## NOBLE HIGH SCHOOL



## PROGRAM OF STUDIES 2014-2015

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NOBLE HIGH SCHOOL MISSION STATEMENT
"At Noble High School, we believe all students can learn when provided with a rigorous and personalized education. We use transparent and democratic practices to foster a community of learners that values trust, decency, and equity for all. By creating authentic opportunities for collaboration, performance, and meaningful work, we seek to prepare students through mastery of skills and knowledge so they may participate capably and responsibly in society"

## MSAD \#60 GUIDING PRINCIPLES

Central to the Noble High School experience is a core essential knowledge studied by all students. As a result of an education at Noble High School, within the context of required and elective courses, a student will graduate with the knowledge, skills and attitudes to become:

A complex thinker
A competent user of content
A responsible community and global contributor
An effective communicator
A self-directed, lifelong learner A flexible worker
A healthy person

In order to achieve these goals, Noble High School holds the following 21st Century Learning Expectations for all students. These expectations are assessed through the use of school-wide rubrics.

## ACADEMIC EXPECTATIONS:

A1. Effective Communication: Communicates clearly and effectively in a variety of formats i. Written Communication
ii. Presentations

A2. Critical Thinking: Creatively and accurately applies content knowledge and critical thinking skills to solve novel problems (planning
and reflection will be included in the rubric)

## A3. Creative Use of Resources:

i. Research- Uses books, other library resources, interviews, and technology effectively to perform research; Integrates and applies information across disciplines;
ii. Technology- Uses technology to research, solve problems, and design presentations, documents, and other products in a legal and ethical fashion.
iii. Design and Professionalism - Creates neat, well-designed, and professional products.

A4. Work Habits: Demonstrates that he or she is a self-directed learner by completing work on time and maintaining an effective organizational system.

## SOCIAL EXPECTATIONS:

S1. Collaboration: Interacts, collaborates, and communicates effectively with others.

S2. Social Responsibility and Awareness: Manages personal behavior effectively with consideration for the community.

## CIVIC EXPECTATIONS:

C1. Informed Citizenship: Exemplifies the characteristics of an informed voter by demonstrating an understanding of governmental processes, global issues, the challenges and opportunities associated with diversity, and the impact of personal actions on the wider community.

## VERTICAL LEARNING ACADEMIES

Noble High School has two vertical, four-year academies, each comprised of approximately 450 students across grades 9-12. Each vertical academy has four grade level teams that are connected through their small learning communities as a semi-autonomous school. Our academies have been designed to support increased academic success, as we support our students in reaching ever-increasing federal, state and local standards. The academy experience includes fewer transitions and changes for students. Most students will remain on vertical teams for their entire Noble career, fostering lasting, continuous and positive relationships between students, staff and parents/guardians. Our academy structure allows each student and parent to have a clearer line of communication, which over time supports quicker, more personalized and responsive solutions to student needs. We believe that through these efforts we enhance each student's learning and success.National studies have shown that small-personalized schools, with strong ties to their communities, do a much better job of preparing students for meaningful and satisfying futures. School within a school models have reduced dropout rates, increased attendance and reduced disciplinary concerns. Increased academic success along with college acceptance has also been supported by the long-term growth associated with small school conversions of large high schools. At NHS we have seen improvement in academic success as measured by academic tests, increased attendance, along with a reduction in disciplinary concerns in the implementation of our academy model. Our academy structure is allowing us to make the best use of our innovative building by creating a more personalized, more connected, more supportive educational experience for each one of our students.

## BENCHMARK ASSESSMENTS

The four-year experience at Noble High School revolves around three year-end assessments and a graduation exhibition. These assessments offer students an opportunity to showcase their academic work, progress, and interests. These benchmarks are an important part of the Noble experience.

The Freshmen Roundtable is a student led conference created to highlight the achievements of students during their initial high school experience and to define the needs of the student as they move past their freshmen year. During the roundtable, students present their work to a panel encompassing parents, a teacher, and peers. The panel assesses student progress in relation to their ability and offers feedback designed to assist the student in being more successful during their sophomore year.

The Sophomore Gateway is the symbolic end of the first half of high school and a transition to the second half of their schooling here at Noble. While the Gateway follows a similar format to the Roundtable, it asks students to go to greater lengths to evaluate what needs to happen in their junior and senior years to be successful. Like the roundtable, students present their findings, through use of a yearlong portfolio, to their parents, a teacher, and peers.

The Junior Pathway is an intensive self-exploration process, helping students to bridge the gap between their knowledge of themselves and where they want to go after high school. Students will identify post-secondary options and develop a plan to explore some of these options. This project will culminate in a reflective presentation or paper that will be a part of the graduation portfolio.

The Senior Exhibition is an in depth graduation exhibition in which the student needs to demonstrate mastery of a series of standards in order to graduate. Students have an opportunity to select a research topic, craft a clear research question and do first hand inquiry of that
topic during their senior year. A panel of three teachers and one underclassman student evaluates the project based on a rubric of essential skills.

## SPECIAL PROGRAMS

## HONORS COURSES

An Honors option is offered in most classes. Students must develop a contract with each of their teachers in order to earn the honors distinction. An "H" following the course grade designates honors work on the transcript.

## ADVANCED PLACEMENT PROGRAM

Advanced Placement (AP) is sponsored by the College Board and consists of college level courses and exams. Students are awarded college credit for AP courses based upon their exam score and the specific requirement of the college they will attend. AP courses are offered in English, social studies, science, mathematics, studio art, and computer programming. A 600-course number in this Program of Studies designates these courses. All students who take AP courses at Noble High School will receive an additional weight of .5 quality points per AP course. This weight will be added to their GPA computation. Summer work may be required.

## MULTIPLE PATHWAYS PROGRAM

The Noble High School Multiple Pathways Program serves approximately thirty NHS students who have demonstrated the need for a more personalized and supportive approach to learning. This program helps students to meet the standards of the Maine State Learning Results and the Common Core State Standards in mathematics, English, science and social studies. Program components include service learning, job site visits, Outward Bound and Project Adventure activities, wilderness hikes and cultural field trips. This program strives to continually put students in demanding situations that will help them develop their confidence, talents, skills, and knowledge base. Students must demonstrate a commitment to all program components in order to be accepted into the program and to be continually enrolled. An application process must be completed. For more information on how to apply, please contact your guidance counselor

## PROJECT EXCEL

EXCEL provides in-school programs in the arts by inviting visiting artists to work with students in theatre, music and creative writing. All students may apply to participate. EXCEL staff work with individual teachers and teams of teachers to provide richer and more rigorous curricular connections for students who seek a more challenging educational experience.

## EARNING COLLEGE CREDIT

Students interested in any of the programs listed below should see their guidance counselor. All students who take a 3 credit Early College course will receive an additional weight of .5 quality points for each 3 credit Early College course. This weight will be added to their GPA computation.

Dual Enrollment Program - Juniors and seniors at Noble may enroll in select courses at York County Community College. Some tuition assistance may be available. Interested students should contact their guidance counselor for more information.

Academ-E - This early college distance education program is offered through the University of Maine. Students may earn university credit through online, videoconferencing and on-campus courses. Students are required to attend an all day orientation meeting on the Orono campus. See your guidance counselor if interested.

CLEP - The College-Level Examination Program or CLEP provides students of any age with the opportunity to demonstrate college-level achievement through a program of exams in undergraduate college courses. There are 2,900 colleges that grant credit and/or advanced standing for CLEP exams. The Noble Adult Education Program is an approved CLEP administration site, so Noble High School students may take CLEP tests right here in the building. Noble High School has some funding available to cover the cost for students who wish to take a CLEP test. This funding will be distributed on a first-come, first served basis. See your guidance counselor if interested.

Cisco Networking - Students may earn three college credits per year from the Great Bay Community College (GBCC) by taking the Cisco Networking course. The full Cisco program is two years long. Students must sign-up to earn credits with GBCC at the beginning of the first semester of the Cisco class. A fee is charged by GBCC. See the instructor for more information.

## GUIDANCE INFORMATION

## Required Course Load

All students in grades nine through eleven must carry at least six courses each semester. Seniors must carry at least five courses each semester.

Transfer Credit
In order to receive transfer credit, a passing grade and credit must have been earned at the student's previous school. Transfer credit is
granted to in-state home school courses for students who are officially registered with Maine State Department of Education. All other transfer students are evaluated on an individual basis. Questions regarding the awarding of credit are referred to the principal.

Independent Study
Under certain circumstances, Noble High School students may be given the opportunity to do independent study work. Students seeking an independent study must meet with the supervising teacher and complete an independent study contract. This contract must be submitted to the student's guidance counselor. The following guidelines apply to independent study:

- Advance Placement courses cannot be taken as an independent study.
- All independent studies must be pre-approved by the guidance director and the principal.
- An independent study may not be used to fulfill any NHS graduation course requirements. Independent studies are considered electives.
- An independent study may not be used in determining eligibility. Independent studies will be graded pass/fail unless other arrangements are made with the teacher.


