductory course offers a guided approach to various forms of writing, including but not limited to scriptwriting, narrative writing, the personal essay, and poetry. The course functions as a community of writers who share, assess, revise, and peer edit student writing. Those who enroll should possess strong basic writing skills, particularly in regard to grammar and usage.

Course Title: **CREATIVE WRITING II**



Grade/Course #: 10, 11, 12 (0056)  
Course Length: Semester (.5 credit)

**Description:** This course provides a forum in which students meet as a community of interested writers. Here, students utilize the writing process, examine the craftsmanship of published authors, and experiment with various writing techniques while developing their own personal style and voice. Student writers both contribute to and facilitate online student ezine.

Course Title: **ORAL COMMUNICATIONS I-NCAA**  
Grade/Course #: 9, 10, 11, 12 (0047)  
Course Length: Semester (.5 credit)

**Description:** Students will prepare and present a variety of speeches designed to practice delivery techniques. Students will study vocal, verbal, non-verbal messages to enhance communication skills. This course develops student awareness of the importance of communication.

Course Title: **PUBLICATIONS SEMINAR I**  
Grade/Course #: 10, 11, 12 (0068)  
Course Length: Full year (One credit)

**Description:** Publications seminar is a year long class for students in grades 10, 11 and 12 who serve as first year designers of the North East High School yearbook. Students will produce this publication using current professional journalism methods and state-of-the-art desktop publishing software. Individual work will be evaluated using performance-based authentic assessment procedures. Courses such as Journalism I, creative writing, photography, drafting, and computer applications provide a background for this class. Students are required to participate in an advertising campaign for the yearbook.

**Prerequisite:** Completed application, faculty review, and an interview.

Course Title: **PUBLICATIONS SEMINAR II**  
Grade/Course #: 11, 12 (0078)  
Course Length: Full year (One credit)

**Description:** Publications Seminar II is a year-long workshop class for students in grades 11 and 12 who have successfully completed Publications Seminar I. Students will provide leadership in such positions as editor-in-chief, assistant editor, photography editor, business manager, etc., to produce the official North East High School yearbook. Editorial positions are competitive based on a portfolio, essay, and interview. This class is scheduled with the Publications Seminar I students. Students in this section will be responsible for content of the yearbook as well as provide funding for the publication using current advertising and marketing techniques.

**Prerequisite:** Successful completion of Publications Seminar I or teacher recommendation.

Course Title: **JOURNALISM I-NCAA**  
Grade/Course #: 9, 10, 11, 12 (0061)  
Course Length: Semester (.5 credit)

**Description:** This course covers basic news gathering, writing, editing, and interviewing techniques. Areas of emphasis include leads, straight news, features, and editorials. Students will also learn the basics of headline writing, proofreading, The First Amendment, the ethical responsibilities of journalists and the guidelines for gathering information and writing an accurate news story.

Course Title: **JOURNALISM II**  
Grade/Course #: 10, 11, 12 (0071)  
Course Length: Semester (.5 credit)

**Description:** Journalism II is a class devoted to developing a writer's skills and his/her awareness of American media. Students will work as a class to design, write, and publish a variety of school newsletters. The goal of each newsletter will be to organize and produce an informative source of print media that creates a forum of discussion among the student body and faculty at NEHS.

**Prerequisite:** Journalism I and/or teacher recommendation.

Course Title: **DRAMATIC PERFORMANCE I**  
Grade/Course #: 9, 10, 11, 12 (0048)

Course Length: Semester (.5 credit)

**Description:** This course introduces the students to physical elements of the stage, voice and diction, nonverbal communication, improvisation and a series of beginning acting experiences. Students will study drama through the textbook as well as through acting experiences on the school stage. Participants in this class will prepare and present a variety of performances; students will be required to memorize short and long scenes, as well as a one act play. In addition, there will be written homework, quizzes, tests and a written final exam.

***The courses below are not electives; students are placed in these classes by the principal or the school counselor when warranted based on teacher recommendation, test scores and grades.***

Course Title: **ACADEMIC LITERACY**

Grade/Course #: 9, 10, 11, 12 (0023)

Course Length: Semester (.5 credit)

**Description:** This course provides academic support and monitoring for students who need additional assistance in learning strategies or transition to high school. It also provides individualized monitoring of students' course work as well as individual and small group tutoring. **Students are placed in this class by recommendation of the principal and school counselor.** Access to Academic Literacy can be based on several factors including: Course failure, as a 504 plan accommodation, for those transitioning back to NEHS from a placement or as a new transfer student, or due to a significant scheduling issue. This course can be taken two consecutive semesters based on need and availability.

Course Title: **COLLEGE PREP STUDY**

Grade/Course # 11, 12 (0102)

Course Length: Semester – no credit

**Description:** Any junior or senior taking a combination of 4 or more Honors and AP courses is eligible for placement in College Prep Study. The course is primarily a study hall designed to allow students the ability to plan, prepare, organize and complete school work. Seating is limited and preference will be given to those students not enrolled in Service Learning or as a senior aide.

	9th	10th	11th	12th
Option 1	Pre Algebra 1.0 credits	Algebra 1	Algebra 2 <b>OR</b> Geometry (Keystone Proficient) <hr/> Algebra 1 Part 1 <b>OR</b> Algebra 1 Part 2 (½ credit only) (Not Keystone Proficient)	Algebra 2 <b>OR</b> Geometry <hr/> Personal Finance (½ credit only) Computer Science A, B (½ credit only)
Option 2	Algebra 1	Algebra 2 <b>AND/OR</b> Geometry <hr/> Algebra 1 Part 1 <b>OR</b> Algebra 1 Part 2 (½ credit only) (Not Keystone Proficient)  *No double if not Keystone Proficient	Algebra 2 <b>OR</b> Geometry <hr/> H Trig/Adv Math <hr/> Algebra 2 <b>OR</b> Geometry	H Trig/Adv Math <hr/> H Calculus <hr/> Algebra 2 <b>OR</b> Geometry <b>OR</b> Personal Finance Prob & Stats A, B Comp Sci A Comp Sci B
Option 3	H Algebra1	H Algebra 2 <hr/> H Algebra 2 <b>AND</b> H Geometry	H Geometry <hr/> H Trig/Adv Math <hr/> H Pre Calculus	H Trig/Adv Math <hr/> H Calculus <hr/> College Calculus I *H Pre Calc required
Option 4	H Algebra 2	H Geometry	H Pre Calculus	College Calculus I

Grade  
9, 10, 11, 12  
10\*, 11, 12  
11, 12  
11, 12

Electives  
Computer Science A & B  
SAT Prep (\*must be co-enrolled in Geometry)  
Probability & Statistics A, Probability & Statistics B Honors  
Personal Finance

## MATHEMATICS DEPARTMENT

Course Title: **PRE-ALGEBRA**

Grade/Course #: 9 (1130)

Course Length: Full year, A and B Day (1.5 credits)

**Description:** This course is designed for those students who are unable to maintain the pace of a standard one-year Algebra I course. All of the same topics will be included, plus an emphasis on building basic math skills needed for success in Algebra I. Topics covered include integers, rational and irrational numbers, linear relations and functions, linear equations and inequalities, polynomial operations and factoring, exponential operations, some probability and statistics topics.

Course Title: **ALGEBRA I-NCAA**

Grade/Course #: 9, 10, 11, 12 (1123)

Course Length: Full year (One credit)

**Description:** This course is concerned with the study of systematic ways for solving problems. Topics include integers, rational and irrational numbers, working with linear relations and their representations, polynomial operations, factoring and topics from probability and statistics. **Prerequisite:** "C" or better in previous math class or teacher recommendation.

Course Title: **ALGEBRA I HONORS-NCAA**

Grade/Course #: 9 (1124)

Course Length: Full Year (one credit)

**Description:** This course is concerned with the study of systematic ways for solving problems. Topics include integers, rational and irrational numbers, working with linear relations and their representations, polynomial operations, factoring and topics from probability and statistics. Topics will be covered in greater breadth and depth in the honors course.

**Prerequisite:** Proficient or advanced on the math PSSA; teacher recommendation will be considered

Course Title: **ALGEBRA I PART 1**

Grade/Course #: 10, 11 (1127)

Course Length: Full year (One credit)

**Description:** This course is for the student who has successfully completed Algebra I but still has not attained proficiency on the PA Algebra I Keystone Exam. Topics covered will continue with problem solving skills encountered in Algebra I. They include solving linear equations and inequalities, solving and graphing systems of equations, work with rational and irrational numbers, polynomial operations and factoring, and probability and statistics topics.

**Prerequisite:** Algebra I, Basic/Below Basic on the Algebra Keystone (score below a 1480), or teacher recommendation.

Course Title: **ALGEBRA II-NCAA**

Grade/Course #: 10, 11, 12 (1139)

Course Length: Full year (One credit)

**Description:** This course provides a continuation and further refinement of problem solving skills encountered in Algebra I. Topics discussed include linear and quadratic relations, factoring, graphing, radicals, exponents, matrices and topics from probability and statistics. **Prerequisite:** Grade "C" or better in Algebra I

Course Title: **ALGEBRA II HONORS-NCAA**

Grade/Course #: 9, 10 (1138)

Course Length: Full year (One credit)

**Description:** This course provides a continuation and further refinement of problem solving skills encountered in Algebra I. Topics discussed include linear and quadratic relations, factoring, graphing, radicals, exponential and logarithmic functions, matrices and topics from probability and statistics in greater breadth and depth than the regular Algebra II course.

**Prerequisite:** 9th grade students proficient or advanced on the 8th grade math PSSA, grade B or better in Math 8; teacher recommendation considered. 10th grade, B or better in Algebra I and teacher recommendation.

Course Title: **ALGEBRA I PART 2**

Grade/Course #: 10, 11 (1140)

Course Length: Full year (One credit)

**Description:** This course is designed for students who have successfully completed Algebra I, but still have not attained proficiency on the PA Algebra I Keystone Exam. Topics covered include: operations with real numbers and

expressions, linear equations and inequalities, functions, coordinate geometry and data analysis.

**Prerequisite:** Algebra I and basic on the Algebra Keystone (score above 1480), or teacher recommendation.

Course Title: **MODERN GEOMETRY-NCAA**

Grade/Course #: 10, 11, 12 (1137)

Course Length: Full year (One credit)

**Description:** This course is designed to study the formal structure of geometry. Topics covered include deductive reasoning, angles, segments, congruent triangles, parallelism, transformations, similarity, circles, and polygons. Emphasis is placed upon the use of precise language in the statement of definitions, postulates and theorems. A major objective of the course is to develop the ability of the student to reason creatively and critically in both mathematical and non-mathematical situations. Modern Geometry may be studied simultaneously with Algebra II

**Prerequisite:** Grade C or better in Algebra I or teacher recommendation.

Course Title: **MODERN GEOMETRY HONORS-NCAA**

Grade/Course #: 10, 11 (1136)

Course Length: Full year (One credit)

**Description:** This course is designed to study the formal structure of geometry. Topics covered include deductive reasoning, angles, segments, congruent triangles, parallelism, transformations, similarity, circles, and polygons. Emphasis is placed upon the use of precise language in the statement of definitions, postulates and theorems. A major objective of the course is to develop the ability of the student to reason creatively and critically in both mathematical and non-mathematical situations.

