# Algonquin Regional High School 

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2024-2025
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A Tradition of Excellence
Serving the Communities of Northborough and Southborough

## Algonquin Regional High School

## Program of Studies

## 2024-2025

## A Tradition of Excellence

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## IMPORTANT INFORMATION

January 2024

## Dear Students and Parents:

Though next school year seems quite far off, we have begun the process of developing our courses for next year, and your input will be critical. The information below will, I hope, assist you as you identify the courses and levels that will provide a healthy balance of courses that are challenging while at the same time provide opportunities for success.

We offer three levels of courses and to support you making this best choice we have included in the Program of Studies the full College Preparatory (CP) and Honors (H) criteria. It is imperative that both students and parents read through the Program of Studies and course levels carefully; by high school, many students begin to show clear preferences for some content areas and less enthusiasm for others. Often, as a result, it's common for students to take a mixture of college preparatory and honors courses, depending on their interests and ability.

Some students may choose to enroll in Advanced Placement courses, which are our most challenging courses and require the content knowledge and skill required at the college level. The curriculum for AP courses is reviewed and approved by the College Board. The AP course expectations are consistent with the criteria established at most selective colleges and universities. Our teachers maintain these high expectations in their AP classrooms; as a result, AP courses are very rigorous.

We are deeply committed to preparing all of our students for college and careers upon graduation. And, our Program of Studies reflects that commitment, offering a wide variety of course types at levels that match students' interests and skills. However, sorting through these choices can be daunting. If you have questions about which courses or level might be best, please consult with your child's teachers and guidance counselor. Addressing questions and concerns is much easier now than after our master schedule is developed. Unfortunately, making changes after the course selection process is complete may be difficult or even impossible.

I wish you the best of luck next year and hope you are as excited about the courses in the Program of Studies as my staff and I are to offer them to you.

Sincerely,
Sean Bevan
Principal, ARHS

## II. ALGONQUIN REGIONAL HIGH SCHOOL MISSION STATEMENT

The mission of Algonquin Regional High School is for all members of its school community to grow and achieve their potential within a supportive and safe environment. In an atmosphere that fosters academic rigor, high standards and expectations are set for all disciplines including the fine and performing arts, technology, and wellness education. Cultural diversity, individual expression, and inclusion are embraced and respected. Lifelong learning and an understanding of civic responsibility are encouraged. Collaboration among students and teachers empowers individuals to explore and pursue a variety of educational and social experiences. The school community supports student participation in service projects, from which students derive an awareness of and sensitivity to the needs of others.

## Academic Expectations

## Students at Algonquin Regional High School will:

- Read critically, by analyzing, interpreting and evaluating text
- Synthesize information from diverse sources, to produce coherent summaries, arguments and positions
- Speak and write effectively, using standard English in a manner appropriate to purpose and audience
- Acquire and apply mathematical and technological skills, to interpret information and to solve problems
- Explore, develop and express individual creativity; set goals and objectives; and manage time effectively
- Demonstrate competencies in all curriculum areas identified by the Massachusetts Department of Education
- Be challenged in an intellectually stimulating and engaging environment


## Social Expectations

## Students at Algonquin Regional High School will:

- Develop the skills to work both independently and cooperatively
- Demonstrate respect for themselves and others, as well as for diversity in the school community
- Be active participants in the school community


## Civic Expectations

## Students at Algonquin Regional High School will:

- Become aware of their roles and responsibilities as members of local, national and global communities
- Contribute to these communities as active participants


## III. Course Level Criteria

## COLLEGE PREPARATORY CRITERIA

College Prep courses are designed to develop a thorough understanding of the fundamentals of a subject: the skills needed to understand relevant material and the application of the concepts through various assessment tools. Materials are presented at a deliberate pace in both abstract and concrete formats. The teacher, with the goal of building independent study and critical thinking skills, provides considerable instructional support. A student's written work must be clear and thoughtful, demonstrating a basic understanding of vocabulary and an accuracy of expression. Other criteria are structured by the teacher and/or the department. Students in these courses have homework on a regular basis with the emphasis on reinforcement of the material presented. Any students experiencing difficulties are expected to seek help from their instructors. Students are expected to plan and complete selected long-term assignments.

## HONORS CRITERIA

The Honors courses at Algonquin are designed to engage the students who have a genuine interest in the subject matter. In an atmosphere that provides an accelerated pace with little repetition of previous work, students with demonstrated academic achievement and a high level of maturity will expand their mastery and appreciation of the course content. These courses require independent initiative and outside preparation with emphasis on analysis, synthesis, critical thinking, reflection and problem solving. Written work must exhibit complexity in structure, thought and vocabulary. Students must also be able to organize time and demonstrate a consistency of effort to comply with long-term assignments and independent studies. Students are expected to take advantage of opportunities to seek help from their instructors in order to ensure all possible steps are there to produce the best outcomes. Therefore, self-directed students should seek Honors classes in subjects that interest them to a high degree and must accept the responsibilities to meet the demands of these courses.

## AP CRITERIA

Advanced Placement courses are generally appropriate for grade 11 and 12 students who are highly motivated and have demonstrated their eligibility through required prerequisite courses and appropriate levels of achievement.

Prerequisites for AP courses are determined by individual departments. We are open to expanding options for exceptional students; however, please understand that AP courses are college courses. The curriculum for AP courses is mandated by the College Board and not aligned with MA curriculum frameworks and MCAS tests. If students or parents feel that they would like to pursue an AP course in grade 10, they should speak to the current teacher and department head for the content area. Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## IV. Graduation Requirements and Support Services

## A. Important Note to Students and Parents about MCAS

Students are required to pass the Massachusetts Comprehensive Assessment System test, MCAS, in English Language Arts, Mathematics and Science in order to receive a high school diploma. Additionally, students who receive a score within the Needs Improvement range, will be expected to fulfill the requirements of an Educational Proficiency Plan (EPP).
The purpose of an Educational Proficiency Plan (EPP) is to assist students in further developing their academic skills. An EPP will include, at a minimum: a review of the student's strengths and weaknesses based on MCAS and other assessment results, course work, grades and teacher input; the courses the student will be required to take and successfully complete in grades 11 and 12; and a description of the assessments the school will regularly administer to determine if the student is moving toward proficiency.

## B. Course Requirements for Graduation: Class of 2026 and prior

The following credits must be earned in the designated areas in order to receive a diploma:
a. English*
20.0 credits
b. Social Studies*
15.0 credits
c. Mathematics
15.0 credits
d. Science* 15.0 credits
e. Applied Arts and Technology or Fine and Performing Arts
2.5 credits
f. Digital Literacy \& Computer Applications
2.5 credits
g. Economics*
2.5 credits
h. Health and Fitness*
10.0 credits
i. Electives
27.5 credits TOTAL

110 credits

* These fields of study require students to take specific courses for graduation. Details of these courses are described in Parts II and III of this Program of Studies.