## Auditing Courses

Students may choose to audit a course at Noble High School. No credit will be granted for audited courses and students must get permission from the teacher and their counselor prior to auditing a course. Students who audit a course will be required to attend class and participate in class activities. Students are required to complete all homework assignments as determined by the teacher. Students are not required to complete assessments such as quizzes and tests as part of an audit. Audited courses do not count as one of the classes required to be a full-time student. A contract for class audit must be completed for all students wishing to audit a course.

## Course Withdrawal

Students are expected to make any necessary changes to their schedule during the add/drop period. Extenuating circumstances may warrant course withdrawal after the add/drop period is over. THIS CAN HAPPEN ONLY BEFORE THE SECOND PROGRESS REPORT. In this case, the student must discuss any extenuating circumstances with his or her counselor. At the counselor's discretion, any or all of the following steps will be required: A conference with parents or guardians, a conference with the teacher or a conference with the dean or the assistant principal. Students must attend the class until the add/drop form is completed and textbooks are returned. AFTER THE SECOND PROGRESS REPORT, COURSE WITHDRAWAL IS NOT POSSIBLE.

School policy regarding grades for dropped or withdrawn courses is as follows:
If the withdrawal occurs before the first progress report, the student receives a WP (Withdraw Passing) or a WF (Withdraw Failing) on the transcript. If the withdrawal occurs after the first progress report, the student receives a WP or WF and the student's letter grade at that point is figured into the GPA. The grade will be factored in as $1 / 4$ credit rather than $1 / 2$.

## EARLY COLLEGE COURSES

OFFERED EACH YEAR - dependent upon registrations and staff availability TECH510 Grade 11-12 CISCO NETWORKING
This course examines the theories of network design, installation, administration, and maintenance of computer networks (students may take a second year of CISCO with teacher permission). Content is delivered via the internet under the guidance of the local instructors. There is a major 'hands-on' component. Students who complete this course are eligible to take professional certification exams. This field of study offers tremendous opportunities in the workforce. Students may also qualify for college credit.

## ENGLISH

## FOUNDATIONS IN READING: ANALYSIS OF PROSE AND LITERATURE

By the end of this course, students will be able to independently read, analyze and write about unfamiliar works of prose and literature. In order to prepare for this, students will use the reading process to engage with a wide variety of nonfiction and fiction. In general, a larger percent of the readings will be nonfiction, and the others will be literary. Daily activities will include: independent, small group, or whole class reading; discussions or activities based upon reading; writing about reading; and conferences with the teacher. Although there will be some whole class texts, students will also be able to choose many of the texts they read and analyze in this course.

Graduation Standards: ELA 1; ELA 2; ELA 5; ELA 6

## ENG 102 Grade 9 YEAR LONG

FOUNDATIONS IN WRITING AND CRITICAL THINKING
Students will use higher level thinking skills to effectively craft written pieces with reference to a variety of texts and based on a foundation of sound research. Students learn proper format and appropriate tone for high school level academic writing, improve their vocabulary, and develop their critical thinking skills in order to make more precise, sophisticated observations and arguments.

Graduation Standards: ELA 3; ELA 4; ELA 5; ELA 6

## ENG 201 <br> Grade 10 <br> YEAR LONG

SOPHOMORE LITERATURE AND WRITING
Students will continue to develop their skills in reading, writing and speaking. A strong emphasis will be placed on the ability to think critically. Students should expect to utilize the writing process to produce pieces in a variety of genres; in addition, students will engage in the analysis of informational and literary texts. Students will also be expected to conduct research for a variety of assessments including interdisciplinary projects.

Graduation Standards: ELA 1; ELA 2; ELA 3; ELA 4; ELA 5; ELA 6

ENG301
ENGLISH 11 Grade 11 YEAR LONG
Students will explore and develop their skills in multiple genres of literature. Communication skills will be honed through a variety of writing assignments and speaking exercises. Each learning community will allow for a wide and flexible range of activities that focus on meeting the English standards.

Graduation Standards: ELA 1; ELA 2; ELA 3; ELA 4; ELA 5; ELA 6

## ENG401 <br> Grade 12 <br> YEAR LONG

ENGLISH 12
Students will develop their literature skills from a variety of eras and countries. Communication skills will be honed through a mixture of writing assignments and speaking exercises. Each learning community will allow for a wide and flexible array of activities that focus on meeting English standards. Much attention will center on an extensive research paper and the Senior Exhibition.

Graduation Standards: ELA 1; ELA 2; ELA 3; ELA 4; ELA 5; ELA 6

## ENGLISH ELECTIVES OFFERED EACH YEAR - dependent upon registrations and staff availability

## ENG501 <br> Grade 9-12 <br> SEMESTER

CREATIVE WRITING
Creative writing is a sequence of thinking and writing challenges designed to explore and expand students' narrative use of details, characterization, word choice, and literary devices--in short, to expand student capability in the use of the building blocks of all writing. Emphasis will be placed on thinking differently, in new ways, i. e. creatively, to explore possibilities of style and subject matter. The largest part of the grading will be on two performance assessments, which will be two finished writings based on individual student's choice. Readings will be excerpts from great works and essays by writers about the writing process.

Graduation Standards: ELA 3; ELA 5; ELA 6

ENG502
AMERICAN LAW \& SOCIETY
Students examine turning points in American law by reviewing specific court cases and the circumstances surrounding them. Students learn how dramatically history and culture can and do affect the law, and vice-versa.

Graduation Standards: ELA 1; ELA 2; HIST 6
ENG503 Grade 9-12 SEMESTER

READING AND WRITING SHORT STORIES
Students read and analyze short stories in a variety of genres by well-known authors. In turn, students mimic styles, replicate tone, and compose similarly-themed stories -- all in an effort to cultivate their own voices as writers.

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\text { Graduation Standards: ELA 2; ELA } 3
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ENG504 Grade 9-12 SEMESTER

AMERICAN PLAYWRIGHTS
Students study the lives of, and key works by, great dramatists such as Arthur Miller, Tennessee Williams, Eugene O'Neill, Moss Hart, etc. Plays include classics like Death of a Salesman, A Raisin in the Sun, and A Streetcar Named Desire. This one semester course also provides students the opportunity to perform scenes from the plays being studied.

Graduation Standards: ELA 2; ELA 5

ENG505
Grade 9 - 12
SEMESTER
SAT PREP
This course will prepare students for the critical reading and writing section of the revised Scholastic Aptitude Test. Students will study miniunits on argumentative writing, grammar, and critical reading strategies.

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\text { Graduation Standards: ELA 1; ELA 2; ELA 3; ELA 4; ELA 5; ELA } 6
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## ENG506 Grade 9-12 SEMESTER

## PUBLIC SPEAKING

This course is designed to engage students in the practice and improvement of speaking, presentation and interpersonal communication skills for a number of purposes and audiences. Types of speeches may include the following: informational, narrative, persuasive, dramatic interpretation, impromptu, and debate. Students will engage in self and peer review throughout the semester to develop greater selfawareness, goal setting, and reflection on personal growth.

Graduation Standards: ELA 1; ELA 4; ELA 5

## ENG507 Grade 10-12 SEMESTER

## DEBATE

Students use critical thinking skills, research, writing, and oral argument in the context of adversarial debate. Students select topics and positions of interest, and also are assigned topics and positions to debate with varying degrees of preparation. Open to Sophomores, Juniors, and Seniors who have earned at least two credits in English.

Graduation Standards: ELA 5; HIST 6

## ENG510 <br> Grade 9-12 <br> SEMESTER

INTRODUCTION TO DRAMA
This course is designed for students who are interested in learning about and practicing performance skills. No prior acting experience is required. We will read and analyze a variety of monologues and scenes; we will also study the roots of drama and acting theory. Students will practice a variety of acting styles in this performance-based class, including pantomime, improvisation, monologue, duet scene, and ensemble scene.

This course can be counted as a semester course towards the visual and performing arts graduation requirement.

Graduation Standards: ELA 5; ELA 2; VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

ENG512
MONSTROSITY AND OTHERNESS
In this reading-intensive course we will read Gothic and modern tales of monsters, vampires and others who depict the dark side of humanity.

Through our reading we will ask ourselves how these stories inform us about the human condition. Texts: Frankenstein, Dracula, Dr. Jekyll and Mr. Hyde, and stories by Edgar Allen Poe, Stephen King, and other writers.

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\text { Graduation Standards: ELA 2; ELA 3; ELA } 6
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## ENG515 <br> Grade 9-12 <br> SEMESTER <br> NATURE WRITING

This class will be based upon exploration of the natural world. We will read pieces of writing by great naturalists, trackers, hunters, guides, and observers; we will explore and learn about the natural world outside of NHS ; and we will produce pieces of writing based on our observations, experiences and research. We will also spend some time strengthening awareness and survival skills. If you sign up for this class, expect to go outside a lot, regardless of weather or season.

Graduation Standards: ELA 1; ELA 3;ELA 4; ELA 5; ELA

ENG516

## AMERICAN CINEMA

American Cinema explores a number of film topics: the power and beauty of film, how our minds build meaning from images, the terminology and use of various camera strategies, the film controls available in the filmmaker's toolbox, screenplay structure, genres of films, and the work history, and impact of film giants such as D. W. Griffith, John Ford, Alfred Hitchcock, Steven Spielberg, Francis Ford Coppola, and Clint Eastwood.