**Prerequisite:** Grade B or better in Algebra, or teacher recommendation.

Course Title: **TRIGONOMETRY AND ADVANCED MATH HONORS-NCAA**

Grade/Course #: 11, 12 (1153)

Course Length: Full year (One credit)

**Description:** The trigonometry section of this course is one semester. It includes the theoretical aspects of trigonometry as well as problem solving. The second semester of the course covers topics in advanced algebra, analytic geometry, and the theory of equations.

**Prerequisite:** Grade C+ or better in Algebra II and Geometry, or teacher recommendation.

Course Title: **PRE-CALCULUS HONORS-NCAA**

Grade/Course #: 11, 12 (1154)

Course Length: Full year (One credit)

**Description:** The trigonometry section of this course will last approximately one semester. It includes the theoretical aspects of trigonometry as well as problem solving. Topics for the remainder of this course include advanced algebra, analytic geometry, and the theory of equations. There is also an in depth study of limits from a graphical, numerical, and algebraic approach. This course is designed for the student who intends to take AP Calculus.

**Prerequisite:** B or better in Modern Geometry H and Algebra II H, or teacher recommendation.

Course Title: **CALCULUS HONORS-NCAA**

Grade/Course #: 12 (1160)

Course Length: Full year (One credit)

**Description:** This course is for any student planning to go to college. It will cover derivatives, integrals and their applications. It is for the student who desires an introduction to Calculus.

**Prerequisite:** B or better in Trigonometry/Pre-Calculus, or teacher recommendation.

Course Title: **COLLEGE CALCULUS 1-NCAA**

Grade/Course #: 12 (1163)

Course Length: Full year (One credit)

**Description:** Calculus 1 is a College in the High School course taught by an NEHS teacher in collaboration with the University of Pittsburgh: Bradford. The course is intended for students interested in majoring in engineering, mathematics,

or chemistry. This course will be a study of the derivative, trigonometric functions, the integral, and applications of the derivative and the integral.

**Prerequisite:** Grade B or better in Precalculus, or teacher recommendation.

Course Title: **PROBABILITY AND STATISTICS A -NCAA**

Grade/Course #: 11, 12 (1455)

Course Length: Semester (.5 credit)

**Description:** This course will explore the concepts and processes used in analyzing data and in evaluating statistical claims about such. Data will be drawn from a variety of areas such as business, social sciences mathematics, science, medicine and education.

**Prerequisite:** Algebra I or teacher recommendation.

Course Title: **PROBABILITY AND STATISTICS B HONORS -NCAA (pending)**

Grade/Course #: 11, 12 (1455)

Course Length: Semester (.5 credit)

**Description:** Probability and Statistics Honors - Part B is designed for the college-bound student who has demonstrated success in Algebra II and Probability and Statistics - Part A. This course explores a large range of topics with emphasis on “real world” applications such as sports, health, education, entertainment, history, and others. Concepts in statistics will be applied to hypothetical scenarios similar to those found in newspapers, magazines, and news programs.

**Prerequisite:** Final average grade 85% (B) or better in Probability and Statistics Part A or teacher recommendation.

Course Title: **SAT PREP**

Grade/Course #: 10, 11, 12 (1405)

Course Length: Semester (.5 credit)

**Description:** This course will help prepare the students to earn the best possible score they are capable of achieving on PSAT/SAT/ACT tests. The class will become familiar with the purpose of the tests, their design and strategies for answering the types of questions encountered. Time will also be devoted to college exploration.

**Course can only be taken by 10<sup>th</sup> graders who are currently taking geometry.**

Course Title: **PERSONAL FINANCE A**

Grade/Course #: 11, 12 (1465)

Course Length: Semester (.5 credit)

**Description:** This course provides a practical understanding of basic financial concepts that will assist students in becoming financially responsible citizens. The focus of this course will be *money management, earning money and career planning, and the cost and benefits of borrowing money*. Students enrolled in this course can earn a .5 math credit or a .5 elective credit. Personal Finance A and Personal Finance B may be taken in any order (e.g. Personal Finance B can be taken before Personal Finance A). Students enrolled in honors level math courses should consider taking Investing.

Course Title: **COMPUTER SCIENCE A**

Grade/Course #: 9, 10, 11, 12 (1480)

Course Length: Semester (.5 credit)

**Description:** This course is an introduction and hands-on course that teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem-solving skills. The primary coding language of the class will be javascript which will allow students to build websites, mobile apps, games, and utilize Internet-of-Things connected devices.

**Prerequisite:** Computer Science Discoveries or teacher recommendation

Course Title: **COMPUTER SCIENCE B**

Grade/Course # 10, 11, 12 (1481)

Course Length: Semester (.5 credit)

**Description:** A further refinement into the modern programming in the field of computer science, with an emphasis on helping students develop logical thinking and problem-solving skills. Students will explore the concepts of code refactoring and reuse through the introduction of object-oriented programming. Like Computer Science A, Computer

Science B will continue to use JavaScript as the main primary coding language which will allow for a seamless transition in the sequence. This course was designed in part by CodeHS (website / curriculum) and the CSTA K-12 Computer Science Standards. These standards were adopted by PDE in 2018.

**Prerequisite:** Computer Science A: C or better

## SCIENCE SEQUENCE

### Grade

### Regular Course Track

9	Earth & Environmental Science Introduction to Aviation, Aerospace, and Engineering
10	Biology (required for graduation) Aviation II: Forces of Flight Aircraft Systems and Aircraft Performance
11 & 12	<i>Students can choose from the following:</i> Applied Chemistry Chemistry I Physical Science Ecology/Environmental Science Computer Science Discoveries

### Grade

### Honors Course Track

9	Earth and Environmental Science Honors
10	Biology or Biology Honors is a required science for sophomores Honors track students are permitted to also take Chemistry I (regular or honors). You must have teacher permission to take both honors Bio and honors Chem.
11 & 12*	<i>Students can choose from the following:</i> Chemistry R or H Chemistry II AP (offered every other year) Physics I (must have taken and passed or be co-enrolled in Trig/pre-calc) Physics II AP Organic Biochemistry Honors (offered every other year) Human Anatomy & Physiology Honors Dissection of Life Honors Aviation III A: Weather, Airspace, and Flight Planning Aviation III B: Weather, Airspace, and Drone Operations *Aviation IV A: Instrumental Flight, Advanced Aircraft, and Future of Aerospace *Aviation IV B: Advanced Missions, Advanced Drone Tech, and Future of Aerospace

\*Students can double and triple up in science with teacher recommendation

***Any member of the class of 2025 who does not score proficient or higher on the Biology Keystone Exam must demonstrate competence on a district approved assessment or meet another requirement of PDE graduation criteria.***



## SCIENCE DEPARTMENT

Course Title: **EARTH AND ENVIRONMENTAL SCIENCE-NCAA**

Grade/Course #: 9 (2220)

Course Length: Full year (one credit)

**Description:** This course covers the concepts and principles associated with earth science and the environment. It is designed to provide the basic scientific skills necessary to advance to further courses of study in science. The student will study many of the major areas of earth science including metrics, geology, mineralogy, petrology, meteorology, earth history, plate tectonics, geologic mapping and ecology. Laboratory exercises and activities are a major part of the course curriculum.

Course Title: **EARTH AND ENVIRONMENTAL SCIENCE HONORS-NCAA**

Grade/Course #: 9 (2221)

Course Length: Full year (One credit)

**Description:** This course covers the concepts and principles associated with earth science and the environment. The course of study is the same as general earth science and the environment, but the pacing and material is adapted to suit the needs of the accelerated student. Topics covered include metrics, geology, mineralogy, petrology, meteorology, earth history, plate tectonics, geologic mapping and ecology. A major emphasis is placed on laboratory work and projects.

**Prerequisite:** Proficient or advanced on the science PSSA; teacher recommendation will be considered.

Course Title: **BIOLOGY-NCAA**

Grade/Course #: 10 (2230)

Course Length: Full year (One credit)

**Description:** This course covers the concepts and principles associated with the natural or life sciences as outlined by the Pennsylvania Keystone Standards. Included in this course are a discussion of the fundamentals of methodology used in science as well as metric measurement and microscopy. Units of study include the characteristics of life, biochemistry, cells and cell processes, DNA, genetics, evolution and a review of ecology. Laboratory exercises are included as supportive and supplemental activities throughout the course.

Course Title: **BIOLOGY HONORS-NCAA**

Grade/Course #: 10 (2235)

Course Length: Full year (One credit)

**Description:** This course covers the concepts and principles associated with the natural or life sciences as outlined by the Pennsylvania Keystone Standards. Included in this course are a discussion of the fundamentals of methodology used in science as well as metric measurement and microscopy. Units of study include the characteristics of life, biochemistry, cells and cell processes, DNA, genetics, evolution, and a review of ecology. Laboratory exercises are included as supportive and supplemental activities throughout the course. The course content is essentially the same as general Biology, but pacing is adapted to suit the needs of the honor student. Therefore, topics will be more thoroughly explored through lab based activities and with greater emphasis to detail.

**Prerequisite:** Teacher recommendation, A or better in Earth & Environmental Science

Course Title: **DISSECTION OF LIFE HONORS-NCAA**

Grade/Course #: 11, 12 (2236)

Course Length: Full year (One credit)

**Description:** This purpose of this course will be a continuation of the Biology I course offered to all tenth graders. This course will focus on the study of the kingdoms of life (Bacteria, Protists, Fungi, Animals). The course will begin with a review of the characteristics of living things and use of the microscope. Classification of living things (taxonomy) will then be covered followed by a study of the kingdoms of life. This is a lab-based course focused on dissection. Students signing up for the course should be interested and willing to dissect.

**Prerequisite:** B or better in Biology

Course Title: **CHEMISTRY I-NCAA**

Grade/Course #: 10, 11, 12 (2241)

Course Length: Full year (One credit)

**Description:** This **college prep course** covers the basic principles of chemistry encompassing a study of science and matter in general. Specific emphasis on atomic structure and chemical bonding leads to a study of the composition, structure, and changes of matter. The main mathematical concepts relate to chemical compounds and chemical equations. A brief treatment of solids, liquids, gasses, and solutions leads into an application of chemistry to practical situations. Laboratory exercises are included as a supportive and supplemental activity throughout the course.

