# NORTHTOWN ACADEMY GRADUATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Required Credits - 27</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English/Writing</strong></td>
<td>6.0 Credits</td>
</tr>
<tr>
<td>● 1.0 credit English 1: Multicultural Literature</td>
<td></td>
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<tr>
<td>● 1.0 credit English 2: World Literature &amp; Composition</td>
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<tr>
<td>● 1.0 credit English 3: American Literature &amp; Composition OR AP Lang</td>
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<tr>
<td>● 1.0 credit English 4: Student Choice OR AP Literature</td>
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<tr>
<td>● 1.0 credit Writing 1: Foundations and Form</td>
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<tr>
<td>● 1.0 credit Elective Writing</td>
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<tr>
<td><strong>Social Studies</strong></td>
<td>3.5 Credits</td>
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<tr>
<td>● 1.0 credit Human Geography/AP Human Geography</td>
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<tr>
<td>● 1.0 credit World History/AP World History</td>
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<tr>
<td>● 1.0 credit US History/AP US History</td>
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<tr>
<td>● 0.5 credit Civics</td>
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<tr>
<td><strong>Science</strong></td>
<td>3.0 Credits</td>
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<tr>
<td>● 1.0 credit Chemistry</td>
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<tr>
<td>● 1.0 credit Biology/AP Biology</td>
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<tr>
<td>● 1.0 credit Physical Science or Advanced Science Electives</td>
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<tr>
<td><strong>Math</strong></td>
<td>4.0 Credits</td>
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<tr>
<td>● 1.0 credit Algebra 1 (if not passed in 8th grade)</td>
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<tr>
<td>● 1.0 credit Geometry</td>
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<tr>
<td>● 1.0 credit Algebra 2 or Pre-Calculus Honors</td>
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<tr>
<td>● 1.0 credit Advanced Math (2.0 credits of Advanced Math required if students starts with Geometry)</td>
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<tr>
<td><strong>World Languages</strong></td>
<td>2.0 Credits</td>
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<tr>
<td>● 2 credits of any world language</td>
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<tr>
<td><strong>Physical Education</strong></td>
<td>2.0 Credits</td>
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<tr>
<td>● 0.5 credit Health</td>
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<tr>
<td>● 1.5 credits Physical Education</td>
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<tr>
<td><strong>Electives</strong></td>
<td>6.5 Credits</td>
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<tr>
<td>● 1.0 credit Art, Music, or Technology</td>
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<tr>
<td>● 5.5 credits Choice electives, AP courses, Advanced Science courses, Writing Courses, Dual Enrollment College courses</td>
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## COURSE CATALOG GUIDANCE

This course catalog is designed to help students create 4-year plans and to track progress toward graduation. In addition, the catalog offers students the opportunity to identify and explore opportunities to develop new interests, sharpen particular academic skills, reflect on career options, and prepare for college.

Every year, students should review the graduation requirements and their report cards to determine which credits are completed and which are remaining. Students must meet with grade level counselors to plan for the upcoming school year and to obtain counselor permission for particular courses.

As you peruse the catalog, keep in mind the following:

- 1.0 credit courses are a **full year**;
- 0.5 credit courses are a **semester**;
- AP courses may be taken as electives or for required course credit;
- Students are encouraged to take Math and Science courses **beyond** the basic requirements;
- Students must pass dual enrollment/dual credit courses that are taken in lieu of a high school course;
- Some courses require a fee. Students are required to pay those fees in order to receive credit in the course;
- All students must complete the 40 hour service learning requirement, in addition to the course requirements, in order to qualify for graduation.
WORK STUDY

Northtown Academy offers elective credit to students who work part time jobs after school.

Student Qualifications:
- Students must already have a job.
- Have to be a Junior or Senior.
- 2.5 unweighted cumulative GPA
- Maintain a 2.75 current GPA, at each progress report, for the duration of the semester
- Attendance: 90% cumulative attendance or higher

Process:
- Work Study credit can be applied for through the Student Services website anytime during the current semester
- Students will submit work hours through a google doc bi-weekly
- The Work Study Coordinator will track hours and award credit
- Submission of a minimum of 75 hours, employer evaluation, and reflection paper are due the first day of Semester final exams

Credits:
- Students will receive 0.25 elective credits for each work study cycle
- Students can apply for up to 1.0 credits throughout High School.
- Student can apply for work study credit once per semester

ATHLETIC PHYSICAL EDUCATION ALTERNATIVE CREDIT

Northtown Academy offers physical education credit options for athletes.

Student Qualifications:
- Students must participate in a Northtown athletic team
- Attendance: 90% attendance rate or higher for all practices, games, and other required events

Process:
- Student must try out for and make an athletic team and pay any applicable fees
- Student will apply for Athletic Physical Education credit through the Student Services webpage
- Coaches will take attendance for all practices, games, and other events
- At the end of the season, credit will be awarded to athletes in good standing
- Athletes are required to attend practice during periods of ineligibility (due to poor academic performance, attendance, timeliness, or conduct), such attendance does not count toward the 90% mandate.
- Pursuing credits for sports participation is optional and not required to be part of a team.

Credits:
- Students will receive 0.25 physical education credits for each season
- Students can repeat this for up to 1.0 credits throughout High School.
- Credits are not awarded for athletic participation on sports teams outside of the school’s athletic program.
DUAL ENROLLMENT COLLEGE COURSES

CICS Northtown Academy has partnered with the City Colleges of Chicago to allow high school juniors and seniors to take college level courses and receive both high school and college credit.

Student Qualifications:
- Minimum 2.5 unweighted GPA
- Attendance: 90% cumulative attendance or higher
- Minimum 480 EBRW or 530 Math on official SAT (PSAT 8/9 or PSAT 10 do not qualify); OR
- Minimum score of 21 on ACT English or 21 on ACT Math; OR
- Minimum score of 6 on City College’s Ready to Write or 46+ on ALEKS Math test

Process:
- Complete application at http://apply.ccc.edu
- Complete Dual Enrollment application packet found on Student Services website
- Submit official transcript (received from counselor)
- Submit parent permission form

Credits:
- Submits unofficial transcript to counselor receive course credit
- Must receive a C or higher to earn college and high school credit

Scheduling:
- Students will work with their counselor to pick appropriate courses
- All courses are scheduled for one or two classes after school per week or on Saturday mornings.
- Students will be allowed to have a free period in the middle of the day, leave campus, or arrive late 1 hour to provide them sufficient time to complete college coursework