Course Requirements for Graduation: Class of 2027 and beyond

| a. | English* | 20.0 credits |
| :--- | :--- | :--- |
| b. | Social Studies* | 15.0 credits |
| c. | Mathematics | 15.0 credits |
| d. | Science* | 15.0 credits |
| e. | Fine and Performing Arts | 2.5 credits |
| f. | Digital Literacy or Exploring Computer Science | 2.5 credits |
| g. | Economics* | 2.5 credits |
| h. | Health and Fitness* | 10.0 credits |
| i. | Electives | $\underline{27.5}$ credits |
|  | TOTAL | $\mathbf{1 1 0}$ credits |

* These fields of study require students to take specific courses for graduation. Details of these courses are described in Parts II and III of this Program of Studies.

Courses that meet daily for one semester are valued at 2.5 credits, and those that meet daily for the full year are valued at 5 credits. The total number of credits required for graduation continues to be 110 . However, this number is only a minimum. All Massachusetts high school students are required to be in structured learning time for 990 hours per 180-day school year. This requirement means that all students must be in direct instruction or directed studies each period of every day.

The majority of students earn between 60-70 credits by the conclusion of sophomore year. In order to remain on a four year graduation track, you must earn a minimum of forty (40) credits by the end of sophomore year.

## C. Course Waivers, Alternative Scheduling Options and Independent Study

## 1. Course Waivers

Course waivers are not available for graduation requirements established by law or by listing in the school's Program of Studies.

## 2. Alternative Plans

Alternative plans exist both within the course level and the overall schedule. As each case is individual in nature, all plans must have administration approval. Please refer to the student handbook for the Alternative Plan description.

## 3. Independent Study

Independent Study is available as an option based on the following requirements:
— It is contained within the regularly scheduled student school year under the direction of the teacher.
$\square$ It is a program that has the same rigorous course of study and standards as a core subject.
— It is assigned a grade and credit.
$\square$ It is individually or team designed.

An independent study contract must be completed and approved prior to any implementation.

## 4. Teaching Assistant (TA)

A Teaching Assistant is a valuable resource to both the classroom teacher and students. Any student wishing to become a TA must be approved by the assigned teacher and department head. All TA assignments must adhere to the school wide guidelines. Students choosing to enroll in a TA assignment are only allowed to enroll in one senior study during the given semester.

## 5. Course Level Overrides

During the course selection process, teachers make recommendations pertaining to appropriate course levels based on a student's past performance and teacher's perceptions of future success. These recommendations for students include collaborative work with peers, teachers, colleagues and data. If a parent or student disagrees with a teacher's recommendation, the student must speak with the recommending teacher. If after speaking with the teacher they still wish to pursue an override, they should request an override contract from the teacher. Override contracts must be completed and submitted on or before the published deadline. Late override forms will not be accepted. Students who have previously overridden a course that resulted in a level change cannot override another course in that content area.

Eligibility prerequisites for AP courses are not subject to parental overrides.
**For grade 8 students, please follow the guidelines outlined by your middle school.

## 6. Course Change Guidelines

Our goal is to work with students to provide a challenging learning experience. Teachers make recommendations pertaining to appropriate course levels based on a student's performance and perceived future success in the subject matter. Occasionally students experience difficulties with the subject matter which results in the teacher recommending a level change. The purpose of recommending a level change is to assist a student in finding greater success in their course work.

It's important that students are appropriately placed early on in the school year in order to experience greater success. With this in mind, the following are the course change guidelines.

## Course Enrollments:

Students wishing to change from one elective course to another must do so by:

1. For the first semester, changes must be completed by the Friday after Labor Day.
2. For the second semester, changes must be completed by the first Friday of the new semester.

## Course Withdrawals:

Semester: All course withdrawals or level changes must be made before the midpoint of $1^{\text {st }}$ or $3^{\text {rd }}$ quarter.

1. Weighted grades will follow students in a level change.
2. Course will not appear on the transcript.

Full Year: All course withdrawals or level changes must be made before the end of term 1.

1. Weighted grades will follow students in a level change.
2. Course will not appear on the transcript.

Any student requesting to make a level change during the last two weeks of term 1 for a full year course must finish the term in the higher level course and receive a grade. Students will begin the new course on the first day of term.

## D. Course Levels, Honor Roll, Grade Point Average, and Class Rank

## 1. Course Levels

Courses are organized on the basis of three achievement levels, College Preparatory, Honors and Advanced Placement. Each of these levels meets the requirements for post-secondary education placement. All courses are designed to challenge students to achieve at their highest possible level.

College Preparatory courses are college and post-secondary educational preparatory classes. These are taken by a majority of four-year college bound students, and require well-developed reading, writing, verbal, conceptual, mathematical, and study abilities, as well as substantial outside preparation and assignments.

Honors courses include material presented at an accelerated and more intensive pace than the College Prep courses. They require advanced reading, writing, verbal, conceptual, mathematical, and study abilities, as well as extensive outside preparation.

AP courses are curriculums designed to give students college level courses and exams while still in high school. The curriculum for AP courses is standardized by the College Board and challenges students to the highest degree.

## 2. Honor Roll

The Honor Roll is published at the end of each quarter. It consists of three lists, the Principal's List, the Honors List, and the Commended List.

- Principal's List: No grade lower than A-
- Honors List: No grade lower than B
- Commended List: No grade lower than B-

An incomplete in any course will prevent a student from being included on any of the above lists.

## 3. Career Grade Point Average

A grade point average aggregates the grades a student has received into a single average.

- All courses will be counted as part of the career GPA.
- Career GPA Option: One non-required course per semester may be exempted from counting in the career GPA. This must be declared at the time of course selection.


## 4. Calculation of Career GPA

Determine the quality points and potential credits for each course taken. All courses at ARHS are assigned weighted quality points based upon the level of class (i.e. Advance Placement, Honors, and College Preparatory). Please refer to the following chart on the next page. Potential credits can be found in the description of courses in the Program of Studies (i.e. year long $=5$ credits, semester $=2.5$ credits).

Career GPA is calculated by first multiplying quality points by the potential course credit for each course taken. Then divide the sum of these products by the total potential course credits.

Example:
Course/Level Grade Potential Credits Quality Points

| Eng. (H) | $A$ | 5.0 | $x$ | 4.3 | $=21.0$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SS (CP) | $B$ | 5.0 | $x$ | 3.0 | $=15.0$ | $\underline{54.0}=3.6 \mathrm{GPA}$ |
| Math (CP) | $A-$ | $\underline{5.0}$ | $x$ | 3.5 | $=\underline{17.5}$ | 15.0 |

All courses are calculated into the GPA unless an exemption is noted. Students are allowed to exempt one non-required course each semester from their GPA. This must be declared the time of course selection.
The junior GPA based on six semesters is the GPA sent to colleges during the college application process.