**Prerequisite:** C or better in Algebra 1

Course Title: **CHEMISTRY I – HONORS-NCAA**

Grade/Course #: 10, 11 (2242)

Course Length: Full year (One credit)

**Description:** This course covers the basic principles of chemistry encompassing a study of science and matter. The course content is essentially the same as general Chemistry I, but material and pacing are adapted to suit the needs of the honor student. A much greater emphasis to detail and labs will be included.

**Prerequisite:** B or better in Biology, C or better in Algebra 1, teacher recommendation

Course Title: **APPLIED CHEMISTRY**

Grade/Course #: 11,12 (2246)

Course Length: Full year (One credit)

**Description:** This course is designed for the non-collegiate student. The goal of this course is to give students an appreciation of the contributions and applications of chemistry. Concepts will be presented in a less mathematical approach than in the Chemistry I course. The main focus of this course is the application of chemical principles to everyday life, particularly to areas which affect people on a personal as well as global scale. The structure, properties, and changes of matter around us will be explored using a hands-on approach. Students will learn enough of the chemical theory and language to approach practical problems from a scientific perspective. Class participation in the form of questions and discussion is strongly encouraged.

Course Title: **PHYSICAL SCIENCE-NCAA**

Grade/Course #: 11, 12 (2240)

Course Length: Full year (One credit)

**Description:** This course is designed for non-college students. The goal of this course is to give the students an appreciation of the contributions and applications of physics to the everyday world. Concepts will be covered in a less mathematical approach than the Physics I Honors course. The focus of the course will be the study of, Forces, Motion, Energy, Electricity and Magnetism, Thermal Systems, & Geometric Optics. This course will incorporate hands-on applications to the conceptual knowledge for each topic.

Course Title: **PHYSICS I HONORS-NCAA**

Grade/Course #: 11, 12 (2243)

Course Length: Full year (One credit)

**Description:** This course is designed to give the students an understanding of matter and energy and their transformations through applied mathematics. Areas of study include Motion, Force, Energy, States of Matter, Fluid Mechanics, and Thermodynamics. The course will include inquiry based labs to complement the theoretical study of each topic. Students enrolled in this course need to have a strong mathematical background.

**Prerequisite/Preferential seating:**

1. Juniors who have passed Biology and Chemistry, and who are co-enrolled in Trig or Pre-Calculus
2. Juniors who have passed Honors Biology, and who are co-enrolled in Trig/Pre-Calc and Chemistry
3. Seniors who have passed Chemistry and Trig/Pre-Calculus
4. Seniors and juniors who are co-enrolled in Trig/Pre-Calculus

Course Title: **CHEMISTRY II ADVANCED PLACEMENT - NCAA**

Grade/Course #: 11, 12 (2265)

Course Length: Full year (One credit)

**Description:** This course expands on the basic principles covered in Chemistry I. It extends into other applications of chemistry. Topics covered include; gas laws, acids, bases, salts, chemical kinetics, equilibrium, stoichiometry, concentrations of solutions, reduction-oxidation reactions, electrochemistry, quantitative and qualitative analysis. A comprehensive knowledge of the principles of Chemistry I is required.

**Prerequisite:** B or better in Chemistry I and teacher recommendation

Course Title: **PHYSICS II ADVANCED PLACEMENT-NCAA**

Grade/Course #: 12 (2253)

Course Length: Full year (One credit)

**Description:** This course is designed as a second year of study in Physics. The topics that are covered in this course include a review of the Physics I Topics in addition to, Electricity and Magnetism, Waves and Optics, and Atomic and Nuclear Physics. The course will include inquiry based labs to complement the theoretical study of each topic. In addition the students will become familiar with the questioning and problem solving techniques that are commonly used on the Advanced Placement Exam.

**Prerequisite:** Successful completion of Physics I and teacher recommendation.

Course Title: **ORGANIC/BIOCHEMISTRY HONORS-NCAA**

Grade/Course #: 11, 12 (2267)

Course Length: Full year (One credit)

**Description:** This course will consist of three quarters of organic chemistry and one quarter of biochemistry. Organic chemistry will consist of the naming of organic compounds using both the common methods as well as the I. U. P. A. C. styles. The course will also consist of the mechanisms that occur during reactions and finally the synthesis of organic compounds. The biochemistry component of the course will integrate the organic component with the basic functions of body functions such as DNA replication and protein synthesis to respiration. This course is strongly recommended to those interested in going into any science field in college as well as those going into medicine, chemistry, biology and biochemistry.

**Prerequisite:** B or better in Chemistry I and teacher recommendation

Course Title: **HUMAN ANATOMY AND PHYSIOLOGY HONORS-NCAA**

Grade/Course #: 11, 12 (2276)

Course Length: Full Year (One credit)

**Description:** This course is an anatomy and physiology course dealing with the physiological and anatomical components associated with the human organism. A review of the basic principles of chemistry and biology are covered prior to an *in depth* study of the human body. This course is designed to follow the anatomy and physiology courses offered at Mercyhurst North East associated with their nursing program. In addition, a long term detailed dissection of a higher vertebrate animal will be utilized for comparative anatomical purposes. This course is designed for those students who are endeavoring to pursue a career in health related careers such as, but not limited to: Medicine, nursing, physical therapy, laboratory science, paramedic.... The student who selects this course should enjoy learning detailed information and processes relating to the human structure and function.

**Prerequisite:** B or better in Biology, must have passed Chemistry I, teacher recommendation.

Course Title: **ECOLOGY/ ENVIRONMENTAL SCIENCE A-NCAA**

Grade/Course #: 11, 12 (2280)

Course Length: Semester (.5 credit)

**Description:** This course introduces the student to the concepts involving the interactions that occur between living organisms and the physical habitats they live in. Factors that influence the natural balance of ecosystems are described and demonstrated through discussion and laboratory based curriculum. Topics such as ecosystem structure and functioning, biodiversity, population growth, natural selection, species diversity, and ecological succession will make up the foundation for this class.

**Prerequisite:** Earth and Environment Science and Biology

Course Title: **ECOLOGY/ ENVIRONMENTAL SCIENCE B-NCAA**

Grade/Course #: 11, 12 (2281)

Course Length: Semester (.5 credit)

**Description:** This course introduces the student to the concepts involving the interactions that occur between living organisms and the physical habitats they live in. Factors that influence the natural balance of ecosystems are described and demonstrated through discussion and laboratory based curriculum. Topics such as biomass and energy flow through trophic levels, conservation, biogeochemical and nutrient cycles, pollution, atmosphere, and climate will make up the foundation for this class.

**Prerequisite:** Earth and Environmental Science and Biology

Course Title: **APPLIED BIOLOGY**

Grade/Course #: 11, 12 (2232)

Course Length: Semester (.5 credit)

**Description:** This course is designed for those students in the class of 2019 and beyond who have not demonstrated proficiency on the Keystone Biology exam which is needed as a graduation requirement. The course will review those topics/anchors identified as weaknesses on the prior exam. In addition, students will complete a "Project-Based Assessment" for biology as part of the review process. Students who are enrolled in the Fall semester will retake the Biology Keystone Exam in January, those enrolled in the Spring semester will retake the Biology Keystone Exam in May.

Course Title: **COMPUTER SCIENCE DISCOVERIES-NCAA**

Grade/Course#: 9-12 (2100)

Course Length: Semester (.5 credit)

**Description:** CS Discoveries is an introductory computer science course that empowers students to create authentic artifacts with computer science as a medium for creativity, communication, and problem solving. CS Discoveries introduces students to tools and programming languages that are accessible for beginners while offering more advanced students opportunities to create sophisticated projects. Using the existing App Lab programming environment and the Game Lab, students will be able to transition from block code to typed code at their own pace while learning Javascript.

Course Title: **INTRODUCTION TO AVIATION, AEROSPACE, AND ENGINEERING**

Grade/Course#: 9-12 (2300)

Course Length: Semester (1 credit)

**Description:** Students will learn about engineering practices, problem solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. We hope this course becomes the foundation for a future program at NEHS in which students can earn industry-based credentials in the aviation and aerospace industries.

Course Title: **AVIATION II: FORCES OF FLIGHT AIRCRAFT SYSTEMS AND AIRCRAFT PERFORMANCE**

Grade/Course#: 10-12 (2301)

Course Length: Semester (1 credit)

**Description:** Students will begin with an exploration of the types of aircraft in use today before learning how aircraft are made and how they fly. Students will understand how aircraft are categorized, be able to identify their parts, and learn about aircraft construction techniques and materials. They will gain an in-depth understanding of the forces of flight—lift, weight, thrust, and drag—including how to make key calculations. They will then touch on aircraft design, looking at stability, aircraft controls, and maneuvering flight. The course will focus on career skills related to these topics.

students will take an in-depth look at the systems that make crewed and uncrewed aircraft work. Beginning with aircraft powerplants and fuel systems, students will learn about the options available and how they affect aircraft design and performance. They will explore other key aircraft systems, including electrical, pitot-static, and vacuum systems. Throughout the course, they will learn about the flight instruments associated with each system and how to identify and troubleshoot common problems. This unit also covers aircraft flight manuals and required aircraft documents. Finally, students will learn about the factors that affect aircraft performance and how to determine critical operating data for aircraft.

**Prerequisite:** C or better in Introduction to Aviation, Aerospace, and Engineering

## **SOCIAL STUDIES SEQUENCES**

**Regular**

<b>Grade</b>	<b>Subject</b>
9	American History II
10	Contemporary World Cultures
11	Western Civilization
12	Principles of Democracy

### **Honors**

<b>Grade</b>	<b>Subject</b>
9	American History II Honors
10	Contemporary World Cultures Honors
11	Western Civilization Honors
12	Principles of Democracy Honors

### **Advanced Placement and College In the High School (CHS) Sequence**

<b>Grade</b>	<b>Subject</b>
11	European History Advanced Placement
12	College American Political Process

### **Electives**

<b>Grade</b>	<b>Subject</b>
9-10	Contemporary Issues
11-12	Introduction to Psychology
10-12	Ethnic Conflict
9-12	Medal of Honor
11-12	Pennsylvania and Local History
9-12	Street Law
9-12	Turbulent Sixties
9-12	The Seventies, "Age of Limits"
10-12	Women Who Changed the World

### Options :

- If a student moves from a **regular academic sequence into an honors level sequence** (any year), they must have met the minimum 90% prerequisite average grade requirement from his/her most recent course and/or obtain the teacher's signature.
- If a student moves from an **honors level sequence to an AP/CHS sequence** (any year), the student must meet the minimum 90% prerequisite grade requirement from an HONORS level social studies course and/or obtain the teacher's signature. In addition, the student must have met the English course requirement\* with a minimum of an B+ average grade and/or the English teacher's signature. **The student will also be required to take at least an honors level English course WHILE taking an AP/CHS level social studies course.**
- Any other combination of sequence shifting between levels needs to be approved by the school counselor and the appropriate teachers. A teacher's approval may be required in order for a student to shift academic sequences.