** All City Colleges courses can be taken for elective credit **

ELIGIBLE COURSES TO REPLACE GRADUATION REQUIREMENTS

Students can use the following courses to replace graduation requirements

<table>
<thead>
<tr>
<th>City Colleges Course</th>
<th>Northtown Graduation Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY 121 Biology I</td>
<td>Biology</td>
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<tr>
<td>ENGLISH 101 Composition</td>
<td>Intro to College Writing</td>
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<tr>
<td>One (1) of the following:</td>
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<tr>
<td>One (1) of the following:</td>
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<tr>
<td>SPANISH 101 First Course Spanish</td>
<td>Spanish 1 OR Spanish</td>
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<tr>
<td>SPANISH 102 Second Course Spanish</td>
<td>Spanish 2</td>
</tr>
<tr>
<td>One (1) of the following:</td>
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<tr>
<td>One (1) of the following:</td>
<td>Advanced Math</td>
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<tr>
<td>MATH 118 General Education Math</td>
<td>Economics</td>
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<td>MATH 125 Statistics</td>
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<tr>
<td>MATH 143 Precalculus</td>
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<tr>
<td>MATH 207 Calculus &amp; Analytic Geometry I</td>
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<tr>
<td>One (1) of the following:</td>
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<tr>
<td>One (1) of the following:</td>
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<tr>
<td>ECON 201 Principles Of Economics I</td>
<td>Economics</td>
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<tr>
<td>ECON 202 Principles Of Economics II</td>
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<tr>
<td>POL SCI 201 The National Government</td>
<td>Civics</td>
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<tr>
<td>One (1) of the following:</td>
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<tr>
<td>One (1) of the following:</td>
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<tr>
<td>HISTORY 111 History of American People To 1865</td>
<td>US History</td>
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<tr>
<td>HISTORY 112 History of American People From 1865</td>
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<tr>
<td>HISTORY 114 The Afro-American In US History</td>
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<tr>
<td>HISTORY 115 Afro-American History Since 1865</td>
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<tr>
<td>HISTORY 216 History of Latin America in the U.S.</td>
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LEADERSHIP DEVELOPMENT

Northtown Teaching Assistants (1.0 credit)
Grade: Sophomores, Juniors, Seniors
Prerequisites: Approval through Leadership Program application
Northtown Teaching Assistants will have an opportunity to see what it is like on the other side of the desk as they work alongside Chicago’s finest teaching staff. Teaching Assistant duties will include all facets of a teacher’s day including making copies, assisting struggling students, preparing materials, working in small groups, and other duties as assigned.

Campus Life Leaders (1.0 credit)
Grade: Sophomores, Juniors, Seniors
Prerequisites: Approval through Leadership Program application
Campus Life Leaders is a program dedicated to raising and promoting school spirit. With the guidance of the sponsors, students in this group engage in activities that are designed to infuse students and staff with school pride and celebrate the school’s achievements. This group meets all year, and students should expect to spend time after school to support the program’s mission.

Math Lab Tutor (1.0 credit)
Grade: Sophomores, Juniors, Seniors
Prerequisites: Approval through Leadership Program application
Tutors work alongside teachers to assist students with help on assignments in math classes. Tutors will be provided ongoing training to learn the skills necessary in peer to peer tutoring, but should be comfortable working with a wide variety of students.

Writing Lab Tutor (1.0 credit)
Grade: Juniors, Seniors
Prerequisites: Approval through Leadership Program application
Tutors work alongside teachers in the Writing Lab to assist students with help on assignments in all classes. Tutors will be provided ongoing training to learn the skills necessary in peer to peer tutoring, but should be comfortable working with a wide variety of students.

IGNITE Peer Mentors (0.5 credit)
Grade: Juniors, Seniors
Prerequisites: Approval through Leadership Program application
IGNITE Peer Mentors is a nationally recognized program in which upperclassmen mentor freshmen on their transition from middle to high school. Mentors meet consistently with their mentees through the year and support their academic and social-emotional growth.

COLLEGE EXPOSURE, SUPPORT, AND ACCESS

Junior College Seminar (0.5 credit)
Prerequisites: Junior standing; Passed or concurrently taking Algebra 2
This course is designed to help students prepare for the rigors of taking the PSAT and/or SAT tests offered by the College Board. Our primary goal is to identify and implement test taking strategies using prerequisite knowledge to increase student performance. At the end of the course, students must take a National SAT, in addition to the state test in April.

Senior Seminar (0.5 credit)
Prerequisites: Senior standing
The primary goal of this course will be post-secondary planning and applying to colleges and postsecondary schools. The students will participate in exploring careers, researching and matching with colleges, writing resumes, writing application essays, submitting applications, financial aid forms, and applying for scholarships. This class will also introduce students to concepts important in the successful transition from high school to college life and the workforce through weekly, mandatory, seminars and lectures.

SAT Prep: Independent Study (0.25 credit)
Prerequisites: Junior standing
Course Fee: $30 for student account to Method Test Prep
This independent course is designed to help students self-prepare for the SAT to be completed during their lunch period or free time. Independent study students will be assigned an online account through Method Test Prep where it will provide them with an individualized plan that students should work through. Students should be strong independent workers and be self-directed. Completion of the online program is required for course credit.
City Colleges of Chicago Dual Enrollment (1.0 credit per semester)
Grade: Juniors, Seniors
Prerequisites: Permission of counselor
Course Fee: Tuition Free; Student is responsible for cost of textbooks
Dual enrollment courses offer high school students great savings in time and money by providing both high school and college credit through the City Colleges of Chicago. Northtown students will enroll in a semester long college course that is taken after school or online. Students are responsible for enrolling and passing college courses with a ‘C’ or better.

ENGLISH

English 1: Multicultural Literature (1.0 credit)
English 1: Multicultural Literature Honors (1.0 credit)
Prerequisite: None
This course equips readers with competency and confidence in four areas: academic reading, reading for global engagement, reading for community engagement, and reading literature. It heavily emphasizes nonfiction texts and media, and intentionally incorporates diverse voices and perspectives. The ultimate goal of the course is for students to have flexibility, functionality, and the ability to self-calibrate while facing complex texts across disciplines for a variety of purposes.

English 2: World Literature & Composition (1.0 credit)
English 2: World Literature & Composition Honors (1.0 credit)
Prerequisite: Completion of English 1: Multicultural Survey or Equivalent
Sophomore students will engage in the reading of works from a variety of place and perspectives to understand how universal themes span culture and time periods. Through the use of a variety of anchor and mentor texts and supplemental works (novel, short stories, poems, articles, etc.), students will further develop their ability to interpret and analyze literary and information selections. Students continue to develop more precise literary analysis skills, and write argument pieces, focusing on the skills of topic development, organization, diction/syntax and the use of textual evidence.