## Algonquin does not determine or disseminate class rank.

## 5. GPA Chart for class of 2022 and beyond:

| Letter Grade | \% Equivalent | AP | Honors | CP |
| :---: | :---: | :---: | :---: | :---: |
| A + | $97-100$ | 5.0 | 4.5 | 4.0 |
| A | $93-96$ | 4.8 | 4.3 | 3.8 |
| A- | $90-92$ | 4.5 | 4.0 | 3.5 |
| B+ | $87-89$ | 4.3 | 3.8 | 3.3 |
| B | $83-86$ | 4.0 | 3.5 | 3.0 |
| B- | $80-82$ | 3.8 | 3.3 | 2.8 |
| C+ | $77-79$ | 3.5 | 3.0 | 2.5 |
| C | $73-76$ | 3.3 | 2.8 | 2.3 |
| C- | $70-72$ | 3.0 | 2.5 | 2.0 |
| D+ | $67-69$ | 2.8 | 2.3 | 1.8 |
| D | $63-66$ | 2.5 | 2.0 | 1.5 |
| D- | $60-62$ | 2.3 | 1.8 | 1.3 |
| F | $0-59$ | 0.0 | 0.0 | 0.0 |

## 6. Summer School Policy

Students who fail a course and receive a minimum grade of 55 may attend summer school with the approval of their guidance counselor.

When the summer school transcript is received in August, the student's counselor will adjust the transcript and make any necessary changes to the student's schedule.

After the course has been passed, credit will be reinstated, a notation will be made on the transcript that summer school was attended and the quality points and grade will be calculated into the GPA. The failing grade is still noted on the transcript and this grade is also calculated into GPA.

## E. GUIDANCE SERVICES

## Vision

The vision of the Algonquin Regional Guidance Counseling Program is for all students to acquire the academic, vocational and personal/social skills to successfully participate as productive citizens in an ever-changing, multicultural world.

## Mission

Our mission is to assist all students in realizing their academic, social/personal and career potential within a supportive and safe learning environment.

## Goals

The goals of the ARHS Guidance Counseling Program support the ASCA (American School Counseling Association) National Standards for student academic, career and personal/social development. These goals include:

- Academic Achievement

To assist students in appraising their abilities, achievements and interests

To provide information and resources for long and short term planning

To advocate for students to maximize their educational opportunities regardless of learning styles or differences

- Career Planning

To encourage students to investigate the world of work in relation to knowledge of self and to make informed career decisions

To help students develop a viable plan for their future through the resources both in and out of school

## - Personal /Social Development

To help students develop the skills to evaluate personal issues, problem solve and seek appropriate in school/community resources
To assist students in acquiring the attitudes, knowledge and interpersonal skills to help them understand and respect self and others
To foster the development of good decision making

## F. Course Scheduling

Many hours go into reviewing students' programs and assisting them in making good decisions about their future. Counselors encourage every student and parent to read the Program of Studies, evaluate the teacher recommendations, and then decide on their program. Every choice should involve good decision-making, taking into consideration achievement, motivation, ability, interest and future goals. This process includes:

- Counselors distribute course selection materials \& explain the graduation requirements
- Teachers make individual course recommendations in PowerSchool
- Course selection requests are reviewed and submitted by students \& parents in PowerSchool
- Counselors review course selections
- The master schedule is built to reflect course requests
- Course conflicts are resolved
- Final schedules are distributed to all students


## G. Career Exploration \& Work-Based Learning Offerings

Work-Study-Gr. 11, 12-2.5 credits or 5 credits
The work-study program offers grade 11 and 12 students who are on-track to complete their graduation requirements the opportunity to participate in a work experience. Students will complete a minimum of 75 hours of employment and earn 2.5 credits (or 150 hours for 5 credits). This is a paid traditional work experience that may be identified and secured by the student or with staff support. The experience will be assessed on a Pass/Fail basis.

## Internship-Gr. 11, 12-2.5 credits

The internship program offers students the opportunity to participate in a work-based learning experience to learn more about an industry through hands-on experience. At the host site, each student will be paired with a mentor who will be responsible for providing a structured learning experience, as well as supervision and feedback. Students will be required to complete assignments to reflect on their experience in relation to their personal and career development. Worksites may be identified by the student, family, and/or staff and must be approved by the Career Exploration \& Innovation Leader who will act as a liaison. Students will complete a minimum of 75 hours at the internship. The experience will be assessed on a Pass/Fail basis. Acceptance into the internship program is contingent upon a review of the student's grades, attendance, and discipline as well as finding an appropriate placement. Please note that most of these internships are unpaid.

Job Shadow-Gr. 10, 11, 12
The job shadow experience is open to second semester sophomores, as well as juniors and seniors. A job shadow allows students to observe a career first-hand by visiting a workplace with a host. The student will gain a better understanding of the career and make connections with their talents, skills, and interests. The shadow may range from 3 to 8 hours and take place at any time during the semester-during the school day, after-school, on a weekend, or during a break. The Career Exploration \& Innovation Leader will work individually with each student to create a plan for completion. Students will be expected to complete an informational interview and final reflection on the experience.

# APPLIED ARTS \& TECHNOLOGY DEPARTMENT 

## George Clarke, Department Chairperson

## COURSE OFFERINGS

## Business Studies

Accounting I
AP Microeconomics
Behavioral Economics*
Business Fundamentals
Business Law
Digital Literacy \& Computer Application
Entrepreneurship
Fashion and Retail
Financial Literacy
Management and Leadership
Marketing
Microeconomics and Finance
Project Management
Social Media Marketing
Sports and Entertainment Marketing

## Computer Science

3D Computer Animation
AP Computer Science A (Java)
AP Computer Science Principles
C++ 1
C++ 2
Exploring Computer Science
Game Development \& Programming w/ XNA
Python Programming

Education \& Consumer Sciences
Baking \& Pastry
Culinary \& Hospitality Management
Early Childhood Development
Early Childhood Education
Global Cuisine
Learning through Play
Nutrition and Culinary Arts
Urban Gardening

Technology
Construction Technology
Engineering Graphics 1, 2, and 3
Engineering with Metals
Hands-on Engineering
Robotics Technology
Video Production 1 and 2
Wood Technology 1 and 2

The Applied Arts \& Technology Department also offers participation in the:

Computer Programming Club
DECA Program of Competitive Events
National Business Honor Society
Algonquin Preschool
FIRST Robotics Competition
*Interdisciplinary Course

# Applied Arts \& Technology Department Course Offerings 

The Applied Arts and Technology Department's vision is to provide all students with the knowledge, experience, confidence and personal skills necessary to make meaningful, informed decisions in preparation for post-secondary educational and vocational pathways. In addition, through challenging course offerings students will receive educational enrichment and the skills to become contributing members of the community. The offerings described in the Program of Studies suggest opportunities for students to develop and pursue their interests through a variety of learning experiences that integrate technology, academics, and project-based learning. Program offerings are fully inclusive and designed to provide all students with individualized choices that enhance their comprehensive education.