*\*Prior to taking AP European History, a student must have taken English 10 Honors, and obtained at least a B+ average and/or the teacher's signature. If a student is registering for College American Political Process and did not take AP European History, they must have taken either English 10 Honors and/or English 11 Honors with at least a B+ average, and/or obtained the English teacher's signature.*

### SOCIAL STUDIES DEPARTMENT

Course Title: **AMERICAN HISTORY II-NCAA**

Grade/Course # 9 (3320)

Course Length: Full year (One credit)

**Description:** The purpose of this course is to introduce the major phases of political, economic, social, geographical, and historical development of the United States after Reconstruction. The students will study the basic principles under which America operates and the trends that have occurred in order to understand the present and the future.

Course Title: **AMERICAN HISTORY II HONORS-NCAA**

Grade/Course #: 9 (3325)

Course Length Full year (One credit)

**Description:** The purpose of this course is to introduce the major phases of political, economic, social, geographical, and historical development of the United States after the Reconstruction. In this process the students will be required to demonstrate comprehension of the knowledge gained and apply this content through the utilization of higher order thinking skills. Essentially, the students will examine our nation's past to understand how it shaped, and continues to shape, the present and the future.

**Prerequisite:** Minimum of 90% in previous social studies courses and/or teacher recommendation.

Course Title: **CONTEMPORARY WORLD CULTURES-NCAA**

Grade/Course #: 10 (3330)

Course Length: Full year (One credit)

**Description:** Contemporary World Cultures begins with basic concepts that define and constitute culture and man's cultural developments and achievements. Contemporary World Cultures will conclude with studies of specific cultural areas from around the world that illustrate the similarity and diversity of cultural characteristics such as: attitudes, beliefs, lifestyles,

and explore the interactions and interdependence of these cultures worldwide.

Course Title: **CONTEMPORARY WORLD CULTURES HONORS-NCAA**

Grade/Course #: 10 (3333)

Course Length: Full year (One credit)

**Description:** Contemporary World Cultures Honors provides an in-depth study of various cultural areas, emphasizes the relevance of geographic concepts to human challenges, discusses the relationship between globalization and diversity, investigates the history, culture, economic, and political aspects of these regions. Discussion skills, written expression, research skills, and an awareness of world events and their impact on history, both past and current, are integrated into the course content.

**Prerequisite:** Minimum of 90% in previous social studies courses and/or teacher recommendation.

Course Title: **WESTERN CIVILIZATION-NCAA**

Grade/Course #: 11 (3340)

Course Length: Full year (One credit)

**Description:** "Western Civilization" traces the conceptual development of mankind's progress in today's world beginning with the earliest known civilizations. The course will attempt to define those forces that have contributed to man's development through historical periods consisting of Ancient Civilizations, Medieval times, the Renaissance, and modern Europe.

Course Title: **WESTERN CIVILIZATION HONORS-NCAA**

Grade/Course #: 11 (3345)

Course Length: Full year (One credit)

**Description:** This course will have the same scope and sequence as Western Civilization course, but the material will be covered faster and more in-depth. The students will be required to utilize higher-order thinking skills in various research projects as well as every day activities. The material covered ranges from Ancient Civilizations, the Middle Ages and the Renaissance through modern Europe.

**Prerequisite:** Minimum of 90% in previous social studies courses and/or teacher recommendation.

Course Title: **EUROPEAN HISTORY (ADVANCED PLACEMENT)-NCAA**

Grade/Course #: 11 (3365)

Course Length: Full year (One credit)

**Description:** The course covers the history of Europe from the Renaissance through the present, including an introduction, which covers ancient civilizations and the Middle Ages. Students not only learn factual historical information, but they analyze the political, economic, social and intellectual aspects of European history as well. A student may earn up to 3 college credits with successful completion of the advanced placement test. Advanced placement examinations are given upon request at the end of the year. The student must make an application for the course and is accepted on the recommendation of the instructor and the guidance counselor. All students and their parents must sign a contract indicating that they are aware of the advanced nature of the course.

**Prerequisite:** Minimum of 90% in previous social studies courses and/or teacher recommendation. Students must also fulfill English requirements as described in the social studies sequences.

Course Title: **PRINCIPLES OF DEMOCRACY (POD)-NCAA**

Grade/Course #: 12 (3350)

Course Length: Full year (One credit)

**Description:** POD introduces students to the American system of government. Beginning with the foundations of government, this course encompasses the Executive Branch, Legislative Branch, and Judicial Branch as well as the rights and responsibilities of an American citizen. The U.S. political system is studied, including the electoral process, political parties, and the role of interest groups and public opinion. State and local government systems are also addressed.



Course Title: **PRINCIPLES OF DEMOCRACY HONORS-NCAA**

Grade/Course #: 12 (3351)

Course Length: Full year (One credit)

**Description:** The purpose of this course is to provide an in-depth study of the American system of government. Early political philosophies, charters, and constitutions are utilized to understand the framework for the foundation of government. Through independent research assignments, students work beyond the content as they analyze and evaluate current political policies and practices within the ideals set forth by America's founding members. Special emphasis is given to the system of checks and balances and how it directly relates to current issues facing the three branches of government. International relations through the American political agenda are focused on, as well.

**Prerequisite:** Minimum of 90% in previous social studies courses and/or teacher recommendation.

Course Title: **COLLEGE AMERICAN POLITICAL PROCESS-NCAA**

Grade/Course #: 12 (3375)

Course Length: Full year (One credit)

**Description:** American Political process is a College in the High School course taught by an NEHS teacher in collaboration with the University of Pittsburgh: Bradford. This course is an introductory course focusing on American politics and government. Emphasis is on political processes and institutions on the national level, including Congress, the presidency, the Supreme Court, political parties, pressure groups and elections.

**Prerequisite:** Minimum of 90% in previous social studies courses and/or teacher recommendation. Students must also fulfill the English requirements as noted in the Social Studies sequences.

Course Title: **CONTEMPORARY ISSUES-NCAA**

Grade/Course #: 9, 10, 11, 12 (3210)

Course Length: Semester (.5 credit)

**Description:** "What You Do Matters." These words from the United States Holocaust Memorial Museum sum up the theme of this course. This course will examine a variety of issues that are both global and local. Topics studied will include those found in the daily news media, local issues, and enduring issues focusing on a variety of human rights topics. Study topics may be chosen by the teacher and the students, and should be those that will have an impact on either a group of people, or humanity in general. Students will analyze cause and effect, evaluate solutions and impact, make proposals where appropriate, and produce materials that engage and enrich each other as well as the teachers about the topics studied.

Course Title: **PENNSYLVANIA AND LOCAL HISTORY-NCAA**

Grade/Course #: 11, 12 (3200)

Course Length: Semester (.5 credit)

**Description:** This course explores the historical development of Pennsylvania and the local region from early settlement to modern times. Particular emphasis will be placed on the contributions of Pennsylvania during the various significant events of our nation. The student will gain a better perspective of the rich diverse heritage of our commonwealth by actively participating in local field trips and in class living history programs.

Course Title: **INTRODUCTION TO PSYCHOLOGY-NCAA**

Grade/Course #: 11, 12 (3346)

Course Length: Semester (.5 credit)

**Description:** This course encompasses an introduction to the field of psychology. Students will learn the methods used in conducting psychological research, as well as participate in activities concerning the areas of: Learning, Memory and Thought, and Sensation and Perception. Concentration will be given to the studies of: Altered States of Consciousness, Disturbance and Breakdown, Personality Theory, Stress and Conflict, Attitudes and Social Influence, and Therapy and Change.

Course Title: **ETHNIC CONFLICT-NCAA**

Grade/Course #: 10, 11, 12 (3347)

Course Length: Semester (.5 credit)

**Description:** “Whenever men and women are persecuted because of their race, religion, or personal views, that place must-at that moment-become the center of the universe.” Elie Wiesel’s words summarize the underlying purpose of this course. In the first portion of this course, students analyze the “forces of division” that cause conflict among people and groups, including prejudice, stereotyping, racism, nationalism, and antisemitism. The second portion involves the analysis of case studies of ethnic conflict and genocide, paying careful attention to the ways in which the forces of division contribute to these cases of conflict. Students will engage in a social activist project and learn how their own sense of agency can prevent conflict.

Course Title: **STREET LAW-NCAA**

Grade/Course #: 9, 10, 11, 12 (3215)

Course Length: Semester (.5 credit)

**Description:** Street Law meets students “on the street” addressing the legal and civic issues that impact their everyday lives. Topics covered include: cyber crime, identity theft, intellectual property rights, terrorism, immigration, and recent Supreme Court decisions. Throughout the course students engage in a practical understanding of the law and legal system with interactive methods that focus on legal issues relevant to students’ lives.

Course Title: **MEDAL OF HONOR**

Grade/Course #: 9, 10, 11, 12 (3205)

Course Length: Semester (.5 credit)

**Description:** This course is a US Military History class that focuses on significant leaders from the birth of our nation to modern times. Students are engaged with eye witness accounts of personal bravery and self-sacrifice. Students are provided with opportunities to explore the important concepts of courage, commitment, sacrifice, patriotism, integrity, and citizenship and how these values can be exemplified in daily life. **Resources:** Materials are provided at no cost to the district. Lesson plans and activities are located online. <https://www.cmohts.org/lessons/overview>

Course Title: **TURBULENT SIXTIES-NCAA**

Grade/Course #: 9, 10, 11, 12 (3220)

Course Length: Semester (.5 credit)

**Description:** Students will embark on a journey through one of the most tumultuous and radical times in American history. Assassinations, moon landings, wars, Rock n ‘Roll, and television, the 1960s produced lasting changes socially, economically, and politically that can still be felt today. The course will follow the 10-episode series produced by CNN as a framework. Throughout the course, students will engage with literature, television, and music in an effort to understand how the 1960s affects them in contemporary America.

Course Title: **THE SEVENTIES, “AGE OF LIMITS”-NCAA**

Grade/Course #: 9, 10, 11, 12 (3225)

Course Length: Semester (.5 credit)

**Description:** Students will embark on a journey through the seventies, analyzing the presidencies of Nixon, Ford, and Carter, evaluating the end of the Vietnam War, discussing the impact of Watergate, analyzing additional topics ranging from terrorism to the economy. The course will follow the 8-episode series produced by CNN as a framework. Throughout the course, students will engage with literature, television and film, and music in an effort to understand how the 1970’s affects them in contemporary America.

Course Title: **WOMEN WHO CHANGED THE WORLD-NCAA**

Grade/Course #: 10, 11, 12 (3335)

Course Length: Semester (.5 credit)

**Description:** A one semester Social Studies course based on the contributions and background of a number of internationally significant women and their contributions to their respective countries and the world in general. It is designed to be a seminar course with a focus on student based class discussions, non-fiction reading, research and writing.