English 3: American Literature & Composition (1.0 credit)
English 3: American Literature & Composition Honors (1.0 credit)
Prerequisite: Completion of English 2: World Literature or Equivalent
American identity through multicultural, canonical and non-fiction texts. This course will explore American literature from the Puritan era to Post-Modernism, paying specific attention to the history of the periods and the influences of race, class, and gender on society. This course, through the analysis of each work, will study history through literature. Texts will include the novel, drama, non-fiction, poetry, and short story. Students will be able to incorporate grammar skills into the writing they are doing about their reading.

English 4: Survey of Literature (1.0 credit)
English 4: Survey of Literature Honors (1.0 credit)
Prerequisite: Completion of English 3 or equivalent
Students will be put into a year-long English Literature Course that covers an array of literature. The literature may focus on any of the following: Gothic American Lit, Philsosophy & Lit, Mythology, or Post-Apocalyptic Lit. There are chances for other forms of lit to be introduced throughout the class as well. Students will be reading, analyzing, and writing in this class.

WRITING

Writing 1 (1.0 credit)
Writing 1 Honors (1.0 credit)
Prerequisite: None
Freshmen students will focus on fundamental high school/college grammar skills necessary for college composition and presentation, in connection with a focus on basic argument composition structure necessary for college level composition requirements: introduction construction, body paragraph creation, argument/persuasion structure, conclusion construction, coherence, cohesion, and MLA formatting.

WRITING ELECTIVES

Intro to College Writing (0.5 credit)
Intro to College Writing Honors (0.5 credit)
Prerequisite: Senior Standing
In this course, students develop academic writing and expository prose techniques for creating clear and coherent papers. The course covers a wide range of skills necessary for college-level work including sentence-level issues, theses, paragraph structure, organization, form, and style. A focus will
be placed on writing styles appropriate to audience and purpose. In addition, the process of writing and revision will be emphasized during the course. Students develop critical thinking skills and learn to evaluate, utilize, and cite primary and secondary printed and electronic sources. Students begin to cultivate a strong, individual, and creative voice by developing oral communication skills for a variety of settings.

Creative Writing (0.5 credit)
*Prerequisite: Completion of Writing 1*
In this class students will focus on the following types of writing: fiction, descriptive, memoir, poetry, and more. The goal of this class is to find your stylistic voice as a writer.

Film Studies (0.5 credit)
*Prerequisite: Completion of Writing 1*
In Film Studies, we learn to analyze film and how a director expresses his/her vision in film. We begin the year examining what makes a “great” film then focus on analyzing and evaluating a variety of “American Voices” in genre film (horror, romantic comedy, sci-fi, western).

Public Speaking (0.5 credit)
*Prerequisite: Completion of Writing 1*
The number one fear for most people is public speaking. This class will not only talk about how to overcome this fear, but will help you become a confident public speaker. We will give impromptu speeches, research speeches, group speeches, and persuasive speeches.

Broadcasting (1.0 credit)
*Prerequisites: Completion of English 1*
This course will emphasize news-gathering, writing, video recording, editing, and the study of mass media. Students will also identify various news sources and use interview skills to create stories using video and editing software. Students work in collaborative teams to produce projects using cameras, while learning the basics of studio and field production, lighting and sound. Students will produce a regular NTA news production to be shared with the entire school throughout the school year.

AP ENGLISH and WRITING CLASSES

AP Language & Composition (1.0 credit)
*Prerequisite: Completion of English 2*
*AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)*
Students in this Advanced Placement, introductory college-level course read and carefully analyze a broad and challenging range of nonfiction and fiction prose selections, deepening their awareness of rhetoric and how language works. Through close reading and frequent writing, students develop their ability to work with language and text with a greater awareness of purpose and strategy, while strengthening their own composing abilities. Course readings feature expository, analytical, personal, and argumentative texts from a variety of authors and historical contexts.

AP English Literature & Composition (1.0 credits)
*Prerequisite: Completion of AP Language or teacher recommendation*
*AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)*
AP English Literature engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the way writers use language to provide both meaning and pleasure for their readers.

COURSES FOR ENGLISH LANGUAGE LEARNERS

English 1 ELL (1.0 credit)
*Prerequisite: Recommendation by instructor*
In English 1 ELL, students continue to develop essential reading, writing, speaking, and listening skills through the study of a variety of diverse texts, including poetry, short stories, novels, and plays. They explore questions of identity and culture, while working in a collaborative setting. Another major focus of the course is to continue to facilitate growth in both academic and social English.

English and Writing 1 ELL (2.0 credit)
*Prerequisite: Recommendation by instructor*
In English and Writing 1 ELL, students continue to develop essential reading, writing, speaking, and listening skills through the study of a variety of diverse texts, including poetry, short stories, novels, and plays. Using these model texts, students will acquire and develop English writing and grammar skills that will prepare them for both success on standardized tests and overall clearer communication. While they
explore questions of identity and culture, they also continue to facilitate growth in both academic and social English.

**English 2 ELL (1.0 credit)**
**Prerequisite: Completion of English 1 ELL or recommendation by instructor**
In this course, students will discuss and compare themes and issues essential to different cultures and societies. Students will be exposed to both classic and contemporary literature from different parts of the world, including but not limited to Latin America, Middle East, Asia, and Africa. By studying novels, short stories, poems, and articles from a variety of cultural perspectives, students will continue developing their academic English skills, including those in reading, writing, listening, and speaking.

**English 2 Bilingual (1.0 credit)**
**Prerequisite: Recommendation by instructor**
In *English 2 Bilingual*, in both English and Spanish, students will read works from a variety of places and perspectives to understand how universal themes span culture and time periods. Through the use of varied anchor and supplemental texts (novels, plays, poems, short stories, etc), students will develop their ability to interpret and analyze literature. Students will write argument and literary analysis pieces, focusing on the skills of topic development, organization, diction/syntax, and the use of textual evidence. / En inglés y en español, los estudiantes leerán obras de muchos lugares y de muchas perspectivas para entender cómo las temas universales abarcan la cultura y el tiempo. A través del uso de una variedad de textos (novelas, obras de teatro, poemas, cuentas cortas, etc), los estudiantes desarrollarán sus habilidades de interpretar y analizar la literatura. Los estudiantes escribirán ensayos argumentativos y del análisis de la literatura, enfocándose en las estrellas del desarrollo temático, la organización, la dicción/el sintaxis y el uso de la evidencia textual.