## Applied Arts \& Technology Graduation Requirements:

Digital Literacy \& Computer Application- or - Exploring Computer Science ( 2.5 credits).
Microeconomics and Finance- or- Financial Literacy are required for graduation; AP Microeconomics fulfills this requirement. ( 2.5 credits).

In addition to the requirements above, for the classes of 2025 \& 2026, 2.5 credits in Applied Arts \& Technology or in Fine \& Performing Arts are required- see page 5.

## Pathways

## Algonquin Business Concentration

The Algonquin Business Concentration is committed to providing students with the business knowledge, communication and technology skills necessary to excel in college and workplace. The program will provide students with a rigorous, dynamic and interpersonal academic and project-based business program, with a culminating capstone which will foster critical and creative thinking relevant to today's business environment.

Choose one introductory class to take first:
Business Fundamentals (CP or H), Marketing (CP or H). If you take both, one may count as a core class.
Take three core classes:
Accounting $1(H)$, AP Microeconomics, Behavioral Economics (H), Business Law (H), Fashion Design and Retail (CP), Financial Literacy (CP or H), Culinary and Hospitality Management (CP or H), Microeconomics and Finance (CP or H), Social Media Marketing (H), Sports and Entertainment Marketing (H).
Take one capstone class or complete a business internship to complete the ABC concentration:
Project Management (H), Entrepreneurship (H), Management \& Leadership (H).

## Culinary \& Hospitality Pathway

The Algonquin Culinary \& Hospitality Program provides students with introductory and advanced courses in culinary studies along with a hospitality and urban gardening component. This Pathway provides students with the opportunity to learn how to prepare meals, bake, and learn about foods from all around the world. You'll get an in-depth, hands-on experience that emphasizes nutrition, food preparation and production, along with how the culinary and hospitality industries work and operate. Students who take at least three classes within this program are eligible for the Culinary and Hospitality Certificate.
Classes in this pathway include:
Nutrition and Culinary Arts (CP), Global Cuisine (CP \& H), Baking and Pastry (CP), Culinary and Hospitality Management (CP \& H), and Urban Gardening (CP \& H).
Students taking this pathway will have an opportunity to pursue industry certifications such as the ServSafe Food Handling.

Early Childhood Pathway to Certification - Algonquin Regional High School offers a comprehensive Early Childhood Program in which students learn about early human development, explore curriculum strategies and concepts, and gain field experiences working in our on-campus preschool: The Algonquin Preschool. Students who take at least three classes within this program, gaining 150 hours working with the children in the preschool, over the course of their career at Algonquin are eligible for certification as a preschool teacher through the department of Early Education and Care (EEC) upon graduation.
Classes in this pathway include:
Early Childhood Development (CP), Early Childhood Education (CP or H) and Learning Through Play (CP or H).

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: |
| Required for <br> Graduation: <br> _ Digital Literacy and <br> Computer Application <br> (CP) or <br> __Exploring Computer Science (CP) <br> Electives: <br> __Business Fundamentals (CP) (H) <br> __C++ 1 (H) <br> __Construction Technology <br> (CP) <br> __Early Childhood <br> Development (CP) <br> __ Engineering Graphics <br> 1 (CP)(H) <br> __ Engineering with Metals <br> (CP) <br> __Game Development and Programming with XNA <br> (CP)(H) <br> __ Marketing (CP)(H) <br> __ Nutrition \& Culinary Arts <br> (CP) <br> __Python <br> Programming (CP)(H) <br> __Urban Gardening (CP)(H) <br> _ Video Production 1 <br> (CP)(H) <br> _ Wood Technology 1(CP) <br> __ Wood Technology 2 (CP) | Required for Graduation: <br> __Microeconomics and Finance (CP)(H) <br> or <br> __Financial Literacy (CP)(H) <br> Electives: <br> You may select any Grade 9 elective plus any of the following: <br> __Accounting 1 (H) __AP Computer Science A (Java) <br> __AP Computer Science Principles <br> _ Baking \& Pastry (CP) <br> __Behavioral Economics(H) <br> __Business Law (H) <br> __C++ 2 (H) <br> __3D Computer <br> Animation (H) <br> __Culinary \& Hospitality <br> Management (CP) (H) <br> __Early Childhood <br> Education (CP)(H) <br> __Engineering Graphics 2(H) $\qquad$ Fashion \& Retail (CP) $\qquad$ Global Cuisine (CP)(H) $\qquad$ Hands-on Engineering(H) $\qquad$ Learning Thorough Play (CP)(H) <br> __Robotic Technology (H) <br> _ Social Media Marketing <br> (H) <br> __Sports \& Entertainment Marketing (H) <br> __Video Production 2 (CP)(H) | Required for Graduation: $\qquad$ Microeconomics and Finance (CP)(H) or $\qquad$ Financial Literacy (CP)(H) <br> or $\qquad$ AP Microeconomics <br> Electives: <br> You may select any Grade 9 or 10 elective plus any of the following: $\qquad$ Engineering Graphics 3(H) $\square$ Entrepreneurship (H) $\qquad$ Management and Leadership (H) $\qquad$ Project Management(H) | You may select any electives from Grade 9, 10, and 11. |

7225 Accounting 1 (H) — Gr. 10, 11, 12 - 2.5 Cr.
Money talks and that is why Accounting is called the language of business! It tells a story about the business in financial terms and provides information to both internal and external decision makers about the financial health of a business. In this course, students will gain an understanding of the importance of maintaining accurate financial records, how these records are used to prepare financial statements, and how financial statements are analyzed and used by the company and their investors. Students will complete an entire accounting cycle for a business as well as examine ethics, internal control procedures, auditing, etc. DECA eligible course.

## 7333 AP Microeconomics - Gr. 11, 12 - 5 Cr.

This course is modeled after the frameworks published by the College Board. The course offers an extensive examination of the principles of Microeconomic theory. After the introduction of opportunity cost, the concept of scarcity and comparative advantage, the course will focus on the laws of supply and demand, marginal utility, diminishing returns and production costs. A major emphasis of this course will be on the development of critical thinking skills and the application of economic principles in problem solving. Students will be prepared for the Advanced Placement Exam in Microeconomics. DECA eligible course. Prerequisite: A grade of B- or better in Algebra $2(H)$ or a grade of $A$ - or better in Algebra 2 (CP). Fulfills the Economics graduation requirement.

Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

7341 Behavioral Economics (H) - Gr. 10, 11, 12 - 2.5 Cr.
In this semester-long interdisciplinary course, students will explore how and why economic choices and behaviors affect both psychological health and happiness and economic wealth. The traditional study of economics is based on the assumption that consumers are rational decision makers, but through combining principles and theories from the field of psychology with economics, another picture of consumers as "predictably irrational" emerges. Students in this course will gain an appreciation and understanding of why individuals participate in risky behaviors, choose various saving and investment options, overspend, and how social media impacts decision making. Students will become more savvy consumers as they think about how cognitive biases affect behavior and how to take control of their economic decision making. This course is co-taught by teachers from the Social Studies and Applied Arts departments. This course does not fulfill the economics graduation requirement.

## 7432/7430 Business Fundamentals (H) (CP)- gr. 9, 10, 11, 12 - 2.5 Cr.

Are you interested in finding out more about the world of business? This semester course will explore the areas of basic business skills, economics, entrepreneurship, management and leadership, marketing, the stock market and accounting (as time allows). This is an overview course focused on the practical application of business knowledge through projects and critical thinking assignments. Individual and/or team oral and written presentations will be required. This class is an excellent foundation for other business classes offered at Algonquin Regional High School or to see if one of the topics mentioned above is something you are interested in exploring further in the future. Though topics may be similar for Honors and College Preparatory level students, the levels will be differentiated with regard to rigor and the requirements for additional projects, reading, writing, and viewing assignments at the honors level. DECA eligible course.

## 7317 Business Internship (H) - Gr. 11, 12-2.5 Cr.

The business internship provides an opportunity to apply principles learned in and outside the classroom. The internship is an academic program, which integrates classroom work and practical experience with cooperating businesses. The internship allows students the opportunity to apply classroom learning in businesses both large and small. It is a structured field experience in which an intern acquires and applies knowledge and skills, while working in a responsible role within a business environment. Working with a supervisor, the student will perform prescribed work within an administrative setting. The internship will be tailored to the individual student's career interests and the needs of the supervising organization. Students must be enrolled in the Algonquin Business Concentration. Dept. Chair approval required.

7400 Business Law (H) - Gr. 10, 11, 12 - 2.5 Cr .
Students interested in pursuing a degree in business, law, or understanding more about how business law affects their everyday lives should take this course. This course starts out with an overview of where law comes from, jurisdiction, and the structure of state and federal courts. An emphasis will be made on Administrative Agencies and their role in business ownership and consumer protection. Students will learn the difference between criminal law and procedures and civil law and procedures as it pertains to corporations, white-collar crimes, small businesses, and consumers. We will go into greater depth with tort law, especially in manufacturer and product liability. Distinguishing a legally enforceable contract from other agreements will be the focus in the Contract Law unit. With the ever-changing use of technology, students will study Cyber law in areas such as but not limited to Intellectual property and E Commerce. Learning will take place through lectures, individual work, student research, group work, analyzing and discussing situations and cases, projects, presentations, and class activities. Guest speakers, a field trip to the Worcester County District, and/or a mock trial are incorporated into the course when available. DECA eligible course.

4807 Digital Literacy \& Computer Application (CP) - Gr. 9 -- 2.5 Cr.
In this course, students are introduced to a broad range of technology topics that will give them a foundation for success in today's evolving digital landscape. Students will learn how to access and utilize online resources using various search techniques, credible databases, and proper evaluation techniques to determine accuracy, credibility and or bias. They will learn proper storage techniques and options, how to create and manipulate spreadsheets and word processing tools, and various digital ways to communicate, display, and analyze data. Students will learn some of the core concepts in computing and will be introduced to computational thinking in Computer Science. This course will be taught through a combination of lectures, online training, project based learning, and hands-on experience using Google, and other applicable tools. This course fulfills the Digital Literacy or Exploring Computer Science graduation requirement.

7325 Entrepreneurship (H) — Gr. 11, 12-2.5 Cr.
Entrepreneurship is a mindset not a job title. This project-based capstone course will teach the skills and approaches to successfully evaluate and create new business opportunities through the design thinking method. Students will engage in team building and collaborative activities, with the intent of increasing career and college readiness. Students will explore the complex tasks, expectations, and restrictions of individuals engaged in entrepreneurial activities. Students will progress through different methods for developing business ideas, the processes of starting a business, the acquisition of resources, and the key components of a business plan. Emphasis will be placed on entrepreneurial characteristics and traits; Design Thinking; Growth Mindset; Business Plan/Lean Canvas; creativity and innovation; idea/product feasibility; business plan pitches; and public speaking to increase self-confidence through business pitches. DECA eligible course. Prerequisite: A grade of B- or better in Marketing or Business Fundamentals.

8620 Fashion Design and Retail (CP) — Gr. 10, 11, 12 - 2.5 Cr.
This course is ideal for students considering a career in fashion, merchandising or related areas or for any student who wishes to develop a new skill set. Students will sketch new and current fashion trends, coordinate fashion displays, conduct fashion trend research, plan promotions and create storefronts and window displays. DECA eligible course.

7320 Financial Literacy (CP) Gr. 10, 11, 12 - 2.5 Cr.
This course will provide students with the necessary financial skills to make wise, informed money management decisions. Students will learn what it takes to navigate the financial world and develop the skills to be financially independent and successful. Topics covered in this course include: budgeting, banking, behavioral economics, credit, investment options and retirement plans. Students will apply their knowledge to case studies addressing buying v renting a home, buying v leasing a vehicle, credit card management, understanding taxes and managing on-line commerce decisions. This course fulfills the Economics graduation requirement.

7323 Financial Literacy (H) Gr. 10, 11, 12 - 2.5 Cr.
It is imperative that our youth be given the financial skills necessary to make wise money management decisions now and in the future. By the end of this course, students will understand what it means to be financially literate. They will study career related topics such as job search, employment, payroll forms, and tax returns. Students will focus on developing a financial plan which includes establishing goals and preparing, managing, analyzing a budget, and financing college. An in-depth look at various savings and investment options such as stocks, bonds, and retirement plans will be explored along with the Time Value of Money concept. We will examine the meaning of debt which is a critical problem in our economy. This includes types of credit (revolving charge accounts, auto and home loans, etc.), the importance of having a good FICO score, and analyzing and calculating the cost of credit. This course fulfills the Economics graduation requirement.

7620 Management and Leadership (H) -- Gr. 11, 12 - 2.5 Cr.
This course is intended to help students become more effective leaders in their current lives and future contexts to which they aspire. At the core of this class, the four management functions (planning, organizing, leading and controlling) are examined. Course topics include leadership, group dynamics, and theories of motivation, introduction to organizational structures, communication skills, conflict resolution, and ethical decision-making. Students will demonstrate effective problem solving, critical thinking, teamwork, and goal-setting skills. Current business articles related to management and leadership are examined and students are required to participate in class discussions. This course will require team project-based assignments. DECA eligible course. Prerequisite: A grade of B- or better in Marketing or Business Fundamentals.