## WORLD LANGUAGE DEPARTMENT

Many colleges and universities are requiring at least 2 years of a world language as an admission criteria. It is recommended that students considering post-secondary study complete a 4 year language sequence. Students are also encouraged to study a second world language sequence while completing a first.

Course Title: **SPANISH I-NCAA**

Grade/Course #: 9, 10, 11, 12 (4523)

Course Length: Full year (One credit)

**Description:** This is an introductory course in basic Spanish language skills. It is designed to develop the student's ability to understand, read, write, and speak elementary Spanish. Also included is the study of the grammatical structure of the language in conjunction with some cultural traits about Hispanic peoples and cultures.

**Prerequisite:** All students must have a "C" average in English.

Course Title: **SPANISH II-NCAA**

Grade/Course #: 10, 11, 12 (4533)

Course Length: Full year (One credit)

**Description:** This course is a continuation of Spanish I, presenting a more analytical study of grammatical structure and civilization of the Hispanic countries.

**Prerequisite:** Spanish I, with a 77% average or better, or teacher recommendation

Course Title: **SPANISH III – (Honors)-NCAA**

Grade/Course #: 11, 12 (4543)

Course Length: Full year (One credit)

**Description:** This course expands and refines students' abilities in the areas of written and oral expression as well as listening and reading comprehension. Advanced grammatical and communicative structures are studied and practiced in depth. Cultural aspects are studied in greater detail.

**Prerequisite:** Spanish II, with a 77% average or better, or teacher recommendation

Course Title: **SPANISH IV – (Honors)-NCAA**

Grade/Course #: 12 (4553)

Course Length: Full year (One credit)

**Description:** This course further expands and refines students' written and oral expression as well as listening and reading comprehension. Through new vocabulary and topics students will review and reinforce structures previously studied. New advanced grammatical and communicative structures will also be studied and practiced in depth. Cultural aspects are studied in greater detail.

**Prerequisite:** Spanish III, with a 77% average or better, or teacher recommendation

## BUSINESS DEPARTMENT

Course Title: **INTRO TO COMPUTER**

Grade/Course #: 9, 10, 11, 12 (5044)

Course Length: Semester (.5 credit)

**Description:** This course is designed so that the student will learn to type by touch. The student learns to type with acceptable speed and with accuracy. While acquiring these skills, the student learns beginning word processing techniques allowing him/her to create letters, tables, reports, and numerous other documents. Each student will prepare a personal cover letter and resume as a final project. An introduction to Microsoft Word, Excel, PowerPoint, and Access is included.

Course Title: **DIGITAL CITIZENSHIP AND COMMUNICATIONS**

Grade/Course #: 10, 11, 12 (5066)

Course Length: Semester (.5 credit)

**Description:** This course will help students take ownership of their digital lives. Students will learn skills to make smart choices online. Students will learn about their digital footprint, how to identify reliable sources and how to behave ethically online. **Prerequisite:** Intro to Computer

Course Title: **ACCOUNTING I**

Grade/Course #: 10, 11, 12 (5038)

Course Length: Full Year (One credit)

**Description:** This course is designed to make the student knowledgeable about business organization, procedures, terms, and operation. The student learns how to keep simple records for a service business organized as a proprietorship and a merchandising business organized as a partnership. Instruction is given on the accounting cycle, cash control systems, and payroll accounting, taxes, and reports. This course may be used as a mathematics requirement for graduation.

Course Title: **ACCOUNTING II**

Grade/Course #: 11, 12 (5048)

Course Length: Full year (One credit)

**Description:** This course is designed to give the student a more in depth look at accounting procedures. Accounting I procedures are reviewed and new procedures are learned for keeping records of a corporation. A four- to six-week simulation is completed during the year using the methods previously learned. An introduction to computerized accounting through the use of a spreadsheet will be completed during the last semester.

**Prerequisite:** Accounting I with a minimum of a B final grade or teacher recommendation.

Course Title: **ACCOUNTING III**

Grade/Course #: 12 (5058)

Course Length: Full year (One credit)

**Description:** To better prepare a college bound student, this course is designed to further explore advanced accounting topics that will most likely be presented at the collegiate level. It is intended for students interested in pursuing a Business major and is structured as an independent study. Students will get their first introduction to Automated Accounting Software. Topics covered in this course will include but are not limited to, Accounting Information for Management Decisions, Financial Statement Analysis, Statement of Cash Flows, Cost Accounting for a Merchandising Business, Cost Accounting for a Manufacturing Business, Accounting Transactions and Financial Reporting for a Manufacturing Business, and Budgeting and Accounting for a Not-For-Profit Organization.

**Prerequisite:** Accounting II with a minimum of a B final grade and teacher recommendation.

Course Title: **INTRO TO BUSINESS: ENTREPRENEURSHIP**

Grade/Course #: 9, 10 (5054)

Course Length: One Semester (.5 credit)

**Description:** In this course, students will learn the preliminary steps to starting a business, starting with a background on entrepreneurship, the traits of an entrepreneur, and discovering if they have the mindset to one day develop and run their own business. Additional topics that will be covered throughout the semester include researching start-up costs, the steps to obtaining different types of financing, introductory accounting and bookkeeping, supply and demand, product and/or service development, creating a brand, designing a marketing campaign, and writing a business plan, all culminating in a Shark Tank style presentation of their business at the end of the semester. This course is designed to introduce students to the other courses available in the business education department. It will also serve as a prerequisite for the Entrepreneurship: Marketing and Economics course.

Course Title: **INVESTING IN YOUR FUTURE**

Grade/Course #: 11, 12 (5060)

Course Length: One Semester (.5 credit)

**Description:** This course stresses the importance of planning for life and setting goals while providing the knowledge that is necessary to meet responsibilities. Subjects examined include: money management principles, financial planning, the power of investing, and the importance of protecting yourself. Much of the research is done through the use of internet resources. Students have the opportunity to develop a portfolio of financial information to use later in life.

**Prerequisite:** Must have passed Algebra 2 and Geometry. Students not meeting this requirement should consider taking Personal Finance.

Course Title: **INTRO TO GRAPHIC LANGUAGE OR GRAPHIC LANGUAGE**

Grade/Course #: 9, 10, 11, 12 (6225) Intro (6230) Full Year

Course Length: Semester (.5 credit) or Full year (One credit)

**Description:** This course strives to increase the student's ability and skill to interpret his/her impressions and visualize them clearly in a given space by means of an accepted set of conventions and abbreviations. The course work consists of learning the basics of lettering (construction and spacing), proper line usage (visible, hidden, center, etc.), plate layout, and proper instrument usage. Various methods of projection, ellipse construction, dimensioning, and pattern layout. An introduction to CAD which encompasses the use of computer hardware, software, and peripheral devices to produce graphic images.

Course Title: **ADVANCED GRAPHIC LANGUAGE**

Grade/Course #: 10, 11, 12 (6356)

Course Length: One year (One credit)

**Description:** This is an advanced precision instrument drawing class with project drawings in orthographic, isometric, and oblique projections, dimensions, section views, fasteners, assembly, developmental and architectural drawing. Extensive use of CAD and drawings from industry will be covered.

**Prerequisite:** Graphic Language

Course Title: **INTRO TO MATERIALS TECHNOLOGY OR MATERIALS TECHNOLOGY**

Grade/Course #: 9, 10, 11, 12 (6450) Intro (6455) Full Year

Course Length: Semester (.5 credit) or Full year (One credit)

**Description:** The study of the construction and manufacturing industries and their relationship to all industrial technologies will be researched. Materials, tools, safety procedures, and processes that are basic to all materials will be explored through assigned problems and projects.

Course Title: **ADVANCED MATERIALS PROCESSES**

Grade/Course #: 10, 11, 12 (6470)

Course Length: Full year (One credit)

**Description:** This course provides an in-depth study of materials and processes of construction and manufacturing technology. Design, tooling, and advanced processes are covered. Assigned projects plus student-designed projects are required.

**Prerequisite:** Materials Technology and Graphic Language.

## FAMILY AND CONSUMER SCIENCE DEPARTMENT

Course Title: **FOOD AND NUTRITION**

Grade/Course #: 10, 11, 12 (6200)

Course Length: Semester (.5 credit)

**Description:** This semester course is an intermediate study of food and nutrition. It incorporates math and biology. Topics discussed include food history, preservation, school food, our food supply and connection to health problems, food nutrition labels, My Plate, as well as serving/portion sizes. There is a focus on healthy eating in relation to future health.

Course Title: **CHILD DEVELOPMENT**

Grade/Course #: 9, 10, (6220)

Course Length: Semester (.5 credit)

**Description:** This course will explore the physical, environmental, and societal influences on development from conception through adolescence. This course will address parenting, family structure, reproduction, pregnancy, labor, delivery, and post-natal care. In addition, the physical, emotional, and intellectual stages associated with development will be studied. The course culminates with the opportunity to participate in an electronic baby simulation or an alternative research project.

Course Title: **INTERIOR DESIGN**

Grade/Course #: 9, 10, 11, 12 (6150)

Course Length: Semester (.5 credit)

**Description:** This semester course will explore the history of Interior Design and paths available to pursue the profession. The course will explore the history of housing, furniture, and design. The course will explore the principles and elements of design and how they affect our choices. Students will apply principles and elements of knowledge to complete design and client oriented projects. Students will explore and apply the concepts of measuring, scale and furniture placement to complete room design. In addition, students will explore current trends in decorating, reuse, repurposing, wall coverings, flooring and paints for the home.

Course Title: **INDEPENDENT LIVING**

Grade/Course #: 11, 12 (6370)

Course Length: Semester (.5 credit)

**Description:** Intended to prepare students for life beyond high school, the course covers a variety of topics pertaining to life on your own. Topics include personal finance, vehicles, housing, and household management, with a strong focus on cooking. Personal finance includes savings, budgeting, checking, credit, pay stubs and benefits. A short segment on purchasing vehicles is included. Housing covers moving out, types of housing, rental agreements, lease terminology, insurance, and furnishings. Household skills include a focus on basic cooking, common equipment, and measurements. In addition, students will be introduced to savings techniques, grocery shopping, budgets, nutritious food choices and preparation. Food preparation will be done throughout the semester.

Course Title: **SERVICE LEARNING**

Grade/Course # 11, 12 (6394)

Course Length: Semester (.5 credit)

**Description:** This course is designed to allow students the opportunity to perform community service or volunteer hours. Placement of students is decided by the teacher. If a placement cannot be found, students may have schedule alterations. Students are required to keep a detailed log of service activities, and submit a final reflection about their experience. Attendance record is graded, and must be consistent to remain enrolled. Students may take this course **only one time** during Junior year and **only one time** during Senior year. Students must be in good standing with attendance and discipline.