**English 3 ELL (1.0 credit)**
**Prerequisite: Completion of English 2 ELL or recommendation by instructor**
In *English 3*, students explore the history and collaborative nature of literature through a variety of diverse texts from poetry to young adult novels. In addition, students focus on language structure, grammar, and speaking skills to continue to develop language function. This course culminates in an original small-group project centered around readings and activities from the year.

**English 4 ELL (1.0 credit)**
**Prerequisite: Completion of English 3 ELL or recommendation by instructor**
In *English 4*, students explore the history and collaborative nature of literature through a variety of diverse texts from poetry to young adult novels. In addition, students focus on language structure, grammar, and speaking skills to continue to develop language function. This course culminates in an original small-group project centered around readings and activities from the year.

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**MATHEMATICS**

**Algebra 1**
**Algebra 1 Honors (1.0 credit)**
**Prerequisite: None**
In *Algebra 1*, students gain an understanding of the properties of real numbers and formalize the language of functions, including linear and quadratic. Students explore the behavior of functions numerically, graphically, analytically, and verbally. Students use technology to discover relationships, test inferences, and solve problems. Students write expressions, equations, and inequalities from physical models. A graphing calculator is required.

**Geometry**
**Geometry Honors (1.0 credit)**
**Prerequisite: Completion of Algebra 1 credit or placement test**
In *Geometry*, students develop reasoning and problem solving skills as they study topics such as congruence and similarity, and apply properties of lines, triangles, quadrilaterals, and circles. Students also develop problem solving skills by using length, perimeter, area, circumference, surface area, and volume to solve real-world problems. A graphing calculator is required.

**Algebra 2**
**Algebra 2 Honors (1.0 credit)**
**Prerequisite: Completion of Geometry or Algebra 1 Honors**
The content of *Algebra 2* is organized around families of functions, including polynomial, exponential, radical, and rational functions. Students work with functions graphically, numerically, analytically, and verbally, as well as in real-world situations. A graphing calculator is required.

**Precalculus Honors (1.0 credit)**
**Prerequisite: Completion of Geometry Honors**
In *Precalculus*, students will study functions through a graphical, algebraic, and numerical analysis. In addition to reviewing linear and quadratic functions, students are introduced to polynomial, rational, trigonometric,
logarithmic, and exponential functions. Throughout the course, students will explain their reasoning both verbally and in written form, and apply their knowledge to real world situations. A graphing calculator is required.

**Precalculus (0.5 credit)**  
*Prerequisite: Completion of Algebra 2*  
Upon successful completion of this course, students are able to analyze and graph functions, including linear, quadratic, polynomial, rational, exponential, and logarithmic. Students will also be able to apply these functions to application problems. Students justify their reasoning and understanding verbally, in writing, and with models. A graphing calculator is required.

**Calculus (0.5 credit)**  
*Prerequisite: Precalculus*  
This course introduces students to the fundamental topics in Calculus. Students will study limits of functions, continuity, derivatives, and integrals. A graphing calculator is required.

**AP Calculus AB (1.0 credit)**  
*Prerequisite: Completion of Precalc Honors*  
*AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)*  
**AP Calculus AB** is a rigorous college level course in differential and integral calculus with emphasis on theory and application. This course includes analysis of graphs, limits of functions, asymptotic and unbounded behaviors, and continuity as a property function, concept of a derivative, derivative as a point, derivative as a function, interpretations and properties of definite integrals, application of integrals, fundamental theorems of calculus, techniques of antidifferentiation and the application of antidifferentiation.

**Personal Finance (0.5 credit)**  
*Prerequisite: Completion of Algebra 2 or equivalent*  
In **Personal Finance**, students will survey the basic personal financial needs of most individuals. This course emphasizes the fundamentals of budgeting, saving, checking, investments, credit, the wise use of insurance, and paying and preparing income tax returns. Students will build confidence in their own financial decision-making and work towards empowering themselves to save, budget, avoid debt, spend wisely, and invest.

**College Algebra (0.5 credit)**  
*Prerequisite: Completion of Algebra 2 or equivalent*  
This course presents traditional concepts in college algebra. Topics include real numbers, equations and inequalities, exponents and polynomials, lines and systems, functions and graphs, rational expressions, radical expressions, and geometry.

**Statistics (0.5 credit)**  
*Prerequisite: Completion of Algebra 2 or equivalent*  
**Statistics** includes the study of: basic descriptive statistics including frequency distributions, mode, mean and standard deviation; permutations, combinations, probability rules and Bayes Theorem; binomial and normal distributions; basic inferential statistics including sampling theory, confidence intervals for means and proportions, test of hypotheses; chi-square distribution; and introduction to correlation and regression. A graphing calculator is required.

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**SCIENCE**

**Physical Science (1.0 credit)**  
*Prerequisite: None*  
**Physical Science** is a lab based course that combines the traditional college preparatory courses of biology, chemistry and physics. This curriculum covers four units of scientific study in the span of one academic year. Successful completion of the **Physical Science** program fully prepares the students with skills to be used in college-preparatory courses such as biology, physics, chemistry and AP-level science courses.

**Chemistry (1.0 credit)**  
**Chemistry Honors (1.0 credit)**  
*Prerequisites: Completion of Physical science or placement test*  
This course explores the question, what is everything around me made of? In seeking the answer to this question students access computer simulations to learn about atoms, molecules, compounds, and chemical bonds. Experiments are utilized to explore how acids and bases react when mixed together. Demonstrations allow students to witness what happens to solids, liquids, and gases under varying conditions. Inquiry activities encourage students to
explore how heat and nuclear reactions alter the world around us, for better or for worse. Students leave this course with an understanding of how the physical world functions at a microscopic level.

**Biology (1.0 credit)**

Prerequisites: Completion of Chemistry

This course will enable students to understand and appreciate the importance of biology by examining the diverse systems of life. This upper-level class is designed to prepare students for college level biology courses. Emphasis will be placed on the molecular basis of life and include investigations in bioethics, evolution, genetics, and the changing environment. Students will integrate concepts that they have learned in chemistry, physics, and physical science to synthesize their scientific learning in high school.

**AP Biology (1.0 credit)**

Prerequisites: Completion of Chemistry Honors

AP Biology is a college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

**Physics Honors (1.0 credit)**

Prerequisites: Completion of Chemistry and Biology

This course provides mathematical and conceptual exposure to the fundamental principles and processes of the physical universe. Topics include motion, forces, momentum, orbits, energy, heat, electricity, magnetism, and electromagnetic radiation. Upon completion, students are able to explain any phenomena observed in the universe both conceptually and mathematically. Demonstrations, experiments, inquiry activities, computer simulations, and design builds are utilized to create a hands on experience.