7805 Marketing (CP) $-\operatorname{Gr} .9,10,11,12-2.5 \mathrm{Cr}$.
Marketing is an Integral Part of EVERYTHING! Marketing is not something that only concerns salespeople and medical reps. Whether you become an electrician, plumber, carpenter, teacher, engineer, or a doctor, you'll benefit from it. That's the bottom line! A Google search results in over 70 different definitions for marketing. However it is defined, marketing provides the bridge between business and consumers. One goal of the course is to open the student's eyes to the world of marketing that is all around and to become educated decision-makers. The course involves a variety of activities focused on market segmentation, target marketing, market research, promotion, pricing, product/service management, distribution, and selling. Instructional activities may include introductory case studies, current event discussions, guided notes and guest speakers. In addition, students will learn the basic skills of graphic design including layout, fonts, colors and technology to create visually appealing artifacts. The course ends with students completing a project incorporating all the concepts learned through the course. DECA eligible course.

7305 Marketing (H) - Gr. 9, 10, 11, $12-2.5 \mathrm{Cr}$.
Marketing is an Integral Part of EVERYTHING! Marketing is not something that only concerns salespeople and medical reps. Whether you become an electrician, plumber, carpenter, teacher, engineer, or a doctor, you'll benefit from it. That's the bottom line! A Google search results in over 70 different definitions for marketing. However it is defined, marketing provides the bridge between business and consumers. One goal of the course is to open the student's eyes to the world of marketing that is all around and to become educated decision-makers. The course involves a variety of activities focused on market segmentation, target marketing, market research, promotion, pricing, product/service management, distribution, and selling. Instructional activities may include case studies, current event analysis, research and discussion, demonstrations, notes and guest speakers. In addition, students will learn the importance of graphic design including layout, font, colors and technology to create visually appealing artifacts. The course ends with students completing a project incorporating all the concepts learned through the course. DECA eligible course.

7346 Microeconomics and Finance (CP) - Gr. 10, 11, $12-2.5 \mathrm{Cr}$.
Microeconomics \& Finance is a half-year course covering topics that are relevant to today's world economy and necessary for wise consumer decision-making. Some of the topics covered in this course will be scarcity, opportunity cost, the production possibilities curve, basic economic resources, and the Gross National Product. Students will also research, analyze, and compare the different economic systems that exist in the world today. They will study supply, demand, and equilibrium and how it relates to consumer buying decisions and the theory of elasticity. The course will also cover forms of business ownership with a look at modern day entrepreneurs and other successful businesses. This course will cover an overview of financial topics such as saving, cost of credit, loans, investing, etc. DECA eligible course. This course fulfills the Economics graduation requirement.

7345 Microeconomics and Finance (H) - Gr. 10, 11, 12 - 2.5 Cr .
This one-semester course prepares students for microeconomics at the college level. Excellent mathematical and problem-solving skills are necessary to succeed in this course. Students will study advanced economic concepts and theories. An intense focus will be placed on a thorough analysis of supply, demand, and government price controls on the individual firm. The acquisition of skills in problem solving and critical thinking is a certainty after students analyze elasticity of demand, supply, and equilibrium. Further microeconomic theory will be addressed in the study of cost curves, perfect competition, monopolistic competition, oligopoly, and monopoly. This course will also cover an overview of financial topics such as saving, the cost of credit, loans, investing, etc. Research and essays are integrated into the course. DECA eligible course. This course fulfills the Economics graduation requirement.

7615 Project Management (H) Gr. 11, 12 - 2.5 Cr.
In this project-based capstone course, students will enhance their communication and project management skills through the development of research projects. Written projects in this course are designed to challenge students to develop their professional writing style. Projects may be student generated, community-based or based on DECA guidelines published each year. Mentor alliances will be formed with community-based businesses and organizations. Emphasis will be placed on problem solving, research techniques and analysis, project development and organizational skills. Students will be expected to integrate technology into all aspects of their classroom experience. Field experiences in the community may be required depending on project topics. Students taking this course are eligible to compete in written events at DECA State Competitions. DECA eligible course. Prerequisite: A grade of Bor better in Marketing or Business Fundamentals.

7307 Social Media Marketing (H) - Gr. 10, 11, 12 - 2.5 Cr.
Do you follow influencers on social media? Do you follow brands on social media? This course is for you! Does being an expert user of social media automatically qualify one as a social media marketing expert? Unfortunately not - the world of social media is far too complex for that to be true! Such complexity is precisely why this class is important. This class will introduce you to social media marketing and guides students through the process of learning what social media marketing entails and how to practice it in an effective, strategic, and value-creating manner. Students will learn to appreciate the challenges involved in successful social media marketing, realize that doing it well is not easy, and see how the complexities and challenges can be turned into marketing opportunities for brands and companies. The class has an online Social Media Marketing Simulation where you will be the Social Media Manager for a company. Each week you will post on 6 different platforms and see how many of your posts convert to sales! DECA eligible. Prerequisite: A grade of B- or better in Marketing.

7316 Sports and Entertainment Marketing (H) - Gr. 10, 11, 12 - 2.5 Cr.
The sports and entertainment industries have emerged as one of the leading occupational areas of the 21st Century. This course will give you an overview of the industry; inform you about career opportunities and give you hands-on experience using projects as they relate to the marketing of a major sport or entertainment venue. Some of the areas this course may cover include sponsorship and endorsements; sportscape; college, amateur, and professional sports; event marketing; resorts and theme parks; and the entertainment industry. Classroom instruction will be reinforced through the use of outside lectures, case studies, possible field trip experiences, computer simulations, projects, and lecture/discussions. DECA eligible. Prerequisite: A grade of B- or better in Marketing.

## Computer Science

4863 AP Computer Science A (Java) - Gr. 10, 11, 12 - 5 Cr
This course teaches programming methodology with an emphasis on problem solving and algorithm development and is meant to be the equivalent of a first-semester course in computer science, using the Java programming language. It also includes the study of data structures and abstraction. This course includes a substantial lab component in which students design solutions to problems, express their solutions precisely (i.e. in the Java programming language), test their solutions, identify and correct errors (when mistakes occur), and compare possible solutions. The AP CS A labs are aligned to the course framework. Grade 10 students that would like to take this course must speak with the teacher for approval before selecting. Prerequisite: Students need to have successfully completed Algebra 2 (CP) and obtain the computer science teacher's recommendation.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

4874 AP Computer Science Principles - Gr. 10-12-5 Cr
This is an exciting computer science course developed by the College Board. It will be taught using the Mobile Application approach. The visual programming language, MIT App Inventor for Android, will be used to provide a rigorous, programming-based introduction to computer science using a project based curriculum. Students learn computer science by building socially useful mobile apps. In this way, student learning will be associated closely with their interests and grounded in their schools, their homes and their communities. The curriculum is organized around seven principles called the Seven Big Ideas and six Computational Thinking Practices. These big ideas and computational thinking practices comprise what CS experts believe is the most important information for an educated citizen to know and understand about CS. This course is complementary to AP Computer Science A. Students can take these courses in any order or at the same time, as schedules permit. Prerequisites: Successfully completed a first-year high school algebra course.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

4911 C++ 1 (H) - Grades 9-12-2.5 Cr.
In this course, the student will study beginning C++ programming. The course builds a foundation of structured programming before learning about object oriented programming. The emphasis is on methodology including syntax and style. The development of good algorithm design is emphasized. This course includes simple types, screen I/O, looping, and the use of relational and logical operators and library functions.