## FINE ARTS DEPARTMENT

Course Title: **STUDIO I**

Grade/Course #: 9, 10, 11, 12 (7005)

Course Length: Semester (.5 credit)

**Description:** Studio art prepares students to creatively engage with and learn the basic principles of art and design using various mediums of fine art. In this course, students are given an opportunity to explore a range of mediums and styles that help them develop their unique artistic passions and skills. Students will engage in, but are not limited to; drawing, charcoal, graffiti, 2D design, 3D design, painting, digital art, and more. Throughout the course students will have references to art history, various artists, art movements, and time periods to learn about and influence their artistic creations

Course Title: **CERAMICS I**

Grade/Course #: 9, 10, 11, 12 (7055)

Course Length: Semester (.5 credit)

**Description:** This course is designed to allow the student an opportunity to learn, in depth, the basic skills and techniques of the various methods of ceramic construction, for example, the pinch, the coil, the slab, the wheel thrown and their combinations. Opportunity is also given for the development of the design and technical skills necessary for both sculptural and functional ceramics.

Course Title: **CERAMICS II**

Grade/Course #: 10, 11, 12 (7065)

Course Length: Semester (.5 credit)

**Description:** This course is designed to allow the student to advance the basic skills learned in ceramics I. Students will also learn how to make clay, engobes, stains and glazes. To enhance further experiences that student will be called upon to assist in the loading, firing, and unloading of oxidation and reduction fired kilns. **Prerequisite:** Ceramics I and teacher recommendation

Course Title: **PAINTING I**

Grade/Course #: 9, 10, 11, 12 (7125)

Course Length: Semester (.5 credit)

**Description:** This course will further develop the students skills' in design and composition. The students will expand their experimentation with acrylics, watercolor, tempera and oil paints. The students will become knowledgeable in the stretching of canvas and various advanced painting techniques. The student has the opportunity to become more expressive with the mediums while completing more complex assignments.

Course Title: **PAINTING II**

Grade/Course #: 10, 11, 12 (7135)

Course Length: Semester (.5 credit)

**Description:** This course is designed to allow students to further develop their expression of personal style. The students will limit their experimentation of mediums while further refining their painting skills. The students will be expected to broaden their knowledge of terminology, painting techniques and historical insight. **Prerequisite:** Painting I and teacher recommendation.

Course Title: **DIGITAL PHOTOGRAPHY/ADOBE PHOTOSHOP**

Grade/Course #: 11, 12 (7255)

Course Length: Semester (.5 credit)

**Description:** This course introduces the student to the basics of digital photography. The course explores the techniques and applications of acquiring, manipulating and outputting digitized photographic images utilizing Adobe Photoshop. Training in the operation of the digital camera will be covered. Students will become proficient in the use of Adobe Photoshop and Windows Movie Maker as a digital editing tool and as a graphic design program to create numerous projects including a stop-animation project using clay or Lego's. **A cell phone or camera that takes a decent picture will be required.**

Course Title: **3D DESIGN**



Grade/Course #: 9, 10, 11, 12 (7505)

Course Length: Semester (.5 credit)

**Description:** This course introduces the students to the basic elements and principles of design. The students will experiment with a variety of materials in developing skills in dimensional problem solving. The students develop their awareness of various techniques and artists associated with three-dimensional design.

Course Title: **3D DESIGN II**

Grade/Course #: 10, 11, 12 (7515)

Course Length: Semester (.5 credit)

**Description:** This course further develops the student's skills in materials, methods and approaches. The students will expand their knowledge of movements and influences associated with 3-D Design. They will broaden their sensitivity to the uniqueness of creating conventional and contemporary sculpture.

**Prerequisite:** 3D Design and teacher recommendation.

Course Title: **2D DESIGN**

Grade/Course #: 9, 10, 11, 12 (7525)

Course Length: Semester (.5 credit)

**Description:** This course introduces the student to drawing and graphic design covering an overview of shading, perspective, design theory and image. Projects will stimulate the application of creative thinking to solving two-dimensional drawing and graphic design problems.

## **MUSIC**

Course Title: **SENIOR BAND**  
Grade/Course #: 9, 10, 11, 12 (7400)  
Course Length: Full year (One credit)

**Description:** This course allows the student who already has a strong instrumental background to increase his/her abilities and knowledge of instrumental music through individual lessons, group lessons, small ensemble rehearsal and performance, concert band rehearsal and performance, and marching band rehearsal and performance. A wide range of concert and marching band literature is played throughout the year. The band represents the school in both concert and marching settings at various civic and school functions. All students are required to participate in marching band if enrolled in this course. Exceptions will be made, at the discretion of the director, for students involved in fall sports and activities that conflict with marching band rehearsals and performances.

Course Title: **CHORUS**  
Grade/Course #: 9, 10, 11, 12 (7445)  
Course Length: Full year (One credit)

**Description:** This course provides students with an opportunity to develop their musicianship skills and creatively express themselves through vocal music. Students will learn how to sing and speak efficiently using vocal warmups, with particular emphasis on vocal alignment, proper breathing, and navigating their range and registration. Students will learn how to sing using solfege and strengthen their music literacy skills through sight-singing exercises. Students will also practice and prepare diverse choral literature selections. Chorus students are required to perform at all concerts and school functions.

Course Title: **MUSIC THEORY**  
Grade/Course #: 9, 10, 11, 12 (7485)  
Course Length: Semester (.5 credit)

**Description:** Students will learn the fundamentals of music theory beginning with the reading of notes in treble and bass clef, music vocabulary, intervals, key signatures, scale structures and rhythmic analysis. Students will then progress into introductory composition and chordal analysis using figured bass notation leading to analysis of Bach chorales. Basic keyboard and sight-reading/sight-singing will be incorporated in the curriculum. Music Technology will also be demonstrated and many programs will be utilized for this course. This course is designed for beginners or people with little or no music experience.

Course Title: **JAZZ BAND**  
Grade/Course #: 9, 10, 11, 12 (7605)  
Course Length: Full year (One credit)

**Description:** This course includes the basic-to-advanced concepts of American jazz with the emphasis on jazz styles such as blues, swing, bebop, funk and jazz rock. The prerequisite for the course is a thorough knowledge of one's instrument with an understanding to sight-read music as well as participation as a group. Good technique and attitudes are also addressed throughout the year. It is under the discretion of the jazz band director for a student to participate in this group. The course is primarily intended for the student who is serious about studying American jazz and learning jazz improvisation techniques. The latter of these is needed in order to play a solo in class which is done by listening to jazz pieces and the study of improvisation through reading chords. Outside practice will be required due to the difficulty level of the music. The repertoire is determined by the ability of the group to achieve a quality performance. All students are also required to perform at all concerts and school functions.

Course Title: **HISTORY OF BROADWAY**  
Grade/Course #: 9, 10, 11, 12 (7490)  
Course Length: Semester (.5 credit)

**Description:** This course will trace the development of the Broadway Musical from the 1950's to present day. It is primarily a multimedia course, in which we will watch several Broadway musicals and explore the characters, plot, music and choreography. We will explore the evolution of the musical focusing on the shows and creative individuals most influential in its development, and examining the many ways in which it has reflected the changes in American life.

Course Title: **GUITAR CLASS**

Grade/Course#: 9, 10, 11, 12 (7500)

Course Length: Semester (.5 credit)

**Description:** No experience playing guitar is necessary. This course is designed for anyone who wants to learn the basics of guitar playing or for the established guitarist that wants to learn how to read tablature and music. Topics to be covered include: Fundamental techniques for guitar emphasizing chord study and related literature are presented. Areas of study include chords, right-hand picking and strumming patterns, exercises, theory as applied to the guitar, history of the guitar (physical development of the instrument, as well as playing styles), reading musical notation plus tablature, basic rock and blues rock, and blues solo and rhythm techniques. Concepts learned in class will be applied to songs and appropriate chord progressions.

## HEALTH & PHYSICAL EDUCATION DEPARTMENT

Course Title: **DRIVER EDUCATION/HEALTH 1**

Grade/Course #: 9 and 10 (9002)

Course Length: Semester (.5 credit)

**Description: Health:** This **required** class is designed to provide the student with instruction focused on information that will help them develop into healthy adults. This class will provide instruction in topics such as wellness - stress, personality development, healthy emotions, nutrition, alcohol/tobacco and substance abuse. Students will be given the opportunity to receive their first aid & CPR certification.

**Driver Education:** This course provides 30 hours of classroom instruction designed to develop the proper skills and attitudes for the safe operation of a motor vehicle. If interested, the course provides the opportunity for 6 hours of behind-the-wheel instruction for entitled drivers training with a learner's permit or valid operator's license. **Driver Training requires a lab fee of \$100.00**

Course Title: **HEALTH 2**

Grade/Course #: 11 and 12 (9012)

Course Length: Semester (.5 credit)

**Description: Health:** This **required** class is designed to provide students with instruction focused on information that will help them develop into healthy adults. It will include topics such as non-communicable diseases, sexual health (STD & teen pregnancy prevention, healthy relationships, sexual harassment, etc.), lifelong fitness, mental health (stress-management, suicide awareness and prevention, etc.) and first aid & CPR skills. During the lifelong fitness unit, students will wear a heart rate sensor and be required to participate in a fitness-based activity to achieve moderate to vigorous physical activity minutes.

Course Title: **B-FIT LEADERSHIP**

Grade/Course #: 10, 11, 12 (9015)

Course Length: Semester (.5 credit)

**Description:** This course will prepare students to be role models for elementary students and through exploration nutrition, physical activity, tobacco-free lifestyles, and mental health. Students will prepare lessons, teach elementary students how to make healthy choices, and participate in physical activities. B-Fit leaders represent North East High School through the B-Fit philosophy: "Eat healthy stuff, move around enough, live tobacco free, and believe in you and me!"

**Prerequisite:** Driver's Ed/Health 1, Health 2, course application with signed teacher approval.

Course Title: **TEAM SPORTS**

Grade/Course #: 9, 10, 11, 12 (9022)

Course Length: Semester (.5 credit)

**Description:** This class is designed to allow the student to participate in team sport activities. The student will receive greater depth of instruction in specialized activities. Teams will be established for class tournaments. The student will also receive instruction in conditioning skills and drills for each sport. Sports will include but will not be limited to the following: basketball, soccer, floor hockey, flag football, lacrosse, volleyball, pickleball, team handball. Students will be assessed on their fitness abilities by participating in the president's Council on Physical Fitness testing. The class aims to develop an understanding of the rights of others through good sportsmanship and teamwork.