**Introduction to Engineering (1.0 credit)**

Prerequisites: Completion of Chemistry and Biology

Course Fee: $100 lab fee (reduced for Free/Reduced)

Dual Credit Fee: $200 for 3 college general credits

This is a project based course that serves three purposes. First, to introduce students to the design process as they create pinhole cameras and redesign piggy flashlights. Second, to introduce students to a variety of engineering fields. Students discover how to brew a perfect cup of coffee as chemical engineers, build and test earthquake safe buildings as architectural engineers, write computer code to generate music as programmers and design aerial imagery to identify victims of natural disasters as systems engineers.

**Anatomy and Physiology (0.5 credit)**

Prerequisites: Completion of Chemistry and Biology

Anatomy and Physiology is the study of the structure and function of the human body. This course focuses on answering the question, how does a human body function normally and what happens when it breaks down? Each unit in this course will focus on the anatomy of different systems in the human body such the muscular, skeletal, circulatory, respiratory, nervous and reproductive system. Students will investigate the diseases and disorders that can affect each of these symptoms and find possible solutions. This class provides a hands-on learning experience in which laboratory work includes dissection of preserved specimens, microscopic study, physiologic experiments, computer simulations, and multimedia presentations.

**Cooking Through Science (0.5 credit)**

Prerequisite: None

Cooking through Science will be an innovative class, combining all Science courses (Biology, Chemistry, Physics and Physical Sciences) with the Art of Cooking. Students will have an opportunity to not only think about what they put into their bodies, but will learn how to create nutritious food. Students will be able to not only learn cool cooking techniques, but can also learn where their food comes from, what happens to food when it is cooked and why these processes occur. Cooking through Science will be an elective class that combines the academic rigor of Science with the vocational skill of how to cook and bake.

**Introduction to Public Health (0.5 credit)**

Prerequisite: Completion of Chemistry and Biology

In this course students will study different human diseases and learn about
epidemics and outbreaks that have killed humans throughout history. This course will introduce the basics of microbiology and will explore the impacts of infectious diseases around the world. Significant diseases will be examined such as the Bubonic Plague, Smallpox, AIDS and Zika. Students will learn why some diseases are done away with while others continue to give us trouble.

**Forensics (0.5 credit)**

*Prerequisites: Completion of Chemistry and Biology*

Forensic science is the process of using science to solve crimes. Students in this course will learn how to collect evidence found at a crime scene and how to properly analyze this evidence. Topics covered in this course will include fingerprinting, blood and blood spatter analysis, hair and fiber examination, DNA analysis, and toxicology. Forensic science is rich in exploration and lab investigation which applies many disciplines of scientific study such as biology, anatomy, chemistry, and physics to solving crimes.

**Aquatic Science (0.5 credit)**

*Prerequisites: Completion of Chemistry and Biology*

Aquatic Science is the study of the marine and freshwater ecosystems. This course focuses on the habitats and its inhabitants of different ecosystems found in the world. Students will also investigate the human impact on aquatic ecosystems and what it may lead to in the future. NTA has partnered with Shedd Aquarium to bring resources into the classroom and give students opportunities to visit and speak with professionals involved in aquatic science.

**AP Human Geography (1.0 credit)**

*Prerequisites: Placement by department team*

*AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)*

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

**World History (1.0 credit)**

**World History Honors (1.0 credit)**

*Prerequisites: Completion of Human Geography*

A survey history class focusing primarily on reading skills, study skills, and historical thinking skills. The course begins with the Big Bang and ends with modern day history and conversations on the future. Throughout the year, the course discusses significant thresholds between time periods, important cultural and political characteristics of various societies to provide students with a general understanding of the course of human history. Students are taught to engage history through a variety of learning experiences and consider information in many formats and from countless sources.

**AP World History (1.0 credit)**

*Prerequisites: Completion of Human Geography*

*AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)*

The AP World History course focuses on developing students’ understanding of world history from approximately 8000 BCE to the present. This college-level course has students investigate the content of world history for significant events, individuals, developments, and processes in six historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past.
U.S. History (1.0 credit)

Prerequisites: Completion of Human Geography

United States History aims to engage students in studying the political, social, and economic development of the United States from the pre-colonial period through contemporary history. Students will especially focus on how the current American political system was established, challenged, and threatened. Students will also focus on various social attitudes, norms, movements, and standards that have shaped public American attitudes today. In all, students will be expected to think critically about American history—its institutions, political figures, and social norms—in order to better understand the America we live in today.

AP U.S. History (1.0 credit)

Prerequisites: Completion of World History

AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)

The AP U.S. History course focuses on developing students’ understanding of American history from approximately 1491 to the present. The course has students investigate the content of U.S. history for significant events, individuals, developments, and processes in nine historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. That students explore throughout the course in order to make connections among historical developments in different times and places.

Civics (0.5 credit)

Prerequisites: Completion of World History

History is the study of how the world used to be, Civics is the study of how the world could and should be, with a peak behind the curtain to examine how government actually functions. What does it mean to be civilized? How do members of civilized society organize themselves? What sacrifices must be made for the good of the entire society? We try to answer these questions in civics, focusing on the rights and responsibilities of citizens of the United States and state of Illinois.

Economics (0.5 credit)

Prerequisites: Completion of World History

Economics explores how humans behave when faced with a choice. Should I go to college or not? Should I spend my money on new clothes or save it? We will look at what is gained and what is lost when you make any choice.

ELECTIVES in SOCIAL STUDIES

Law (0.5 credit)

Prerequisites: Completion of World History

Law students analyze the way justice is defined, perceived, and employed in modern society. Law engages in an in-depth study of constitutional law, one that goes beyond what you’ve learned in U.S. History and Economics/Civics. This portion of the course looks at current, precedent setting cases. Mock Trials are a major part of law class. The most driven students are invited to represent Northtown in a City Wide Mock Trial Competition at the Daley Center. Our study of criminal and civil law addresses specific legal processes, concepts, and standards.

Current Events and Global Issues (0.5 credit)

Prerequisites: Completion of World History

This course is designed to introduce students to the role that media plays in our lives. Students will be exposed to the various forms of media, including all major domestic and foreign news networks, as well as new media. We will use these networks to discuss current events throughout the world. We will explore and debate the role of media today and the influence it has over the public as well as governmental institutions.

Psychology (0.5 credit)

Prerequisites: Completion of U.S. History

Students explore introductory psychological concepts. The class focuses on how our behavior is influenced by our brain, and vice versa. Areas of study include the biology of the brain, learning, memory, and the human life cycle. Students will be challenged to use their own personal experiences as a reference to psychological concepts from class.