Graduation Standards: ELA 1; ELA 3; ELA 4;

## ENG517

SPORTS WRITING
This course will focus on sports journalism. Students will learn what it takes to be a good journalist, and more importantly, a great sports writer. Students will begin by learning the basics of journalism, terms such as: leads, angles, grafs, investigative-reporting, libel, narration, oped and, most importantly, deadline! Students will write a straight news piece, and a feature, in addition to (1) optional piece. Ultimately, the course asks students to write effectively and with clarity. Students will be expected to attend anywhere from (1-2) high school sporting events in order to learn the craft of reporting. Students will attend a field-trip to Foster's Daily Democrat to view a newsroom directly. The culminating assignment will be the creation of a class sports page. This elective will meet the Writing standard

Graduation Standards: ELA 1; ELA 3; ELA 6

## ENG518 <br> Grades 9-12 <br> SEMESTER

## INTRODUCTION TO PSYCHOLOGY

This is a survey course designed to allow students to explore some key concepts in the scientific study of the mind and human behavior. Topics over the semester include biopsychology, social psychology, memory and development, and an overview of how psychology has developed into an important topic of academic study and a vibrant medical field. SEMESTER (English Social Studies)

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Graduation Standards: ELA 1
SS Graduation Standards: HIST 6
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## ENG519 <br> Grade 11-12 <br> SEMESTER

WOMEN, GENDER, \& LITERATURE
This semester elective will examine women's experiences through history, and analyze women as portrayed in literature and the arts. Students will analyze gender roles in literature. Students will study a wide range of authors including Kate Chopin, Margaret Atwood, Sylvia Plath, Alice Walker, Maya Angelou, Zora Neale Hurston, Alice Munro and Adrienne Rich. Additional works will be chosen by class consensus. The study of language and its relationship to gender roles will also be addressed. This course is designed for upperclassmen with an interest in reading rich works of literature, analyzing their impact and reflecting on their significance.

Graduation Standards: ELA 2; ELA 3; ELA 6

This course will explore the world of songwriting from a writer's and musician's perspective. Students will listen to and analyze a variety of songs to discover the tools and strategies that they may use in their own songwriting; in addition, they will engage in creative writing exercises to expand their songwriting skills. This course offers the opportunity to meet and workshop with professional singer-songwriters from the local
area. Prior songwriting experience is highly recommended. Students must be willing to share their original songs with others.
Prerequisite: Students must be able to play the guitar or the piano at a basic level; students interested in electronic-based compositions must possess basic knowledge of some recording program.

This course can be counted as a semester course towards the visual and performing arts graduation requirement.

Graduation Standards: ELA 5; ELA 3; MUS 1; MUS 2; MUS 3; MUS 4; MUS 5

## ENG522

## THE ART OF WAR Grade 9-12 SEMESTER

In this course, students will be introduced to the history of war, with a special emphasis on warfare and ethics. We will start with early Chinese history, philosophy and various war treatises, like The Art of War. We will then probe both the Ancient Greeks and Romans and analyze how they conquered large parts of the world. This will be followed by a survey of both the methods and weaponry of the Middle Ages and the guerrilla warfare waged in the New World, focusing on the French, Indian and Revolutionary Wars. With time, we will investigate the advances in warfare during WWI, WWII and Vietnam. In this semester long class we will work with primary sources, firsthand accounts, fictional excerpts and pieces, as well as movie clips that focus on particular wars.

Graduation Standards: ELA 2; ELA 3; ELA 4

This class is designed for students who are interested in food, flavors, cooking, and eating. Whether you enjoy dabbling in the kitchen, can sit for hours watching Food Network, or dream of one day working in a professional kitchen, this class will give you the opportunity to spend time exploring your passion. We will read and discuss works of food-based fiction and nonfiction, try our hands at writing food reviews, and delve into the world of food blogging.

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\text { Graduation Standards: ELA 1;ELA 2; ELA 3; ELA } 5
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## ENG525:

## NHS WRITING CENTER

Grade 10-12

## SEMESTER

Do you enjoy writing? Do other students ask you to read their work or help them write? Do you like to talk to people, help them write, or tutor your peers? If so, we're looking for you! Students who choose the Writing Center elective will be trained to conduct effective writing conferences with other students about their writing, after which they will become Writing Center Staff. At that point, students from across the school will be welcome to come and conference with the WC staff about getting ideas for writing assignments, pre-writing and researching, or to conference about their drafts. English Teacher Recommendation \& Application Required - See your guidance counselor if interested.

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\text { Graduation Standards: ELA } 3
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## ENG528

THE STRATEGY OF SPORT
Grade 9-12

## SEMESTER

Have you ever heard of the Monday morning quarterback? Are you guilty of criticizing a baseball manager for leaving his starting pitcher in the game one batter too long? America is fascinated with sport, and oftentimes fascinated with the strategy behind why their team wins or loses. This elective will analyze decisions, tactics, and trainings within high school, college, and professional sport. Classroom activities will include comparing and contrasting varying coaching pedagogies, constructing game plans in written or oral formats, reading non-fiction resources published by America's most successful coaches, and analyzing how technology is changing sport.

Graduation Standards: ELA 1; ELA 3; ELA 5

## ENG601 AP ENGLISH LANGUAGE AND COMPOSITION

Grade 11 - 12

## YEAR LONG

This is a year-long course devoted to the analysis of language and composition. This course is writing intensive and includes a strong vocabulary component. We spend much of our time reading and analyzing non-fiction - essays, speeches, books, and articles - and examining many kinds of persuasive texts, including films, artwork, advertisements and documentaries, to learn about the strategies of rhetoric. The AP exam is given in May and success on the exam will earn college credit at many post-secondary institutions.
Students are expected to complete a summer reading and writing assignment.
ENG602 Grade 11-12 YEAR LONG

## AP ENGLISH LITERATURE AND COMPOSITION

This is a year-long course, which includes a survey and analysis of selections from British and world Literature. This course is writing intensive and includes a strong vocabulary component. Areas of study include novels, short fiction, poetry and drama. All students in AP Literature will write a thorough research paper focusing on a writer of their choice. The AP exam is given in the spring semester and success on the exam will earn college credit at many post secondary institutions.

## Students are expected to complete a summer reading and writing assignment.

Graduation Standards: ELA 1; ELA 2; ELA 3; ELA 4; ELA 5; ELA 6

## MATHEMATICS

## NHS Mathematics Department Graduation Standards:

## MA 1: Communication

MA 2: Connections
MA 3: Problem Solving
MA 4: Reasoning
MA 5: Representation

## MA101 Grade 9 YEAR LONG <br> COMMON CORE MATH 9

In this course, students will learn the basics of linear functions, linear inequalities, and exponential functions. Students will learn to solve, graph, and model linear and exponential equations. Students will use multiple representations to explore key features of linear and exponential relationships. Students will represent data using dot plots, histograms and box plots, and identify trends in the data by calculating measures of variation. Students will need a scientific calculator for this course, TI-30XIIS is recommended.

Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA 5

MA201
Grade 10
YEAR LONG, EVERY DAY
COMMON CORE MATH 10
In this course, students will learn the basics of quadratic functions, absolute value functions, and special functions including square root, cube root, piecewise, and step. Students will learn to solve, graph, and model quadratic, absolute value, and special functions. Students will use multiple representations to explore key features of each function type. Students will explore geometric relationships using a variety of tools. Students will perform constructions, measure figures, and prove geometric theorems. Topics will include similarity of triangles, polygons, and circles, line and angle relationships, and volume. Students will use right triangles to explore beginning trigonometry concepts. Students will investigate beginning probability concepts including conditional probability, permutations, combinations, sampling, and bias. Students will need a scientific calculator for this course, TI-30XIIS is recommended.

Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA 5

MA301
Grade 11
YEAR LONG
COMMON CORE MATH 11
In this course, students will continue their exploration of various function types. Function types include: polynomial, rational, radical, inverse, and trigonometric. Students will use multiple representations to explore key features each function type. Students will investigate statistical relationships using measures of variation and standard deviation. Students will use statistics to draw inferences. Students will explore trigonometry concepts using unit circles and radian measure. Students will need a scientific calculator for this course, TI-30XIIS is recommended.

## MA400

Grade 12
YEAR LONG
PATHS
This course is designed for seniors who are unsure of their future plans. The coursework is centered around a variety of money management topics, including: drafting a budget, paying for college, mortgages, auto financing, insurance, investing for retirement and more. Students will need a scientific calculator for this course, TI-30XIIS is recommended.