Course Title: **LIFETIME SPORTS**

Grade/Course #: 9, 10, 11, 12 (9032)

Course Length: Semester (.5 credit)

**Description:** This class is designed to allow the student to participate in lifetime sports and activities. The student will receive a greater depth of instruction in these specialized activities. Students will participate in competitions and tournaments. Sports will include but will not be limited to the following: softball, bowling, golf, tennis, badminton, leisure activities, shuffleboard, pickleball, volleyball. Students will be assessed on their fitness abilities by participating in fitness testing. The class aims to develop an understanding of the rights of others through good sportsmanship and teamwork.

Course Title: **WEIGHT TRAINING/CONDITIONING**

Grade/Course #: 9, 10, 11, 12 (9042)

Course Length: Semester (.5 credit)

**Description:** This class is designed to provide the student with the opportunity to learn the following: nutrition, weight training styles, weight room etiquette, basic anatomy, safety and proper exercise techniques. The student will have the opportunity to improve their motor skills by participating in plyometric, agility, and endurance drills as well as conditioning activities. The student will be required to take a skill test, complete written assignments, and record daily workouts. The student will be assessed on their effort, attitude as well as their ability to increase overall strength by 20% by the end of the semester.

Course Title: **PERSONAL FITNESS**

Grade/Course #: 9, 10, 11, 12 (9062)

Course Length: Semester (.5 credit)

**Description:** This course is designed to provide students with the opportunity to improve physical fitness through aerobic activities and resistance training. Demonstration and explanation of safety techniques will be given. The student will complete written and skills tests. Warm-ups will include cardiorespiratory endurance activities and line dancing. Instruction in high intensity interval training, step aerobics, yoga, kickboxing, Pilates, Zumba dance, as well as other forms of aerobic activities will be included. The student will learn about the five components of fitness and how to achieve a healthy level of each. Resistance training exercises will be taught in order to improve basic muscle tone. The student will use the information provided to create an aerobic routine as a final project.

Course Title: **AQUATIC FUNDAMENTALS**

Grade/Course #: 9, 10, 11, 12 (9072)

Course Length: Semester (.5 credit)

**Description:** This class will enable the student to be exposed to various aspects of aquatics. Basic swimming strokes, flip turns, non-competitive swimming skills, as well as pool rules, procedures and safety will be taught. Snorkeling skills, basic water polo rules and water aerobic techniques will be included. The student will be assessed on their participation, effort and attitude as well as completing written and skills tests.

Course Title: **LIFEGUARDING**

Grade/Course #: 9, 10, 11, 12 (9082)

Course Length: Semester (.5 credit)

**Description:** This elective class is designed to provide the student with the opportunity to receive certification as a professional lifeguard from the American Red Cross. "The purpose of the Lifeguarding class is to provide entry-level participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide professional-level care for breathing and cardiac emergencies, injuries and sudden illnesses until *emergency medical services* (EMS) personnel take over" (Lifeguarding Instructor manual pg 1). If the student meets all skill and written requirements they will receive certification. The optional Waterfront Lifeguarding component will be offered in this course also.

\*This course requires a fee to cover the Red Cross materials and certifications.

\*\*The student must be able to swim a minimum of 300 yards in fair form without stopping.

\*\*\*Minimum age requirement for certification is 15 years.

## ERIE COUNTY TECHNICAL SCHOOL PROGRAM

Vocational and technical education is available to the student who qualifies in grades ten, eleven and twelve. The Erie County Technical School is an extension of North East High School which permits the student to participate in a variety of vocational or technical training with job entry skills. The student receives three credits per year toward graduation. At the conclusion of the program, the student receives the standard North East High School diploma plus a Certificate of Achievement indicating the total hours completed in his/her vocational or technical curriculum. Students in their second and third Year at the Erie County Technical School will earn honors weight. **Students must be enrolled in the same program for a minimum two consecutive years to earn honors weight.** Courses Student selection is conducted through the high school guidance office. Further information may be obtained from the Guidance Office. Administrative approval is required to enter these Programs.

### Course Sequence – Three Year ECTS Students

9th Grade	10th Grade	11th Grade	12th Grade
English 9      1 credit	English 10      1 credit	English 11      1 credit	English 12      1 credit
American History      1 credit	Art/Humanities Elective      ½ credit	Western Civilization      1 credit	POD      1 credit
Dr Ed/Health I      ½ credit	Health 2      ½ credit	PE (this or next year)      ½ credit	PE or elective      ½ credit
Math      1 credit	Math      1 credit	Math      1 credit	Elective      ½ credit
Earth Environ Science      1 credit	Biology      1 credit	Elective      ½ credit	Science      1 credit
Art/Humanities Elective      ½ credit	ECTS      3 credits	ECTS      3 credits	ECTS      3 credits
Electives      3 credits			
Credit Earned = 8	Credit Earned = 7	Credit Earned = 7	Credit Earned = 7

## COMMUNICATIONS DEPARTMENT

Course Title:      **ART & DESIGN FOR BUSINESS**

Grade/Course #:      10, 11, 12 (8218)

Course Length:      Full year (Three credits)

**Description:** The term “commercial art” is an umbrella title encompassing many occupations in which an artisan creates a representation to the specification of a client. Prospective students should possess the following characteristics: a demonstrated talent in drawing, solid verbal and written communication skills, good sense of color, proportion and design, applied math skills, developed problem-solving skills, fine motor skills.

Graduates of the Commercial Art program, depending upon their talent and work ethic, are prepared to enter the workforce in entry-level positions. Examples include but are not limited to: Photo lab technician, Sign painter, Matting and framing worker, Web page designer. A high percentage of our graduates continue their education at two-or four-year colleges pursuing a career as: Graphic design artist, Photographer, Media specialist, Art therapist, Teacher.

Course Title: **COMPUTER PROGRAMMING**

Grade/Course #: 10, 11, 12 (8228)

Course Length: Full year (Three credits)

**Description:** Students achieve entry-level skills in areas of computer operations, data entry and computer programming depending on their ability and interests. Combined with a background of knowledge, skills and appreciation of the data processing industry, each student is able to seek employment in the area of their interest. Prospective students should be able to think logically, have good speaking, reading and writing skills and pay attention to detail.

Graduates from Computer Information Systems are prepared to enter the workforce in entry-level positions. Examples include but are not limited to: Computer Consultant, Web page designer, Programmer. Students may seek additional training to pursue any of the following: Programming manager, Computer systems analyst, Information service processor, Systems architect, Systems engineer.

Course Title: **DRAFTING & DESIGN ENGINEERING**

Grade/Course #: 10, 11, 12 (8236)

Course Length: Full year (Three credits)

**Description:** Drafting careers are changing rapidly as computer technology replaces traditional procedures and functions. The Drafting & Design course instructs students in industry standards and prepares students to step into the workplace or it gives them an important edge, if choosing to further their education in this field. Drafting, mechanical drafting and CAD involve making precise, instrument-aided drawings that show how to construct machines, buildings and infrastructures.

Prospective students should possess the following characteristics: creative minds and good imagination, logical thinking, basic math skills, accuracy and artistic ability.

Graduates of the Drafting & Design program are prepared to enter the workforce in entry-level positions. Examples include but are not limited to: Architectural draftsman, Technical illustrator, Electronic draftsman, Mechanical detailer. Students may also wish to seek additional training to pursue any of the following: Registered architect, Civil or construction engineer, CAD technician, Mechanical engineer.

Course Title: **GRAPHIC MEDIA & DESIGN**

Grade/Course #: 10, 11, 12 (8248)

Course Length: Full year (Three credits)

**Description:** The Graphic Communications program introduces students to theoretical aspects as well as hands-on experiences using computers, dark-room equipment and printing presses. Students acquire marketable skills in job planning, design and layout, copy preparation, proofing, platemaking, offset press operation, bindery and finishing.

Prospective students should possess the following characteristics: creative mind, good typing skills, good background in English and spelling, strong mechanical skills, good attention to detail, organized and neatness.

Graduates of the Graphic Communications program are prepared to enter the workforce in entry-level positions. Examples include: Typesetter, Offset press operator, Proofreader. Students may choose to seek additional training in: Production manager, Graphic designer, Graphic specialist.

## CONSTRUCTION DEPARTMENT

Course Title: **CONSTRUCTION TRADES**

Grade/Course #: 10, 11, 12 (8212)

Course Length: Full year (Three credits)

**Description:** This program prepares students to enter the building trades industry with marketable skills. This encompasses all phases of residential construction. The student will gain knowledge of: Basic building materials, Blueprint reading, Brick and Block laying, Rough framing, Door and window installation, drywall hanging and finishing, Stair construction, Roofing and siding, Finish trim applications, Basic principles of wiring and plumbing.

Prospective students should have mechanical aptitude, coordination, stamina, physical strength, manual dexterity, mechanical dexterity and no fear of heights. Graduates will be qualified for entry-level jobs as: Carpenter's apprentice, and Block or brick layer. With additional training, students can pursue careers as: Self-employed contractor and Building supply sales.

Course Title: **FACILITY MAINTENANCE TECHNOLOGIES**

Grade/Course #: 10, 11, 12 (8260)

Course Length: Full year (Three credits)

**Description:** This unique and highly versatile course offers several trades in one for the student who is interested in becoming a skilled craftsperson in a variety of trades. Course content includes ship safety, proper use of hand and power tools, basic construction, plumbing, painting, electricity, woodworking, finish carpentry and small engine repair.

Prospective students should have physical stamina, mechanical aptitude, responsibility, manual dexterity, coordination and patience. Graduates will be qualified for entry-level jobs as: Electrician, plumber or carpenter apprentice, Maintenance mechanic, Assembler, Plumber, electrician or groundskeeper assistant. With Additional training, students can pursue careers as: Electrician, plumber, carpenter or HVAC installer, Mill or plant maintenance supervisor.

## HUMAN SERVICES DEPARTMENT

Course Title: **CULINARY, BAKING, & PASTRY ARTS**

Grade/Course #: 10, 11, 12 (8224)

Course Length: Full year (Three credits)

**Description:** The Culinary Arts program assists the student who is interested in the fast-paced and ever growing food services industry. The program offers a comprehensive presentation of basic principles and techniques necessary to obtain an entry-level position in the food service industry or prepare for continued training and education.

Graduates can choose to enter the food service industry in entry-level positions such as: Fast order cook, Waiter or waitress, Baker, Cook, Cake decorator or finisher. With additional training or education, students may pursue careers as: Chef, Culinary manager, Dietitian, Nutritionist, Restaurant owner.

Course Title: **COSMETOLOGY**

Grade/Course #: 10, 11, 12 (8232)

Course Length: Full year (Three credits)

**Description:** Cosmetology is an art and a science involving the study of the skin, hair and nails. The Cosmetology program provides each student with the knowledge and skills required to become a licensed cosmetologist. The license requires 1250 hours of instruction.

Prospective students should possess creative and artistic aptitude, enjoy working with people, physical stamina, flexibility and patience.