AP Psychology (1.0 credit)

Prerequisites: Completion of U.S. History
AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)
The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

AP United States Government and Politics (1.0 credit)
Prerequisites: Completion of U.S. History
AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)
This course introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments.

WORLD LANGUAGES

Spanish 1 (1.0 credit)
Prerequisite: None
This course introduces students to Spanish language and culture through a story-telling environment based on comprehensible input and 90% of class time spent in the target language. The objective of this course is to develop communication through listening, speaking, reading, and writing in everyday situations. The foreign language program also aims to develop an understanding and appreciation of the customs, and cultures, of Spanish speaking societies. Integral parts of this course include class participation, vocabulary, and grammar.

Spanish 1 for Heritage Speakers (1.0 credit)
Prerequisite: Fluency in spoken Spanish language
This introductory world language heritage course focuses on fine-tuning each student’s ability in the following four skill areas: listening comprehension, reading, writing, and speaking. Emphasis is placed on current grammar skills in writing and speaking, in order to scaffold in an approach to professional-level fluency. Reading from modern and contemporary Spanish literature will be included, as well as films, and recorded material, to improve the student’s conversation, composition, reading and listening skills.

Spanish 2 (1.0 credit)
Prerequisite: Completion of Spanish 1 or equivalent
This course builds upon the materials and skills acquired during the student’s first year. In this intermediate language course, students continue the skill development and understanding of Spanish cultures. Students will expand their vocabulary through storytelling and with further emphasis on reading and writing skills. Student usage of Spanish in the classroom is an integral part of student participation. They will begin the year with a review of SP 1 and move on to practicing their grammar skills in the past tense.

Spanish 2 for Heritage Speakers (1.0 credit)
Prerequisite: Completion of Spanish 1 Heritage
This course is designed to develop Spanish-speaking heritage language learners’ academic language within various vocational settings while also starting to develop skills used in AP Spanish. Academic skills cover students’ abilities to listen, speak, read, and write in the target language. More focus is placed on students’ ability to read and write in the target language, in both formal and informal academic settings. Cross-curricular unit themes will lead students to be able to analyze a variety of literary texts, engage in an academic discussion, produce persuasive speech, write expository and directive texts, and finally construct formal petitions in writing.

Spanish 3 Honors (1.0 credit)
Prerequisites: Completion of Spanish 2 or teacher recommendation
Students will begin to study more sophisticated grammatical concepts along with a thorough review of previously studied topics. Students will be expected to communicate more regularly in Spanish. Current events and issues, literature, and influences of the Latinx culture will be discussed and studied in this course.

AP Spanish Language and Culture (1.0 credit)
Prerequisite: Completion of Spanish II Heritage or Spanish III Honors
AP Test Fee: $94 (reduced fee for Free/Reduced Lunch families)
In this college-level course, students focus on developing their three modes
of communication: interpretive, interpersonal and presentational. They develop their communicative abilities within six globally themed contexts: families and communities, science and technology, beauty and aesthetic, contemporary life, global challenges, and personal and public identity. Throughout the year, students develop their language skills through activities such as evidence-based classroom discussions and persuasive essay writing.

**French 1 (1.0 credit)**

**Prerequisites:** none

Students in French 1 begin to acquire French. The objective of this course is to develop basic French communication skills through listening, speaking, reading, and writing in everyday situations. Students will explore traditions and customs from Francophone countries around the world. Class participation is essential to student success.

**French 2 (1.0 credit)**

**Prerequisites:** Completion of French 1 or equivalent

Students in French 2 build upon the skills and vocabulary acquired during French 1. In this intermediate language course, students will continue to grow their vocabularies, acquire new tenses, and deepen their exploration of Francophone culture. French is the language of conversation in a French 2 classroom. Class participation continues to be essential to student success.

**Wellness**

**Freshman Physical Education (0.5 credit)**

**Prerequisite:** None

Freshman Physical Education has three goals for its students: 1.) Acquire movement skills and understand concepts needed to engage in health enhancing physical activity; 2.) Achieve and maintain a health-enhancing level of physical fitness based on continual self-assessment; and 3.) Develop team-building skills by working with others through physical activity. The skills of team sports will be taught and students will work with others in team situations.

**Health (0.5 credit)**

**Prerequisite:** None

Health will be presented within both disciplinary and interdisciplinary frameworks. The disciplinary will emphasize three major goals: 1.) Understand principles of health promotion and the prevention and treatment of illness and injury; 2.) Understand human body systems and factors that influence growth and development; and 3.) Promote and enhance health and well-being through the use of effective communications and decision-making skills. The interdisciplinary perspective will examine these goals as they relate to public health and current social and political issues, identity, cultural issues involving morality and belief, and global health concerns.

**Advanced Health (0.5 credit)**

**Prerequisite:** Completion of Health

Advanced Health is an experience and discussion-based class that uses a variety of activities, projects and authentic learning opportunities to discover the world of health. Topics include but are not limited to: health care, complementary/alternative medicine, ethics, human sexuality, the war on drugs, quality of life, sports medicine and CPR. Guest speakers from a variety of health care fields, addiction, and other life experiences are incorporated into the curriculum to give it authenticity. This course offers significant opportunities for students to grow through social learning and ultimately have a better understanding of what their own health means to them.

**Group Fitness (0.5 credit) - can be repeated**

**Prerequisites:** Completion of Freshmen Physical Education

Group Exercise provides students with opportunities to participate in group-fitness exercise workouts that will improve their personal fitness levels in flexibility, muscle strength, and cardio-respiratory health. Workouts may include: yoga, Pilates, step aerobics, cardio kickboxing, cardio-resistance training, HIIT (high intensity interval training), and basic core training. Students will be involved in the participation and tracking of weekly fitness-training programming as well as creating their own fitness program.

**Competitive P.E. (0.5 credit) - can be repeated**

**Prerequisites:** Completion of Freshmen Physical Education

This course is designed for students who enjoy competition and want to learn more about strategy and advanced skill development. Students learn the skills involved in sports and are assessed on skill growth and the ability to execute the rules and strategies of the game, to exhibit overall sportsmanship,
and to work within a team to achieve a goal. Fitness principles, strategies, and techniques will also be infused into the curriculum throughout the semester using a variety of facilities and equipment.

**Strength and Conditioning (0.5 credit) - can be repeated**  
*Prerequisites: Completion of Freshmen Physical Education*

Strength Training is a class that will help improve an individual’s muscular strength and endurance. This course is designed to use weightlifting and assorted workout techniques to increase overall fitness. The focus of this course will be on building muscle, safety and proper exercise technique.