## Prerequisite: Common Core Math 11 and teacher recommendation

Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA 5

## MA401 Grade 10/11 YEAR LONG

PRE-CALCULUS 10/11
This course is designed for students who are advanced in mathematics. Course content will include relations, functions, trigonometry, advanced functions, graphing and discrete mathematics. The curriculum will prepare students for calculus as well as other introductory college mathematics courses. Students will need a graphing calculator for this course, Tl-83 is recommended.
Prerequisite: Minimum Grade of B-in Common Core Math 11 and teacher recommendation

Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA 5


#### Abstract

MA402 Grade 11-12 YEAR LONG STATISTICS \& PROBABILITY This course is designed for motivated math students who have completed Common Core Math 11 with a minimum grade of $C$ or have received permission from the teacher. This course will involve data analysis, statistics and probability. Students will need a graphing calculator for this course, Tl -83 is recommended. Prerequisite: Minimum Grade of C in Common Core Math 11 and teacher recommendation


Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA5


#### Abstract

MA501 Grade 12 YEAR LONG

\section*{PRE-CALCULUS 12}

Course content will include relations, functions, trigonometry, advanced functions, graphing and discrete mathematics. The curriculum will prepare students for calculus as well as other introductory college mathematics courses. Students will need a graphing calculator for this


 course, Tl-83 is recommended.
## Prerequisite: Common Core Math 11 and teacher recommendation

Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA 5
MA550
CALCULUS
This course is intended for students who are interested in Calculus, yet might not feel comfortable with the pace and depth that the
Advanced Placement class would demand. In Calculus, students will examine both the instantaneous rate of change (Differential Calculus)
and the accumulation of change (Integral Calculus) for various function types. Both graphical and analytic/algebraic methods will be
regularly employed, and opportunities to apply newly acquired Differential and Integral Calculus skills to real-world scenarios will play a
central role in the class. Students will need a graphing calculator for this course, Tl-83 is recommended.
Prerequisite: Pre-calculus

## Prerequisite: Pre-calculus

Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA 5
MA601
AP CALCULUS
This rigorous, fast-paced course offers students a first semester college Calculus I curriculum, covering topics in differentiation and
integration. Students looking for a challenge who possess exceptional math skills can take this course with a passing score on the entrance
exam and successful completion of the summer assignment. Students are expected to take the AP Calculus AB exam in May. A grade of 4 or 5 can earn you credit at most colleges and universities. Students will need a graphing calculator for this course, TI-83 is recommended. Prerequisite: Pre-calculus \& Department Approval

Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA 5

## MA602 Grade 11-12 YEAR LONG

AP STATISTICS
This course will introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will be exposed to four broad conceptual themes: 1. Exploring Data: Describing patterns and departures from patterns; 2. Sampling and Experimentation: Planning and conducting a study; 3. Anticipating Patterns: Exploring random phenomena using probability and simulation; 4. Statistical Interference: Estimating population parameters and testing hypotheses.

Prerequisite: Pre-calculus

Graduation Standards: MA 1; MA 2; MA 3; MA 4; MA 5

## SCIENCE

NHS Science Department Graduation Standards:
SCI 1: Scientific Argumentation
SCI 2: Experimental Design
SCI 3: Plate Tectonics: Energy, Forces, and Interactions
SCI 4: Climate \& Global Climate Change
SCI 5: Ecosystems: Interactions, Energy, and Dynamics
SCI 6: Cell Structure and Function
SCI 7: Energy Systems
SCI 8: Genetics
SCI 9: Evolution
SCI 10: Materials
SCI 11: Petroleum
SCI 12: Nuclear
SCI 13: Atmosphere
SCI 14: Motion
SCI 15: Forces and Interactions
SCI 16: Waves and Digital Information
SCI 17: Energy
SCI 18: Electromagnetic Radiation and Space
SCI 19: Engineering Design

## SCl101 Grade $9 \quad$ YEAR LONG

FRESHMAN ENVIRONMENTAL SYSTEMS
The Earth is a combination of environmental systems including the biosphere, the atmosphere, the hydrosphere, and the lithosphere. These systems interact in unique ways that support and challenge life. Students will examine the interactions of these systems, the interplay between biotic and abiotic factors, and their impact upon life on Earth.

This course features topics evolution, cells, microbiology and disease, and genetics. Students will develop an understanding of the general themes and unifying concepts within these areas of study and learn to distinguish scientific thinking from non-scientific thinking. Labs, experiments, projects, and other tools will be used to help students learn to design, analyze, and carry out scientific investigations. Activities are designed to explore the origin of life forms, the interdependence of life forms, qualities that make life forms unique, and how living systems work.

Graduation Standards: SCI 1; SCI 2; SCI 6; SCI 7; SCI 8; SCI 9

## SCl301 <br> Grade 11 <br> YEAR LONG <br> CHEMISTRY

This year long course is designed to prepare all students to be scientifically literate members of their community. Students will study the concepts of chemistry through the investigation of topics such as materials, petroleum, nuclear energy and the atmosphere. Students will learn the important role that chemistry plays in life, use the principles of chemistry to think more informatively about current issues, and develop a lifelong awareness of the potential power and limitations of science and technology. Laboratory activities are an integral part of this course. Research projects and a term paper may be required.

Graduation Standards: SCI 1; SCI 2; SCI 10; SCI 11; SCI 12; SCI 13
SCI401
PHYSICS
This full year course uses a hands-on, mathematical approach to the study of physics. Analytical problem solving and experimental
laboratory work are emphasized to develop strong technical skills and to investigate physical laws. Students will study motion, energy, and
other topics. Students will develop mathematical expressions for fundamental equations as well as a conceptual understanding of physics.

Graduation Standards: SCI 1; SCI 2; SCI 14; SCI 15; SCI 16; SCI 17; SCI 18
SCIENCE ELECTIVES OFFERED EACH YEAR - dependent upon registrations and staff availability

## SCI504

GENETICS
Grade 11-12
SEMESTER
ANATOMY \& PHYSIOLOGY
This is a challenging year-long course that explores human body systems. Students will learn the anatomy and physiology of major body systems from the cellular level of the whole organism. There will be some lab experiences as part of this course. Dissection participation is mandatory. This is a college preparatory course recommended for all students interested in exploring the field of medicine.
Prerequisite: Biology grade of $B$ - or better or teacher permission.

Graduation Standards: SCI 1; SCI 2; SCI 3; SCI 8

## SCI512 <br> Grade 10-12 <br> SEMESTER

EPIDEMIOLOGY OF INFECTIOUS DISEASE
Students will learn about epidemiology, biotechnology, and immunology through investigating infectious diseases. Students will study various pathogens, trends in global health, and the threats of emerging and re-emerging diseases. Treatments for infectious diseases will be studied, and the role of biotechnology, genetic engineering, and other STEM approaches to create new therapies and drugs will be discussed. This course will require students to increase their ability to decipher scientific literature, conduct research, improve their writing and presentation skills, and to further their problem-solving abilities. Students will gain an enhanced awareness of the origin, prevention, and treatment of infectious disease and the current issues in health and disease from global and local perspectives.

## Prerequisite: Concurrent with Biology or teacher permission.

Graduation Standards: SCI 1; SCI 2; SCI 6; SCI 8; SCI 9

## SCI515 Grade 10-12 YEAR LONG <br> DESIGN IT, BUILD IT, RACE IT

Students work as a team to design and build a single person electric powered vehicle to compete in an hour long endurance race against schools throughout New England. Following the criteria set forth by Electrathon America, students use science, technology, engineering and math, as well as skill and ingenuity to create a lightweight car that will travel as far as possible with a limited electrical supply. In this advanced engineering elective, students will conduct extensive research, apply mathematical formulas and concepts to influence the design, work with their hands to fabricate the car, and communicate effectively with one another to ensure the many components and systems create a competitive car. There is also a significant time commitment outside of class.
SCI520 Grade 9-12 SEMESTER

ENGINEERING - INTRODUCTION TO THE ENGINEERING PROCESS
This activity based class will challenge students to learn the methods used by engineers to solve real-life problems. Students will disassemble and reassemble machines to learn the function of parts and to better understand mechanical systems. Students will use mathematical and scientific principles to build, test and analyze machines and structures to accomplish specific tasks such as moving heavy objects efficiently and safely. This class looks at why things work the way they work, and how things are built to make them work that way.

Graduation Standards: SC1 1; SCI 15; SCI 16; MA 3

## SCI521 Grade 9-12 SEMESTER

ENGINEERING - HOW IT'S MADE
Students will learn about the way things have been engineered and designed through a myriad of projects including: small engine assembly and repair, motorcycle maintenance, solar hot box design and construction and more. Students will cultivate an understanding of the Engineering and Design Process as well as basic skills in wood and metal fabrication, circuitry, plumbing and mechanics.

Graduation Standards: SCI 1; SCI 17; MA 3

## SCI550 <br> Grade 9-12 <br> SEMESTER <br> ROBOTICS

This course will give students an introduction to robotics. Students will experience robotics hands-on as they build and design their own robots using VEX kits and underwater ROVs.

Graduation Standards: SCI 2; SCI 14; SCI 16; MA 3

## SCI558

## WOODWORKING DESIGN \& BUILDING

Students will become proficient in the use of woodworking tools and techniques in this hands-on course. Beginning with hand tools and moving to power tools, students will demonstrate their knowledge by constructing various projects ranging in difficulty from picnic tables and Adirondack chairs to chicken coops and garden sheds, which will then be marketed and sold within the community. Students not only gain valuable woodworking and design skills, but also learn business elements including calculating material costs, making tradeoffs, pricing and delivering a product for which a demand exists.