Graduates of the Cosmetology program will be qualified for entry-level positions as: Salon receptionist, Hair stylist, Manicurist, Esthetician. With additional training, students may pursue careers as: Beauty salon manager, Laboratory technician, Research technician, Teacher.



Course Title: **HEALTH ASSISTANT**

Grade/Course #: 10, 11, 12 (8252)

Course Length: Full year (Three credits)

**Description:** The Health Assistant program is ideal for students considering a career in the health and medical field. This program introduces students to various career opportunities that exist in health care. It prepares the student to enter the health care system as a competent assistant to the health care professional.

Prospective students should possess good communication and interpersonal skills, neatness and cleanliness, manual dexterity, good professional appearance, the ability to maintain confidentiality and the ability to lift 50 pounds.

Graduates are prepared for entry level positions as: Home health aide, Medical receptionist or office assistant, Nurses aide. With additional training students can pursue careers as: LPN or RN, Laboratory technician, Radiology technician, Physician's assistant, Occupational therapist.

Course Title: **SPORTS THERAPY & EXERCISE SCIENCE**

Grade/Course #: 10, 11, 12 (8254)

Course Length: Full year (Three credits)

**Description:** Do you enjoy helping people? Are you interested in physical therapy, exercise, and nutrition? Sports therapy and related rehabilitation programs help people of all ages live active lives. You can choose from a huge variety of careers in rehabilitative care. You will learn assessment, treatment, and injury preventive skills. After graduation from the Sports Therapy & Exercise Science major, you will be prepared to become a physical therapy aide, fitness trainer, rehabilitation aide, or to enter a variety of other areas of rehabilitative health care. Let your compassion guide your career in the Sports Therapy and Exercise Science major!

Prospective students should possess good communication and interpersonal skills, neatness and cleanliness, manual dexterity, good professional appearance, the ability to maintain confidentiality, and the ability to lift fifty pounds.

With additional training, students can pursue Physical Therapy Aide, Personal Trainer, Massage Therapist, Rehabilitative Aide, Athletic Trainer, Dietician, Physical Therapist Assistant, and Occupational Therapist.

Course Title: **EARLY CHILDHOOD EDUCATION**

Grade/Course #: 10, 11, 12 (8272)

Course Length: Full year (Three credits)

**Description:** The Child Care program provides the student with the necessary skills for entry-level positions in the child care field, with an emphasis on the preschool environment.

Prospective students should enjoy children and have a pleasant personality, even temperament, patience and good communication skills, particularly spelling and grammar.

Graduates qualify for entry-level child care positions as: Preschool aide, Teacher's aide, Assistant group supervisor. Students may seek to continue their education by pursuing advanced degrees in early childhood, then be able to pursue careers as: Preschool teacher, Elementary teacher, Child care worker, Special education teacher.

Course Title: **EMERGENCY & PROTECTIVE SERVICES**

Grade/Course #: 10, 11, 12 ( 8280)  
Course Length: Full year (Three credits)

**Description:** Do you enjoy helping people? Our communities rely on professionals to ensure public safety, respond to community needs, and assist in times of crisis. Emergency and Protective Services will train students in the areas of safety, security, firefighting, law enforcement, and emergency response. Students in this program will engage in practical applications and exciting hands-on training within the lab and through field experiences with local agencies. The need for certified professionals in this field is growing and students will have the opportunity to earn national, state, and local certifications.

Prospective students should possess the following characteristics: physically fit, problem solver, team player, compassionate, and service oriented.

Graduates can pursue careers as: police, fire, and ambulance dispatchers, immigration and customs inspectors, police patrol officers, firefighters and emergency responders. Students may seek further education by pursuing advanced training or degrees, students can seek to become intelligence analysts, correction officers, and probation officers.

## MANUFACTURING DEPARTMENT

Course Title: **ELECTRICAL ENGINEERING**

Grade/Course #: 10, 11, 12 (8240)  
Course Length: Full year (Three credits)

**Description:** Students in this program learn the fundamentals of electrical skills and theory. The Electrical Engineering students acquire the skills for employment in all industrial electricity occupations. The students learn in detail the theory and hands-on application of alternating current, direct current, hydraulics, pneumatics, motor controls, programmable logic controllers and residential wiring.

Prospective students should possess mechanical aptitude, ability in basic math and manual dexterity.

Graduates of the Electrical Engineering program qualify for entry-level positions as: Electrician's helper or apprentice, Electrical production or maintenance worker, Hydraulics or pneumatics technician, Test specialist. With additional training, students can pursue these careers: Commercial electrician, Systems research designer, Electrical engineer, Residential electrician.

Course Title: **METAL FABRICATION**

Grade/Course #: 10, 11, 12 (8268)  
Course Length: Full year (Three credits)

**Description:** This is a comprehensive Program designed to give students entry-level skills in the field of metal fabrication. Areas of study include the techniques and fundamentals of pattern development, fabrication, design, proper use of hand and power tools, acetylene welding, acetylene cutting and gas metal arc welding (mig).

Prospective students need manual dexterity, mechanical aptitude, physical stamina and basic math skills.

Graduates of the Metal Fabrication program will be prepared for entry-level positions as: Welder trainee, Structural steel worker, Welder, Production line worker. With additional training or education, job opportunities can include: Metal fabricator, Quality control technician, Pattern maker.

Course Title: **PRECISION MACHINING**

Grade/Course #: 10, 11, 12 (8256)  
Course Length: Full year (Three credits)

**Description:** The machinist is a skilled worker who forms and shapes metals from their raw state to a finely finished and accurately shaped part. Students trained in this program develop the necessary skills to be entry-level machinists.

Prospective students should possess above-average math skills, good work attitudes, mechanical aptitude, eye-hand coordination and the patience to work neatly and accurately.

Graduates of the Tool & Die program will be prepared for entry-level positions as: Machine operator, Toolmaker apprentice. With additional training and education, job opportunities may include: Toolmaker, Machinist, CNC programmer, Model makers.

## TRANSPORTATION DEPARTMENT

Course Title: **AUTO BODY**  
Grade/Course #: 10, 11, 12 (8200)

Course Length: Full year (Three credits)

**Description:** This course presents current and future practices in the rapidly changing world of auto body repair. Projects and class work use the latest technologies, equipment and shop practices.

Prospective students should have good hand-eye coordination, manual dexterity, multi-limb coordination, mechanical aptitude, skill with tools, physical strength, accuracy and the ability to work with minimal supervision.

Graduates of the Auto Body program are eligible for entry-level positions in the following occupations: Reconditioner, Spray painter, Auto body customizer, Body and fender apprentice, Glass installer, Auto body repairer, Auto parts service clerk, Metal finisher. With additional training, students can pursue careers as: Auto body designer, Insurance adjuster, Auto body shop owner or manager.

Course Title: **AUTOMOTIVE TECHNOLOGY**  
Grade/Course #: 10, 11, 12 (8203)  
Course Length: Full year (Three credits)

**Description:** Changes in automotive technology have increased the importance of the automotive technician. This program provides the student with the theory and practical experience needed to diagnose and repair automotive systems.

Prospective students should have mechanical aptitude, manual dexterity, skill with tools, physical stamina, good hand-eye coordination, physical strength, willingness to work in an uncomfortable environment and the ability to think logically.

Graduates of the Automotive Technologies program are eligible for entry-level positions as: Auto mechanic or small engine mechanic, Parts supplier, Front-end or tune-up mechanic, State inspection mechanic. With additional training, students can pursue careers as: Automotive technician or specialist, Repair service estimator, Diesel, bus or farm mechanic.

Course Title: **COMPUTER NETWORKING**

Grade/Course #: 10, 11, 12 (8277)  
Course Length: Full year (Three credits)

**Description:** This course is designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to further their education and training in the computer networking field. Instruction includes, but is not limited to safety, networking, network terminology and protocols, network standards, local-area networks (LANS), wide-area networks (WANS), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing and network standards. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics and communication concepts to solve networking problems. In addition, instruction and training are provided in the proper care, maintenance and use of networking software, tools and equipment and all local, state and federal safety, building and environmental codes and regulations.

Graduates qualify for entry-level networking positions as: Network Technician, Help Desk Operator, and Computer Repair Technician. Graduates may choose to continue their education by pursuing additional training in network administration. They are then able to pursue careers as: Network Administrator, Information Systems Manager, and Systems Programmer.

Course Title: **HOSPITALITY MANAGEMENT & TOURISM**

Grade/Course #: 10, 11, 12 (8211)  
Course Length: Full year (Three credits)

**Description:** The Tourism & Lodging Management program has everything you will need to get started on a hospitality career. In this program, students participate in classroom activities that teach valuable lodging skills and knowledge. Students will also participate in internships supervised by the instructor and a worksite mentor. Major instructional units in the curriculum include: an overview of lodging management, the front office, housekeeping, leadership and management, marketing and sales, and food and beverage service. This program corresponds to competency lists used in the American Hotel & Motel Association's Educational Institute's post-secondary curriculum and forms the basis for articulation agreements with colleges and universities. Students are also trained in food safety and given the opportunity to take the national exam for a food safety certification which is required in all retail food establishments.

Graduates qualify for entry-level hospitality positions as: Bell person, Marketing Clerk, Front Desk Agent, Housekeeper. By pursuing additional training in hospitality management students can pursue careers as: Purchasing Director, General Manager, Executive Housekeeper, and Sales Manager.

## EXTRA-CURRICULAR ACTIVITIES NORTH EAST HIGH SCHOOL

North East High School offers a wide variety of clubs, organizations, and sports to our students. Everyone is strongly urged to become an active member of the high school community and participation in our extra-curricular programs is an excellent way to do this. Most of the clubs and activities have open enrollment but a few are selective or are dependent upon elections. If student demand exceeds the number of openings some sports may require try-outs. Your homeroom teacher will be able to assist you if you wish to participate in any extracurricular activities.

Although our primary focus will always be academic, extra-curricular activities are an excellent way to enrich the high school experience. Valuable lessons in teamwork and peer interaction can be developed and practiced. Consider participation in one of our extra-curricular activities as a way to improve both yourself and our school.

### **Clubs and Activities**

American Field Service (AFS)  
Business and Investing Leadership Society  
Cheerleading  
ESports  
Ecology Club  
Envirothon  
Life Smarts  
Inspire  
Model United Nations  
Musical Production  
National Honor Society  
Pennsylvania Junior Academy of Science  
Science Olympics  
Senior Play  
Student Council  
Yearbook  
History Day

### **Interscholastic Sports**

Baseball  
Boys Basketball  
Dance Team  
Boys Cross Country  
Boys Golf  
Boys Soccer  
Boys Swimming  
Boys Track  
Football  
Girls Basketball  
Girls Cross Country  
Girls Golf  
Girls Soccer  
Girls Swimming  
Girls Track  
Softball  
Volleyball

Wrestling

## Archived Classes

The below classes are not offered during the 2024-2025 school year.