**Adventure Ed (0.5 credit)**  
*Prerequisites: Completion of Freshmen Physical Education*

Fee: There is a $150 course fee for this course.

Adventure P.E. is offered as a semester course for students interested in a unique Physical Education program that is both physically and mentally challenging. Techniques are taught in class to prepare students for field trips which may include activities such as: indoor climbing walls, outdoor high ropes courses, disc golf and ice skating. The importance of teamwork, group decision making and problem solving is emphasized along with climbing skills and techniques. The class may include an overnight camping trip.

**Dance (0.5 credit) - can be repeated**  
*Prerequisites: Completion of Freshmen Physical Education*

This course is an introduction to movement as an expressive art form. It will present the structure of a dance class and the basic elements related to several forms of dance, including: ballet, jazz, modern, and hip hop. Students will use these forms and techniques and apply them to the elements of dance choreography. All students will perform in a final recital. The intent is to give students an awareness and reverence for the physical body and its athletic and expressive capabilities.

**P.E. Level 2 (0.5 credit) - can be repeated**  
*Prerequisites: Completion of Freshmen Physical Education*

P.E. Level 2 provides students the opportunity to participate in a comprehensive program that consists of: skill development, lead up games, team sports, physical fitness, and individual sports. Students will learn rules, history, and strategies associated with different sports. We will promote the spirit of sportsmanship, fair play, and friendly competition.

**P.E. Leadership (1.0 credit)**  
*Prerequisite: recommendation of PE teacher*  
*Grade: Juniors, Seniors*

P.E. Leaders will have an opportunity to assist in physical education courses. Duties will include assisting with warm ups, setting up activities, officiating games, making copies, working in small groups, and other duties as assigned. This course should give the student a practical application on the teaching perspective.

**ELECTIVES: ART & MUSIC**

**Art 1-8 (0.5 credit) - course may be repeated**  
*Prerequisite: None*

Art 1 is an elective that introduces students to Art in a friendly, non-competitive environment. No previous art experience is necessary. Students are encouraged to believe that everyone is an artist as they develop their creative thinking and problem solving skills (valuable skills to have in today's ever-changing professional world). Art 1 is open to all students of all levels and artistic ability. Students are graded based on effort, not talent, as it is understood that everyone has different talents and abilities. The class covers a variety of media, from colored pencils to sewing. The class focuses on the philosophy of Teaching for Artistic Behaviors, allowing students to have strong choice in their artistic creations.

**2D/3D Art (0.5 credit) - course may be repeated**  
*Prerequisite: None*

2D/3D Design is an elective that explores unique materials to create sculptural works of art. Students will be introduced to a variety of materials, techniques, and tools in a non-judgmental, creative environment. The course is designed to introduce students to the process of inquiry and investigation to help them discover their own artistic voice. The class covers a variety of materials from paper to clay. Students are encouraged to believe that everyone is an artist as they develop their creative thinking and problem solving skills (valuable skills to have in today's ever-changing professional world).
Theatre Arts (1.0 credit) - Not Offered in 2020-2021 school year
Prerequisite: Completion of English 1
This course is an intensive study of theater through production and design problems. Students in this class will devise original works and complete learning-through-application of theatrical writing, performance, and technical production. The first half of the course weighs heavily on history, performance, and playwriting, and the second half of the course focuses heavily on technical theater and design. The class does include a requirement for assisting with Theater Crew tasks including sound and lighting or performance for events and school plays. The class can be taken multiple years with increasing independence, leadership, and rigor of tasks.

Intro to Drawing (0.5 credit) - course may be repeated
Prerequisite: None
Intro to Drawing introduces students to the fundamentals of all types of drawing and dry media including contemporary and traditional uses of charcoal, ink, pencil, pastel, watercolor, mixed-media, and other materials allowing student to discover and explore their own personal style.

AP Studio Art (1.0 credit)
Prerequisite: None
Students are treated like artists and given flexibility in interpreting their assignments and will be required to work outside of class to create artworks based on personally meaning that meet AP’s high expectations.
Each student will learn a variety of techniques and approaches in drawing or 2D design so that the student is able to demonstrate a range of abilities and versatility with techniques, materials, problem-solving, and the application of the elements and principles of art.

Art Appreciation (ART 103) 1.0 credit
Prerequisite: City College Dual Enrollment eligibility
Art Appreciation is an art survey course designed to increase knowledge of the visual arts and is designed for students with little experience in the visual arts. The purpose of the course is to increase the students’ understanding of art so that they will be able to interpret and analyze imagery independently.
Students will explore visual art forms and their connections to formal, cultural, and historical contexts including a brief overview of art history from prehistoric to global contemporary works.

Beginning Band (1.0 credit)
Prerequisite: None
Beginning Band is open to students with any amount of musical background. This class focuses on learning the fundamentals of playing traditional concert band instruments (flute, clarinet, saxophone, trumpet, tuba, percussion, etc.).

Advanced Band (1.0 credit)
Prerequisite: Beginner Band or music teacher recommendation
In Advanced Band, music performed will require technical command of all major and minor scales and arpeggios and will now include elements such as full-ranges of dynamics, mixed meters, key changes/modulations and polyrhythms.

Music Theory I (0.5 credit) Not Offered in 2020-2021 school year
Prerequisite: None
Music Theory I is designed to help musicians with the underlying grammar and syntax of musical structure and prepare them to perceive that structure with both the ear and the eye. Emphasis is placed on the basics of musical notation, tonal and melodic structures, and the fundamentals of functional tertian harmony.

Choir (0.5 credit) Not Offered in 2020-2021 school year
Student receive basic instruction in singing, both unison songs and songs with independent parts. Students will explore the basics of music reading and literature ranging from the Renaissance era to the present.

ELECTIVES: TECHNOLOGY

Graphic Design and Photo Editing (0.5 credit)
Prerequisite: None
Learn how to create and innovate in visual media using computers. This course covers photo editing, creating digital visuals, and the basics of commercial design. Learn how to photoshop your friends, create logos and art, and make ads with the help of computers.
Digital Film (0.5 credit)
*Prerequisite: None*
Learn how to create and edit films using computers. This course covers the basics of editing, the uses of shots and transitions, and the basics of cinematography. Retime dances to fit new songs, make a lyric music video, and work up to making simple skits and scenes.

Introduction to Computer Science (0.5 credit)
*Prerequisites: Geometry*
An introduction into the world of computer programming. Learn the basics of coding and how computer language works. This course emphasizes the basic concepts behind the Java language and starts you on the path to more serious coding pursuits. This class uses a combination of MIT’s Scratch language and Oracle’s Java.