Graduation Standards: SCI 1; SCI 2; SCI 19

Grade 9-12

## SEMESTER

METAL DESIGN, FABRICATION \& WELDING
Students will gain practical knowledge in the proper use of metalworking tools and techniques in this hands-on course. They will learn to safely weld mild steel using the MIG process, cut steel with a plasma torch and a shear, form metal using a brake, and shape metal using bench, die and angle grinders. Students will demonstrate and apply their knowledge by constructing various projects ranging in difficulty.

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\text { Graduation Standards: SCI 1; SCI 2; SCI } 19
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## SCI560 <br> Grade 9-12 <br> SEMESTER

ADVANCED METAL DESIGN, FABRICATION \& WELDING
Students will expand their skills and build on techniques learned in the beginning course, as they work in small groups to research, design and fabricate structures to meet a real-world need. They will gain additional welding and fabrication experience, learn to use the tubing bender and horizontal bandsaw and also apply mathematical formulas to select the proper materials for their projects.
Prerequisite: Successful completion of Metal Design, Fabrication and Welding

Graduation Standards: SCI 1; SCI 2; SCI 19
purchase their instrument, a limit number of kits will be available to build, and will be auctioned upon completion in order to reclaim cost. There will be an application process for enrolling in this class.

Graduation Standards: SCI 16

## SCl603 Grade 12 YEAR LONG

AP PHYSICS
This course is the first part of a college level physics sequence for students planning on majoring in physical sciences or engineering: the foundation is in mechanics topics. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus. One of our goals will be to prepare the students for the AP Level C Mechanics Physics exam. Success in this exam earns college credit at many colleges and universities. Students can consider also taking regular physics, which includes topics of light, electricity, and modern physics, to ensure a comprehensive physics background. Students can expect 5-8 hours of homework each week.
Prerequisite: Students should have previously taken calculus or be concurrently enrolled in calculus. Completion of summer assignments is required.

Graduation Standards: SCI 14; SCI 15; SCI 16; SCI 17

## THE FOLLOWING COURSES WILL BE ALTERNATED EACH YEAR.

2014-2015 OFFERINGS (WILL NOT BE OFFERED IN 2015-2016)

## SCI602 Grade 11-12 YEAR LONG

## AP CHEMISTRY

This is an introductory college level course designed to provide students with an in-depth knowledge of basic chemistry principles. Students will study the following 'Big Ideas:' the structure of matter, properties of matter, chemical reactions, rates of chemical reactions, equilibrium, and thermodynamics. This course will emphasize the development of strong problem solving skills in an effort to prepare students for the College Board Advanced Placement Exam. Success on this exam earns college credit at many colleges and universities.

Graduation Standards: SCI 1: SCI 2; SCI 10; SCI 11; SCI 12; SCI 13

2015-2016 OFFERINGS
SCI601 Grade 10-12 YEAR LONG

## AP BIOLOGY

## SOCIAL STUDIES

NHS Social Studies Graduation Standards:
HIST 1: Applications of Social Studies Process, Knowledge, and Skills
HIST 2: Civic Engagement (Involved Citizen)
HIST 3: Civic Engagement (Principles of Constitutional Government)
HIST 4: Economics
HIST 5: Geography
HIST 6: History
social issues that formed the basis of modern America and its place in the world. Much of what students learn will be research and primary source based, to develop literacy from a historical standpoint. Technology will help students explore \& extend the content. Students will use various media to demonstrate understanding and apply relevant knowledge to contemporary events.

Graduation Standards: HIST 1; HIST 2; HIST 5; HIST 6
HIST301 Grade 11 YEAR LONG

AMERICAN HISTORY / WORLD GEOGRAPHY \& CULTURES
This is a two part course. The first part of this course focuses on US History with study of The Great Depression through the Civil Rights Movement. Important events during this period will be addressed in this course, as well a wide variety of secondary topics involving social, economic and political history.

Part two of this course will focus on the social, economic, and political aspects of various regions of the World. In addition to that, students will be asked to examine America's role with the rest of the World through interdependence. Students will learn locations of the World and how climate and the terrain impact societies. This course will focus on research and the examination sources and data.

Graduation Standards: HIST 1; HIST 2; HIST 3; HIST 4; HIST 5; HIST 6
$\begin{array}{ll}\text { HIST401 } \\ \text { 20th- 21st CENTURY HISTORY \& THE FOUNDATIONS OF CITIZENSHIP } & \text { Grade } 12 \quad \text { YEAR LONG }\end{array}$
20th- 21st CENTURY HISTORY \& THE FOUNDATIONS OF CITIZENSHIP
This is a two part course. The first half of this course, 20th 21st century History, finishes the American experience from the Cold War to the present period in American History. Important events during this period will be addressed in this course, as will a wide variety of secondary topics involving social, economic and political history. The second half of the course, Foundations of Citizenship, will address the preparation for all seniors to leave Noble High School as an "informed citizen" ready to take part in the American democratic process as an informed voter. Participation in the democratic process will be an important element of this course.

Graduation Standards: HIST 1; HIST 2; HIST 3; HIST 5; HIST 6

## SOCIAL STUDIES ELECTIVES OFFERED EACH YEAR - dependent upon registrations and staff availability

## HIST501 Grade 9-12 SEMESTER

THE HISTORY OF FOOD
This semester-long course will explore the origins and cultivation of food from the earliest farming in the Fertile Crescent to modern day farm production. Students will learn the importance of food to cultures throughout history and the issues facing the world in the future. Students will be expected to do research, read current data and participate in the hands-on activities.

Graduation Standards: HIST 1; HIST 4; HIST 5; HIST 6

## HIST504

Grade 9-12
SEMESTER
SPORTS HISTORY
Students will explore the role of sports in American history and culture. Students will be required to read a book of their choice and write a review that explains the topic, sources, strong and weak points of the book and how it changed the way the student views that sport or athlete. The class will explore the issues of paying college athletes to play, money, drugs, Title IX, racism, child athletes and current events. Students will be asked to read, research, write and participate in discussions.

Graduation Standards: HIST 1; HIST 4; HIST 6

## HIST507 <br> Grade 9-12 <br> SEMESTER <br> SOCIOLOGY

Sociology is the scientific study of human interaction. This course is a study of concepts, theories, research, case studies and ideas which make up the structure of human knowledge and interactions. By studying sociology, you will learn how to analyze world events and human behavior. Learn about different societies and compare them to yours, learn how individuals are products of their environments and learn how we feel about ourselves and others is dependent upon the society in which we live.

Graduation Standards: HIST 1; Hist 2; Hist 5; Hist 6
HIST509
HISTORY VS. HOLLYWOOD
This course will look at a series of significant events in American History as portrayed by feature length Hollywood films. A comparison with
historical documents and historical evidence will be used to analyze the accuracy of films as compared to the actual historical facts and
historical records. Students will write articles and essays comparing the validity of the film evidence to information in more traditional
sources, such as articles, film reviews and textbooks. Students will participate in class discussions and debates.

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HIST518
Grade 9-12
SEMESTER
1960's \& THE WAR IN VIETNAM
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This course examines political, social, and cultural changes to the United States in the turbulent decade of the 1960s. It will begin by describing the tension that existed in the 1950s with the advent of the Cold War, civil rights the war in Vietnam and the growth of a counterculture. Students will explore these issues through literature, film, music, and technology.

Graduation Standards: HIST 1; HIST 4; HIST 5; HIST 6
HIST520 Grade 9-12 SEMESTER

BEYOND THE WAR: THE CULTURE, PEOPLE AND TIMES OF WWII
Tom Brokaw, legendary news anchor for NBC, once said the citizens of WWII were the Greatest Generation. During the 1940s, America was in the grip of war, sacrificing resources and manpower. What made them so great? Students will be required to read a book of their choice and write a review that explains the topic, sources, strong and weak points of the book and how it changed the way the student views WWII. The class will focus on the war's effect on the people who fought it, how the home front contributed to the effort and the propaganda used during this massive conflict.

Graduation Standards: HIST 1; HIST 4; HIST 5; HIST 6


#### Abstract

HIST602 Grade 10-12 YEAR LONG AP UNITED STATES HISTORY This is a college level survey course of American history from 1607 to the present. The curriculum is set by the College Board and will emphasize analysis, synthesis and evaluation of historical material and topics. Students will be expected to take the College Board test in the Spring and the successful completion of this exam can earn college credit for US history. The reading is at a college level and pace. A research paper will be required for each semester and the completion of a summer assignment (or equivalent) is required.


Graduation Standards: HIST 1; HIST 3 HIST 4; HIST 5; HIST 6

## HIST603

AP WORLD HISTORY Grade 11-12 YEAR LONG
This college level survey course is designed to challenge students in the area of historical thinking, interpretation, analysis, and evaluation. It will cover the time periods from the earliest man to the present day. The curriculum framework is set by the College Board with a test in the spring. Upon successful completion of the AP exam, students can earn college credit. Students will be assessed on homework, tests, writing assignments, and participation. Students will be required to do a summer assignment for this class.