In this course, students build on the foundation begun in C++ 1. The student will use aggregate data types in writing programming solutions. The students will write functions into programming solutions. The student will develop an understanding of structures and use them in programming assignments. The emphasis in this course is on programming methodology, data abstraction algorithms and data structures. Prerequisite: Successful completion of C++ 1 (H).

## 4999 Exploring Computer Science (CP) - Gr. 9-2.5 Cr.

Exploring Computer Science is an introduction to the world of computer science and problem solving that utilizes various unplugged and plugged in activities. Topics covered include: How computers and the internet works, how computing and technological innovation has an impact on society, ethical issues raised by the proliferation of computers and networks, the positive and negative impacts of new technologies on human culture, data management and manipulation and basic coding. This course will be taught through a combination of lecture, individual and group work, online training and the reading of the graphic novel Power On! Hands-on plugged-in training will include; the use of Excel, MicroBit robots (block coding) and additional languages if time allows. This course fulfills the Digital Literacy \& Computer Science graduation requirement.

4996/4997 Game Development and Programming with XNA (CP/H) - Gr. 9, 10, 11, 12-2.5 Cr. Students will learn how to create games using C\# and the XNA Game Development Framework. This course is intended to engage students with the craft of programming by creating video games. Although game development will be the main theme, all of the issues that are explored are also applicable in the wider scheme of software development. Students will ultimately learn how to create games that can be uploaded to an Xbox 360 . Previous programming skills are preferred, but not necessary.

4991/4992 Python Programming (CP/H) - Gr. 9-12-2.5 Cr.
Python Programming is a fun way to learn the basics of programming using an easy-to-learn but powerful industry-standard programming language. Although Python is the perfect programming language for beginners it is recognized by many companies like Google as the language of choice. Students will engage in exciting lessons designed to learn many computer science topics including variables, memory, branching, loops, data structures, functions, file handling, exceptions, object-oriented, GUI and multimedia programming, and program planning. Most importantly, students will learn how to think like a computer scientist. No previous experience required.

## Family \& Consumer Sciences

8526 Baking \& Pastry (CP) - Gr. 10, 11, 12-2.5 Cr.
In this course students will expand on their prior knowledge to explore and create within the expansive area of culinary arts: baking and pastry. This course is appropriate for students interested in learning more about advanced preparation techniques pertaining to baking and pastry while simultaneously focusing on the history, science, cultural aspects, and consumerism baking and pastry encompasses. This course takes place in our classroom setting as well as within the laboratory kitchens. Prerequisite: successful completion of Nutrition and Culinary Arts.
$8540 / 8541$ Culinary and Hospitality Management (CP) $(\mathrm{H})-\mathrm{Gr} .10,11,12-2.5 \mathrm{Cr}$. This course is designed to give students the opportunity to gain knowledge and technical skills in the Culinary Arts/Hospitality Management area. Students receive advanced instruction in cooking and baking techniques and presentation, and operations management in areas such as restaurant/catering, stadium and arena management, etc. Students taking this course will have opportunities to apply their skills to real-world business scenarios and pursue industry certification in ServSafe Food Handling. Prerequisite:
Successful completion of Nutrition \& Culinary Arts.

## 8710 Early Childhood Development (CP) - Grades 9, 10, 11, 12 - 2.5 Cr .

This course allows students to develop and practice necessary skills for future parenting and/or a career in working with children. Topics include physical, intellectual, social and emotional characteristics of young children. Using this information helps students to interact in appropriate ways while teaching in our on-site Algonquin Preschool. Students take on the role of 'teachers' with the $3-5$ year-old children, develop and implement lesson plans, and gain experience in utilizing techniques to effectively guide young children.

8722/8723 Early Childhood Education (CP)(H) - Gr. 10, 11, $12-2.5 \mathrm{Cr}$.
In this course emphasis is on developing skills needed to teach young children and on how to run a high quality preschool. Students become teachers in the Algonquin Preschool. Major projects include to develop a thematic teaching unit for implementation in the preschool and to compose a portfolio for the final project. This course is appropriate for students who enjoy teaching, especially for those who plan on pursuing a career in education. Prerequisite: Successful completion of Early Childhood Development

8522/8523 Global Cuisine (CP) (H)—Gr. 10, 11, 12-2.5 Cr.
Students will study how the history, geography, and culture influence the native diet of a country. They will work in small teams to research the diet and culture from various countries. They will apply that knowledge to the planning and preparing of a multi-course meal from the country studied. As they prepare the meals they will apply the food preparation techniques learned in Nutrition and Culinary Arts 1. The principles of proper meal planning -- nutrition, budget, appearance, texture, and seasonal availability are also discussed. Online tools and resources are used at various times throughout the course to further nutrition education, as well as to analyze the diet of students. Students taking this course for honors credit are expected to complete additional long-term projects and conduct work independently outside of the allotted course hours. Prerequisite: Successful completion of Nutrition and Culinary Arts.

8715/8716 Learning through Play (CP) (H) - Gr. 10, 11, 12 - 2.5 Cr .
In this course emphasis is on the psychology behind the way in which children play, the benefits of play, in addition to developing skills to help guide children's play. Students become teachers in the Algonquin Preschool. Projects include to develop an observation journal and to design and create a prototype of a new toy. This course is appropriate for students who enjoy working with children, especially those who plan to pursue a career in education. This course replaces a previously offered Independent Study course option. Prerequisite: Successful completion of Early Childhood Development.

8510 Nutrition and Culinary Arts (CP) - Gr. 9, 10, 11, 12 - 2.5 Cr.
Students will work together in small teams and will use hands-on experiences to learn a variety of food preparation techniques. Emphasis is given to basic principles such as correct measuring, mixing techniques and reading recipes. Students will prepare a variety of baked goods as well as savory food. Using online tools and resources students will analyze their own diets and apply that knowledge to make decisions about healthy and nutritious food choices for themselves. The role that nutrition plays in overall wellness is an integral theme.