AP Computer Science Principles (1.0 credit)
*Prerequisites: Concurrent enrollment in Alg 2 or completion of Advanced Algebra*
AP Computer Science Principles is equivalent to a first semester college computing course. In this course, students will develop computational thinking skills, such as using computational skills to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. This course builds on a foundation of mathematical and computational reasoning.

Study Skills (0.5 credit)
*Prerequisite: None*
Study Skills is a course designed to empower students to be successful in school and community settings. Students will devote their time to develop habits related to organization, learning styles, social skills - including communication, character and critical thinking, test-taking, notetaking and comprehension strategies. This class is for elective credit.

Writing 1 INSTR (1 credit)
*Prerequisite: None*
Freshman students will learn the basic foundational skills of high school level, academic writing. Students will explore the parts of speech, syntax, sentence structure and advanced punctuation. Each quarter, students will write various types of essays and creative writing pieces: expository, persuasive, rhetorical analysis, poetry, alternate ending and narrative. Students will also practice vital SAT skills necessary to be successful on standardized testing, such as: concision, word choice, adding/revision of sentences, and grammar and mechanics usage. Students will learn these skills at a slower pace, but still receive the same rigorous curriculum as their academic-level peers.

Writing 2 INSTR (1 credit)
*Prerequisite: Writing 1 INST*
In Writing 2 Instructional, students will gain the knowledge of parts of speech, how to write and structure an essay, and how to edit and revise various pieces of writing. Additionally, students will engage in narrative writing, autobiographical reading, and autobiographical writing as they go through the process of telling readers who they are, and explaining what their story is.

English 1 INSTR (1 credit)
*Prerequisite: none*
Students will have an understanding and gain knowledge of literary devices as they explore novels that focus on global issues of diverse cultures. They will gain understanding and expand their vocabulary and language skills. They will comprehend, inference and draw conclusions. They will relate global issues with the world, self and their community.

English 2 INSTR (1 credit)
*Prerequisite: English 1 INST*
In English 2 INST, students will use texts to explore the ideas of culture and identity. While reading, they will analyze the role culture and identity play in shaping a story all while reflecting and applying ideas to their own personal experiences. Students in English 2 INST will read texts from a variety of cultural backgrounds, enhancing their knowledge of the world around them and their global awareness. Additionally, students will continue to build on and strengthen English skills covered in previous English classes, such as
inferencing, summarizing, predicting, use textual evidence and describing relationships between characters and events. Finally, students will work collaboratively and be given ample opportunities to apply positive social skills.

**English 3 INSTR** (1 credit)

*Prerequisite: English 1,2*

This course examines US literature in its cultural and historical contexts. Attention will be given to the study of literary techniques, genres, and traditions using an interdisciplinary perspective emphasizing the influence of multiple cultural values recorded in the literature and texts that are part of the American tradition. We will explore the development of the United States expressed cultural values, from past to present, and into potential futures.

**English 4 INSTR** (1 credit)

*Prerequisite: English 1,2,3*

Students enrolled in this course will read both Great American Short Stories, and at least one socially impactful novel chosen to teach conflict type through the eyes of its author. Students will respond to these readings in a variety of ways including Socratic discussion, small-team collaboration and personal essay writing, in order to bring about an understanding of how different cultures are viewed by society at large. In addition, students will analyze the materials and begin to synthesize the information as it relates to their own personal identity.

**World History INSTR** (1 credit)

*Prerequisite: none*

Students will gain understanding of Man, World Civilizations, society, and how we evolved from the past to the present day. Students will also focus on expanding their vocabulary and comprehension skills. They will research, annotate, and work together to explore our past and understand how our past influences our present and future.

**United States History INSTR** (1 credit)

*Prerequisite: World History INSTR*

In this class we will study the economic, social and political system of the United States. From pre-colonial times until modern day. Students will also focus on various social norms, movements, and standards that helped to shape the United States. Students will be expected to think critically about American history—its institutions, political figures, and social norms—in order to better understand the America we live in today.

**Pre-Algebra** (1 credit)

*Prerequisite: None*

Pre-Algebra-Freshman students will learn the fundamentals of pre-algebra skills. They will focus on topics such as adding, subtracting, multiplying and dividing positive and negative integers, listing positive factors, finding the greatest common factor (GCF), evaluating expressions, order of operations (PEMDAS), substituting values for variables and using the distributive property. Students will also develop basic algebra skills such as solving one and two step equations and relating story problems to real world situations. A calculator is not needed.

**Geometry INSTR** (1 credit)

*Prerequisite: Pre-Algebra INSTR*

In INSTR. Geometry, (first semester) students develop reasoning and problem solving skills as they study topics such as congruence and similarity, and apply properties of lines, triangles, quadrilaterals, and circles. Students also develop problem solving skills by using length, perimeter, area, circumference, surface area, and volume to solve real-world problems. The second semester focuses more on percent and reading and interpreting data as presented in tables, charts and graphs. This course follows along closely with the academic Geometry class with modifications and works at a more concentrated pace.

**Instructional Science I and II** (1 credit)

*Prerequisites: Completion of Physical Science.*

This class will either focus on the life sciences or the physical sciences. Topics in life science will include: environmental science, earth systems, the living world, populations, climate change, energy resources, land & water use, and pollution. Topics in physical science will include: chemical reactions, types of matter, physics, and force. Both classes will expose students to the basics of all scientific knowledge.

**Algebra INSTR** (1 credit)
Prerequisite: Pre-Algebra
In INSTR. Algebra 1, students gain an understanding of the properties of real numbers, including integers, and formalize the language of functions, including linear and quadratic. Learning how and when to use variables, students will solve single and multi-step equations, along with other mathematical concepts that will prepare them for real world math.

Discrete Math (1 credit)
Prerequisite: senior level math
Discrete Math is an integral part of our students everyday life. It is crucial for our students to develop the math skills necessary for solving a wide range of problems encountered in the real world. In this class students receive clear simple directions and short activity questions and sentences written at a low reading level. The activities feature realistic graphic representations that our students already encounter or will soon encounter. There are 6 units that introduce real-world math skills and cover shopping, banking, budgeting, food, health, travel and school. Students will learn to apply a variety of math strategies to real world situations, identify and analyze information needed to solve math problems, build new math knowledge through problem solving, and solve problems that arise in mathematics and in other contexts.

Post-Secondary Transition INST (1 credit)
Prerequisite: This is a senior level course
Students enrolled in this class will learn vocational and independent functioning skills. Students run the Puma Café coffee shop. Students work on career exploration, social skills, and researching post-secondary educational programming.