Graduation Standards: HIST 1; HIST 3; HIST 4; HIST 5; HIST 6

## HIST604 Grade 11-12 YEAR LONG

AP GOVERNMENT \& POLITICS
Do you like to debate? Do you like knowing your American rights? Do you like to study history? This is the class for you! Students will learn about the rights and responsibilities of American citizens as laid out in the Constitution and Bill of Rights. The culminating activity is a simulated congressional hearing where students will compete against other schools in Maine for a chance to go to nationals in Washington D.C. *This class is only open to Juniors and Seniors and will replace senior year history.

Graduation Standards: HIST 1; HIST 2; HIST 3; HIST 4; HIST 5; HIST 6

## WORLD LANGUAGE

The World Language teachers encourage students to take three to four years of a foreign language.

## NHS World Language Graduation Standards:

WL 1: Listening and Reading Comprehension Standards
WL 2: Conversational Standards
WL 3: Planned Speaking and Writing Standards
FREN101 Grade 8-12 YEAR LONG

FRENCH I
French I is an introductory course on the language and culture of the French-speaking world. It is designed to teach and develop basic listening, speaking, reading and French writing skills and to expand awareness of French-speaking cultures. Students learn basic
sentences and expressions which can be applied to personal situations, such as family, sports, school, food, everyday life, and social activities. Grammar, reading, and culture are presented at this level. Oral, written, and performance assessments are assigned throughout the year.

Graduation Standards: WL1, WL2, WL3

## FREN201 Grade 9-12 YEAR LONG

FRENCH II
French II is designed to reinforce French I material and to continue developing proficiency in reading, writing, listening, and speaking and will begin speaking about the past and future. Students are exposed to more spoken French in the classroom and use their communication skills in real life situations, such as family, traveling, home, food, shopping, and everyday life. Grammar, reading and culture are presented at this level. Oral, written, and performance assessments are assigned throughout the year. Prerequisite: successful completion of French I.

Graduation Standards: WL1, WL2, WL3

## FREN301 <br> Grade 10-12 <br> YEAR LONG

FRENCH III
French III continues to build on the skills developed in French I and II. The focus is on the culture of various Francophone regions, tourism, current events, personal well-being and literature. Grammar, reading and culture are also presented at this level. Oral, written, and performance assignments are given regularly and projects are assigned throughout the year. The course content will be assessed by 2018 through the foreign language listening and reading comprehension standards, conversational standards, and planned speaking and writing standards. Prerequisite: successful completion of French II.

Graduation Standards: WL1, WL2, WL3

## FREN401 <br> Grade 11 - 12 <br> YEAR LONG

FRENCH IV
French IV builds on the language skills of previous levels with emphasis on French geography, history and literature. Students will continue to develop skills in oral and written communication. They will gain a deeper understanding of contemporary French society through the study of French political history, culture, literature and art. Oral, written, and performance assessments are assigned throughout the year. (curriculum alternates every other year) Prerequisite: successful completion of French III.

Graduation Standards: WL1, WL2, WL3

## FREN501

Grade 11-12
YEAR LONG
FRENCH V
French V builds on the language skills of previous levels with emphasis on French geography, history and literature. Students will continue to develop skills in oral and written communication. They will gain a deeper understanding of contemporary French society through the study of French political history, culture, literature and art. Oral, written, and performance assessments are assigned throughout the year. (curriculum alternates every other year)
Prerequisite: successful completion of French IV.

Graduation Standards: WL1, WL2, WL3

## SPAN101

Grade 8 - 12

## YEAR LONG

SPANISH I
Spanish I is an introductory course on the language and culture of Spanish-speaking people. It is designed to teach and develop basic listening and speaking and reading and writing skills and to expand awareness of Spanish speaking cultures. Students learn common expressions and the basic ways to communicate in personal situations related to themes such as family, sports, school, everyday life, and social activities. The geography and cultural practices of Spanish speaking countries are incorporated in this course. These will be assessed through the Listening and Reading Comprehension, Conversational, and Planned Speaking and Writing Standards by 2018.

Graduation Standards: WL1, WL2, WL3

## SPAN201 <br> Grade 9-12 <br> YEAR LONG

SPANISH II
Spanish II is designed to reinforce Spanish I material and to continue developing proficiency in reading, writing, listening, and speaking.. Students will begin speaking about the past and are exposed to more spoken Spanish in the classroom and use their communication skills in cultural situations dealing with the family, vacations, leisure activities, food, medical needs, and shopping. Oral, written, and performance assessments are assigned throughout the year. The course content will be assessed through the Listening and Reading Comprehension, Conversational, and Planned Speaking and Writing Standards by 2018. Prerequisite: Successful completion of Spanish I.

Graduation Standards: WL1, WL2, WL3

Spanish III continues to build on the skills developed in Spanish I and II. Themes include immigration, travel, technology, school, and ordering at a restaurant.. The emphasis is on conversational use and the refinement of reading and writing skills as students develop proficiency in the preterite tense, imperfect tense, and the future tense. The geography and cultural practices of Spanish-speaking countries continue to be emphasized. Oral, written, and performance assessments are assigned throughout the year. The course content will be assessed through the Listening and Reading Comprehension, Conversational, and Planned Speaking and Writing Standards by 2018.
Prerequisite: Successful completion of Spanish I \& II.

Graduation Standards: WL1, WL2, WL3


#### Abstract

SPAN401

\section*{Grade 11-12}

YEAR LONG SPANISH IV Spanish IV students continue to develop proficiency in reading, writing, listening, and speaking through class discussions, guided and improvised conversations, short debates, oral reports, and role-plays. It focuses on exploring, comparing and contrasting cultural terms specific to the five regions of the Spanish speaking world. Students also study a few pieces of literature, poems, songs, and a movie. Students will gain confidence to become knowledgeable travelers in Spanish speaking countries as well. These will be assessed through the Listening and Reading Comprehension, Conversational, and Planned Speaking and Writing Standards by 2018. Prerequisite: Successful


 completion of Spanish I, II \& III.Graduation Standards: WL1, WL2, WL3

| CHIN101 |  |
| :--- | :--- |
| CHINESE I | Grade 9-12 |

Chinese I is a year-long course. No prior knowledge of Chinese is required. The purpose of this course is to teach and develop basic listening, speaking, reading and writing skills and to expand awareness of Chinese-speaking cultures. Students learn basic sentences and expressions which can be applied to personal situations, such as family, school, food, everyday life, and social activities. Grammar, reading, and culture are presented at this level. Oral and written (Chinese Pinyin and Chinese characters) projects are assigned throughout the year. These will be assessed through the Listening and Reading Comprehension, Conversational, and Planned Speaking and Writing Standards by 2018 .

Graduation Standards: WL1, WL2, WL3

## CHIN201 <br> Grade 10-12 <br> YEAR LONG <br> CHINESE II

Chinese II is a year-long course. The purpose of this course is to reinforce Chinese I material and continue developing proficiency in reading, writing, listening, and speaking. Students will be exposed to more spoken Chinese in the classroom and use their communication skills in real life situations dealing with the family, home, food, travel, and shopping. Students will learn more advanced grammar, written and oral communication skills. Oral, written, and performance assessments are assigned throughout the year. The course content will be assessed through the Listening and Reading Comprehension, Conversational, and Planned Speaking and Writing Standards by 2018.

Graduation Standards: WL1, WL2, WL3

## CHIN301 Grade 11-12 YEAR LONG

CHINESE III (Hybrid Virtual Learning)
The purpose of Chinese III is to continue developing proficiency in reading, writing, listening, and speaking through class discussions, guided and improvised conversations, short debates, oral reports, and role-plays. The topics include travel, holidays, and reading short stories and short newspaper articles in Chinese. This class is the combination of a traditional class model and a virtual learning model. Most of the teaching materials will be posted online, including lesson plans, course requirements, exercises, quizzes, exams, projects, audio and video clips, etc. The students will login to access these materials and will work more independently on the online component. The students will also have face-to-face classroom time with the teacher as they share the classroom with Chinese II students and are able to get help directly from the teacher in the class. Oral, written, and performance assessments are assigned throughout the year. The course content will be assessed through the Listening and Reading Comprehension, Conversational, and Planned Speaking and Writing Standards by 2018.

## VISUAL ARTS

All Noble High School students need to take two semester courses or one year long course in the visual/ performing arts (music) in order to demonstrate proficiency in the following Graduation Standards.

NHS Visual Arts Department Graduation Standards:

## VA 1: Disciplinary Literacy

VA 2: Creation, Performance, and Expression in the Visual Arts
VA 3: Creative Problem Solving
VA 4: Aesthetics and Criticism
VA 5: Visual Arts Connections
VA 6: Self-Directed Learner

| VA501 | Grade $9-12$ | SEMESTER |
| :--- | :--- | :--- |
| ART EXPLORATION |  | Lab Fee: $\$ 10.00$ |

Students will explore a variety of art media and develop a working knowledge of the elements and principles of art. In addition to creating art, students in this course are expected to read, write and talk about art.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

## VA502

DRAWING \& PAINTING
Grade 9-12
SEMESTER
In this class students will create drawings and paintings from life studies and from imagination. Our goal is to build artistic confidence through technique and regular practice. Charcoal, india ink, acrylics, watercolor, and marker are some of the materials students will use. Traditional and contemporary painting trends will be discussed (including Street Art). Be prepared to make, write and talk about artwork.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6
VA503
Grade 9-12
SEMESTER
Lab Fee: $\$ 10.00$
FIGURE DRAWING \& PORTRAITURE
This semester class will focus on the face and body as subject matter. Student will use a variety of media from drawing to printmaking to mask making as they explore the portraiture and figure to gain a working knowledge of the elements and principles of art. In addition to creating art, students in this course are expected to read, write and talk about art. Throughout the semester each student will keep her/his own works in a portfolio.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA

| VA504 | Grade $9-12$ |
| :--- | ---: |
| GRAPHIC ARTS 1 |  |
| SEMESTER |  |

GRAPHIC ARTS 1
Lab Fee \$10.00
This class covers a broad range of art forms. We will explore the fundamental components of design theory and typography, Students will gain valuable experience in the execution of creating layouts and features. Studio work will include using the Adobe Suite software and hands on projects involving screen printing and product design.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

| VA505 | Grade $9-12$ |
| :--- | :--- | SEMESTER $\quad$ Lab Fee: \$20.00

Students will learn additive, subtractive and casting techniques to build solid 3D foundation skills. Students will work with clay, wood, cardboard, metal, plaster, and will use a variety of hand tools and power tools to make their work. Students will maintain a daily sketchbook as an artistic journaling process to reflect on art history, aesthetics, and process.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

This is an introductory class designed to develop basic skills in manipulating metal; specifically copper and sterling silver. Students will make wearable and non-wearable objects. Students will be introduced and expected to employ techniques that use wire working, cold connections,
cutting and piercing, stone setting and making a ring. Basic soldering techniques will be introduced. Students will maintain a working portfolio and notebook. In addition to creating art, students are expected to read, write and talk about their art and the artwork of others.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6
VA507
Grades 9-12 SEMESTER
METALS II
Lab Fee: $\$ 20.00$
This semester course offers an expansion of techniques learned from Metals I. We will explore chain making, lost wax casting, and enameling. Students must maintain a portfolio and notebook. In addition to creating art, students are expected to read, write and talk about their art and the artwork of others.
Prerequisite: Successful completion of Metals I

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

## VA508

## PUPPET MAKING

Students will study the tradition and techniques of puppet making. Projects will include shadow puppets, marionettes, stick puppets, and theatrical life size and or multi-people puppets. Students will make and learn to walk on stilts. Students will work two and three dimensionally Students must be prepared to make, write and talk about art.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

## VA509 Grade 9-12 SEMESTER

CERAMICS I

## Lab Fee: \$15.00

This course is designed to familiarize students with a variety of hand-building, wheel-throwing and sculpting techniques using clay. Students will also explore glazing methods. In addition to creating art, students in this course are expected to read, write and talk about art.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA

VA510

## CERAMICS II

Grade 9-12
This course is a rigorous experience for the committed ceramics student who has successfully completed Ceramics 1 . Students will expand upon the skills and techniques they learned in Ceramics 1: hand-building, wheel-throwing, sculpting and glazing. In addition to creating art, students in this course are expected to read, write and talk about art.
Prerequisite: Successful completion of Ceramics I.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6
VA511
BLACK \& WHITE PHOTOGRAPHY I
Grade 9-12
The goal of this semester elective is to learn how to make beautiful, interesting black and white photographs. Students will use 35 mm manual SLR cameras and traditional wet darkroom processes as they explore the artistic side of photography. In addition to creating photos, students in this course are expected to read, write and talk about photos. Throughout the semester each student will collect and keep a portfolio of her/his work. Students are required to supply their own film and paper, but these items can be purchased at cost from the department

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

| VA512 | Grades $9-12$ |
| :--- | :--- |
| BLACK \& WHITE PHOTOGRAPHY II |  |
| SEMESTER |  |

This course is designed to give students the opportunity to expand their knowledge of the black and white photographic processes. Students will use the skills they developed in Photo I as they create photographs that utilize some experimental photography techniques. During this class we will focus on the creative, historical and aesthetic aspects of photography. Students are required to supply their own film and paper, but these items can be purchased at cost from the department.
Prerequisite: Successful completion of Photography I.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

## VA513

DIGITAL PHOTOGRAPHY I
Grade 9-12
SEMESTER
The goal of this semester elective is to learn how to make beautiful, interesting, and powerful digital photographs. Students will use digital cameras and a software photo-editing program to explore the artistic side of photography. In addition to creating photos, students in this course are expected to read, write and talk about photography. Students will collect and keep a portfolio of her/his work. Students will need a flash drive to turn in work. The $\$ 10.00$ lab fee will cover printer maintenance and the printing of some photos.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

VA514
Grade 10-12
YEAR LONG
ADVANCED ART WITH AP OPTION
Lab Fee: \$15
Do you love art and want to explore as many materials as possible? This is the place for you. Advanced art students will work to develop a personal style; strengthen 2D and 3D design skills; experiment with new materials; and build a body of work suitable for a college application. Students will have fun exploring topics such as: collective and individual identity, environment, protest in art, and the role of beauty in our daily lives. Students will work with materials ranging from: silkscreening, paint, metal, fiber, traditional drawing material, collage, plaster, clay, ink. Students are expected to maintain a daily sketchbook as an artistic journaling process to reflect on art history, aesthetics, and process. (Students may arrange AP credit on transcripts and/or submit AP portfolio. See instructor prior to selecting AP.)
Prerequisite: 2 semesters of any art class.

Graduation Standards: VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

## MUSIC \& PERFORMING ARTS

All Noble High School students need to take two semester courses or one year long course in the visual/ performing arts (music) in order to demonstrate proficiency in the following Graduation Standards.

NHS Music \& Performing Arts Department Graduation Standards:

MUS 1: Disciplinary Literacy<br>MUS 2: Creation, Performance, Expression<br>MUS 3: Creative Problem Solving<br>MUS 4: Aesthetics and Criticism<br>MUS 5: Visual and Performing Arts Connections



CHORALE
Chorale is open to all students in grades 9-12. No audition is required. It is offered as a full-year course. Students will learn the basics of choral music including music reading, sight-reading, singing, music vocabulary, proper vocal production and a variety of choral literature. A calendar of scheduled performances will be given out by the end of September.
Participation is required at all performances.

Graduation Standards: MUS 1; MUS 2; MUS 3; MUS 4; MUS 5
MUS502
TREBLE CHOIR
Treble choir is open to all girls in grades 10-12 by audition only. It is offered as a full-year course. Students will learn the basics of choral
music including music reading, sight-reading, music vocabulary, proper vocal production, and a variety of choral literature. A calendar of
scheduled performances will be given out by the end of September.
Participation is required at all performances.

Graduation Standards: MUS 1; MUS 2; MUS 3; MUS 4; MUS 5
MUS503
Grade 10-12
YEAR LONG
CHAMBER SINGERS
Chamber singers is open to students in grades $10-12$ by audition only. It is offered as a full-year course. Auditions will be held the previous year before class registration. Students will learn the basics of choral music and advanced music reading, advanced sight singing, advanced music vocabulary, proper vocal production, and a variety of advanced choral literature. A calendar of scheduled performances will be given out by the end of September.
Participation is required at all performances.

Graduation Standards: MUS 1; MUS 2; MUS 3; MUS 4; MUS 5
MUS504
MUSIC THEORY
Students will study the construction and analysis of music. Students will learn ear training, scales, chords, harmony, composition, and
rhythm. Most work will be done on computer using music notation software. This course is strongly recommended for students who intend to
pursue the study of music in college.
Prerequisite: Students must be able to read music.

Graduation Standards: MUS 1; MUS 2; MUS 3; MUS 4; MUS 5

This band performs appropriate level band music for ninth graders. Music fundamentals are stressed, along with improving overall musicianship. There are several performances, both in and out of school.
Participation is required at all performances.

Graduation Standards: MUS 1; MUS 2; MUS 3; MUS 4; MUS 5

MUS506
Grade 10-12
YEAR LONG
SYMPHONIC BAND
This band performs advanced band music. Emphasis is on high-level musicianship, and assumes the student has an understanding of most musical concepts. There are several performances both in and out of school during the year, including possible trips.

## Participation is required at all performances.

Graduation Standards: MUS 1; MUS 2; MUS 3; MUS 4; MUS 5

MUS507
Grade 9-12
YEAR LONG
JAZZ ENSEMBLE
This band studies and performs jazz and big band music. It is open to advanced musicians through audition, and performs in many concerts and festivals. Many jazz styles will be studied, including improvisation.
Prerequisite: successful audition and membership in Concert or Symphonic Band.

Graduation Standards: MUS 1; MUS 2; MUS 3; MUS 4; MUS 5
MUS520
This semester long music course will teach students the basics of playing the piano. No prior music knowledge is necessary. Students will learn to read music, play scales, and learn to play a variety of piano literature.

## Graduation Standards: MUS 1; MUS 2; MUS 3; MUS 4; MUS 5

HEALTH AND PHYSICAL EDUCATION

NHS Health and Physical Education Department Graduation Standards:
HPE 1: Decision Making
HPE 2: Communication/Self-Advocacy
HPE 3: Health Concepts
HPE 4: Influences on Health
HPE 5: Physical Fitness
HPE 6: Motor Skills
HPE 7: Personal and Social Interactions
HPE 8: Participation and Engagement

## OFFERED EVERY YEAR:

HPE201
Grade 9 - 10
SEMESTER
HEALTH I
Health I is a semester long course designed to enable the student to make healthy choices, understand various health risks, and the changes that are occur with teenagers during adolescents. Students are expected to demonstrate evidence that they have met the standards for our health education curriculum by completing state and local assessments including research and project based work.

Graduation Standards: HPE 1; HPE 2; HPE 3; HPE 4

Health II is a semester long course designed to focus on the individual and how they interact with their community and environment in a healthy way. It seeks to create students who can contribute to the overall health of their community. Students will demonstrate completion of standards in health education through state and local assessments.

Grade 11-12
SEMESTER

Graduation Standards: HPE 5; HPE 6; HPE 7; HPE 8

## THE FOLLOWING COURSES WILL BE ALTERNATED EACH YEAR

2014-2015 OFFERINGS (WILL NOT BE OFFERED IN 2015-2016)

HPE101
Grade 9 - 10
SEMESTER
PROJECT ADVENTURE
This semester long course is designed to promote team building, cooperation, and trust through a variety of activities such as large group games, group initiatives (problem solving), and trust activities. The culminating activity consists of a high elements ropes course. Students will be taught to belay, tie their own harnesses as well as all communication necessary to successfully participate in this Project Adventure, Inc. curriculum

Graduation Standards: HPE 5; HPE 6; HPE 7; HPE 8

WILL NOT BE OFFERED IN 2014-2015 (OFFERED IN 2015-2016)

## HPE102

Grade 9-10
SEMESTER
FITNESS

Graduation Standards: HPE 5; HPE 6; HPE 7; HPE 8
MULTIMEDIA AND TECHNOLOGY

NHS Multimedia and Technology Department Graduation Standards:
SCI 1: Scientific Argumentation
SCI 2: Experimental Design
SCI 19: Engineering Design
VA 1: Disciplinary Literacy
VA 2: Creation, Performance, and Expression in the Visual Arts
VA 3: Creative Problem Solving
VA 4: Aesthetics and Criticism
VA 5: Visual Arts Connections
VA 6: Self-Directed Learner

Students will be introduced the history of women in the work place. Students will participate in hands-on activities related to 10 different career areas such as plumbing, residential wiring, tile setting, residential construction techniques, gas welding, pneumatics and others. Students will work with a partner for ten hours in each area and then switch to another area. Learn to maintain a home, and be more self reliant.

Graduation Standards: SCI 1; SCI 2; SCI 19

## TECH501 <br> Grade 9-12 <br> SEMESTER

INDUSTRIAL TECHNOLOGY
Student will be introduced to hands-on activities related to 10 different career areas such as plumbing, residential wiring, tile setting, residential construction techniques, gas welding, pneumatics and others. Students will work with a partner for ten hours in each area and then switch to another area.

TECHNICAL DRAWING
Students will study drafting tools and techniques that pertain to all types of drafting. T-squares, triangles, scales, and compasses will be used to produce different kinds of drawings. Various types of lines, symbols, and dimensions will be taught. This class is a prerequisite to all CAD courses.

Graduation Standards: SCI 1; SCI 2; SCI 19

TECH503
Grade 9-12
SEMESTER
2D DESIGN with AutoCAD
A study of the basic principles of computer aided drafting. This course will be useful to students planning careers in mechanical or construction trades, or students interested in engineering or architecture. Students will become familiar with the AutoCAD software for 2D design.

Graduation Standards: SCI 1; SCI 2; SCI 19

## TECH505 Grade 10-12 SEMESTER

3D DESIGN with INVENTOR
This course will allow students to further their knowledge of the AutoCAD software by learning more advanced commands and techniques. Students will also be working with the 3D solid modeling software Inventor, to make professional presentation drawings. Use a 3D printer to do auxilliary manufacturing and prototyping. May be used to fill the computer proficiency requirement.
Prerequisite: 2D DESIGN

Graduation Standards: SCI 1; SCI 2; SCI 19

TECH506
Grade 10-12
SEMESTER
DESIGN A DREAM HOME
This course is designed to give students the basic background needed for residential architecture. A history and appreciation of building design as well as practical application will be our focus. Students are expected to design and plan their own residential building.

This course can be counted as a one semester course towards the visual arts graduation requirement.

Graduation Standards: SCI 19, VA 1; VA 2; VA 3; VA 4; VA5 ; VA 6

TECH507
SEMESTER

## BUILD A DREAM HOME

This course is designed to build on students' prior knowledge from Design a Dream Home. The student will design and draft a full set of home plans. Students will then build a scaled model of the home.
Prerequisite: DESIGN A DREAM HOME

This course can be counted as a one semester course towards the visual arts graduation requirement.

Graduation Standards: SCI 19; VA 1; VA 2; VA3; VA 4; VA 5; VA 6

TECH508
Grade 9-12
SEMESTER
WEB ANIMATION \& GAME DESIGN
Students will learn to use Adobe Flash to create interactive web sites and games. The purpose of this class is to help students develop the skill that is most needed in the job market in the 21st century. Students will learn the fundamentals of Photoshop and Dreamweaver, but focus on animation and interactivity techniques. Upon successful completion of this course, students will be able to write basic Action Script and manipulate objects, text and sound in order to create interactive websites and design simple games delivered through websites.
This course can be counted as one semester course towards the visual arts graduation requirement.

## TECH509

## ADVANCED WEB DEVELOPMENT \& DESIGN

Students will learn the basic knowledge of the web site development process. They will learn how to develop web pages using HTML standards and CSS for page layout and site design. Students will also incorporate text formatting, graphic, tables, etc. for web page design. Current Web Premium Suite such as Adobe Photoshop, Illustrator, Dreamweaver, Flash and Flash Catalyst will be used. Students are expected to develop and maintain attractive, informative and interactive websites for themselves or for teachers and business owners in the community.
This course can be counted as one semester course towards the visual arts graduation requirement.

Graduation Standards: SCI 19; VA 1; VA 2; VA 3; VA 4; VA 5; VA 6

## THE FOLLOWING COURSES WILL BE ALTERNATED EACH YEAR:

2014-2015 OFFERINGS (WILL NOT BE OFFERED IN 2015-2016)

TECH601
Grade 10-12
YEAR LONG
AP COMPUTER SCIENCE
This class provides an extensive and thorough investigation of Java programming techniques. The class is open to students who display a high interest level and proven academic performance. Upon course completion, students will be prepared for the College Board Advanced Placement exam. Success on this exam earns college credit at many colleges and universities.

Graduation Standards: SCI 19

WILL NOT BE OFFERED IN 2014-2015 (OFFERED IN 2015-2016)

| TECH510 | Grade 11-12 |
| :--- | :--- |
| CISCO NETWORKING |  |
| TECH511 | Grade 11-12 |
| INTRODUCTION TO PROGRAMMING LANGUAGE |  |

## INTRODUCTION TO PROGRAMMING LANGUAGE

## PLANNING YOUR COURSEWORK

Guidance counselors meet with students in March/April to explain the course registration process. Required courses for each grade level are reviewed, as are graduation requirements. Academic advising is also available to students and parents. Parent questions can be addressed by calling the Guidance Office at 676-2665 or via email.

Weighted grades - An additional weight of .5 quality points will be added to a student's GPA computation for each AP or Early College course taken.

Academic honors for graduation are calculated after first semester of the senior year.

Progress reports are issued two times each semester. Report cards are issued at the end of each semester.

Honor Roll is determined at the end of each semester and is categorized as follows: all A's - highest honors, all A's \& B's - honors, and all A's and B's with one C-honorable mention.

Course withdrawal that occur before the first before the first progress report, receive a WP (Withdraw Passing) or a WF (Withdraw Failing) on the transcript. If the withdrawal occurs after the first progress report, the student receives a WP or WF and the student's letter grade at that point is figured into the GPA. The grade will be factored in as $1 / 4$ credit rather than $1 / 2$. If the withdrawal occurs at the midyear, students will earn the first semester grade and credit if the grade warrants.

Please use this Course Planner to develop a plan for your years at Noble High School and discuss your choices with your parents and your guidance counselor.

| Subject Area | Courses | 9 | 9 | 10 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English | 5 |  |  |  |  |  |  |
| Math | 5 |  |  |  |  |  |  |
| Science | 4 |  |  |  |  |  |  |
| Fine Arts | 1 |  |  |  |  |  |  |
| Social Studies | 3 |  |  |  |  |  |  |
| Health | 1 |  |  |  |  |  |  |
| P.E. | 1 |  |  |  |  |  |  |
| Electives | 4.5 |  |  |  |  |  |  |
| Community Service | $\begin{gathered} 60 \\ \text { hours } \end{gathered}$ |  |  |  |  |  |  |
| Grade Level Exhibitions |  |  | Freshman Round Table |  | Soph. Gateway | Junior Pathway | Senior Project |
| TOTAL |  |  |  |  |  |  |  |