7731/7730 Urban Gardening (H) (CP) Gr. 9, 10, 11, 12 - 2.5 Cr.
Urban Gardening is a global movement where people are growing what they need where they live and decreasing the carbon footprint of food distribution. If you have a countertop in your kitchen, a rooftop on your city apartment, a deck off your house, or a small patch of land in your backyard, you have space to grow your own food! Urban Gardening is accessible, sustainable and more importantly, simple! This course provides instruction related to the broad field of Horticulture with the emphasis on the artistic, scientific and business knowledge related to the discipline. Topics of this course will include: information on plant structure and function, plant growth, basic plant identification, propagation, urban garden design, floral design, culinary uses, the distribution, selling and marketing of plants, flowers, fruits, and vegetables to the local community. Students taking this course will work in the greenhouse and garden and have an opportunity to prepare meals using the food they plant. Students taking this course for honors credit are expected to complete additional long-term projects and conduct work independently outside of the allotted course hours.

## Technology

8410 3D Computer Animation (H) - Gr. 10, 11, 12 - 2.5 Cr.
This course is an introduction to computer animation. Students will use professional level software and techniques such as those used in the film, television, and gaming industry. Students will gain a basic understanding of 3D computer animation, modeling, materials, lighting and rendering. High levels of initiative and computer skills are required for successful completion of this course. This course will be offered as an independent study only with prior approval from the teacher.

8320 Construction Technology (CP) - Gr. 9, 10, 11, 12 - 2.5 Cr.
Students who elect this course will study the basics of building construction with an emphasis on residential carpentry methodology. A systems approach will be used as students design and construct structural models. Students will work in both an individual as well as a small group setting while solving technical and design problems related to the building process. Units in residential electrical, plumbing, roofing, and insulation systems will be covered in addition to structural components.

8110 Engineering Graphics 1 (CP) - Gr. 9, 10, 11, $12-2.5 \mathrm{Cr}$.
Engineering Graphics 1 is an exploratory exposure to both traditional as well as computer aided design (CAD) concepts. The students will become proficient in orthographic projection as well as in pictorial concepts, sectional and working drawings. Students will work within a CAD Lab environment in the second half of the course using Autodesk Fusion 360 Software programs. Students will engage in problem solving through analysis, application and presentation of case studies. 3D printing will be explored.

8111 Engineering Graphics $\mathbf{1}(\mathrm{H})$ - Gr. 9, 10, 11, 12 - 2.5 Cr .
Engineering Graphics 1 is an exploratory exposure to both traditional as well as computer aided design (CAD) concepts. The students will become proficient in orthographic projection as well as in pictorial concepts, sectional and working drawings. Students will work within a CAD Lab environment in the second half of the course using Autodesk Fusion 360 Software programs. Students will be held to high standards reflected in a rigorous set of CAD Lab assignments. 3D printing will be explored.

8121 Engineering Graphics $2(H)$ - Gr. 10, 11, 12 - 2.5 Cr .
This course will involve the student with an in-depth experience in solving graphics challenges in the areas of auxiliary views, revolutions, developments and assembly drawings. Geometric dimensioning and tolerances will also be introduced to the student. The student will be immersed in the CAD Lab environment (Autodesk Fusion 360) during all phases of instruction. Upon completion of the course, the student will be able to exhibit both a basic knowledge of descriptive geometry as well as CAD concepts used in technical college programs and contemporary fields of engineering within industry. Prerequisites:

## A grade of C or better in Engineering Graphics 1.

8130 Engineering Graphics 3 (H) - Gr. 11, $12-2.5 \mathrm{Cr}$.
Engineering Graphics 3 challenges all students with developing advanced computer aided design skills while immersed in the solution of structural engineering problems as well as gear and cam design. The student will also demonstrate skills in advanced view development within the engineering framework. In addition, individualized areas of exploration and research will be encouraged and expected as the course advances. Prerequisites: $\boldsymbol{A}$ grade of $\mathbf{C}$ or better in Engineering Graphics 2.

8310 Engineering with Metals (CP) -- Gr. 9, 10, 11, 12-2.5 Cr.
This course will require students to design, test and construct products incorporating both ferrous and non-ferrous metals. Basic skills pertaining to material preparation, forming, assembly, and finishing will be developed as students transform raw materials into finished products. Lessons on proper use and safe application of machine and hand tools will be an important part of this experience. Students will be required to work safely and successfully in both an individual as well as small group setting. All students will be expected to demonstrate a high level of initiative, creativity and professionalism.

Fun and Exciting! It's true! Engineering can be both educational and fun to learn. This project-based course provides an introduction to the basic concepts and fundamentals of engineering. Students will also learn about different fields and types of engineering. Students will learn how to problem solve, brainstorm, and design by using the engineering design process. Students will then apply their new knowledge to build simple projects using basic hand tools. These hands-on projects will allow the students to observe engineering concepts and principals come to life with an emphasis on how engineering is done in the real world today. As this is a Project Based learning (PBL) course, some projects may include: Vortex Cannon, Wind tunnel, Parallax 360 robot, Battle bot hydraulic robotic arm, Underwater sea perch robots, Aeronautics and Bernoulli's principle, simple machines and other related engineering projects to enhance a fun and exciting learning experience.

8400 Robotic Technology (H) - Gr. 10, 11, 12 - 2.5 Cr.
This course is a challenging, fast paced exploration of the world of robotics. Students will be introduced to a myriad of experiences related to this fast growing field. Robotic structure, power-train, power, sensors, control, logic and programming will all be addressed as students construct robots to compete in various classroom challenges.

8010 Video Production 1 (CP) - Gr. 9, 10, 11, 12 - 2.5 Cr .
In this class, students will learn to become critical viewers of various video productions. They will design and create video productions with focus, detail and consideration of audience and purpose. Problem solving, communication skills, individual innovations and creativity will be stressed as students learn the basics of scripting, camera operation, lighting, audio and video editing.

8015 Video Production 1 (H) - Gr. 9, 10, 11, 12-2.5 Cr.
This is a fast-paced introductory video production class. Students who enroll in this course must have creative writing skills and be prepared to quickly develop skills of scripting, storyboarding, camera operation, lighting, audio and video editing. Among other projects, students will study pieces by major filmmakers and will write, direct, shoot and edit video pieces based on their interpretations of the director's styles.

8045 Video Production 2 (CP) - Gr. 10, 11, 12 - 2.5 Cr.
Students in this class will participate in both field and studio shoots. As members of small production teams, students will produce short documentary pieces and special features. Emphasis will be placed on pre-production preparation and post-production using professional editing software. Students will also learn the skills required for a studio shoot as they work as members of a larger crew to shoot a variety of multi camera productions. This class will require a high level of commitment and is recommended for serious students only. Prerequisites: $\boldsymbol{A}$ grade of $\boldsymbol{C}$ or better in Video Production 1.

8046 Video Production 2 (H) - Gr. 10, 11, 12-2.5 Cr.
Students in this class will participate in both field and studio shoots. As members of small production teams, students will produce short documentary pieces and special features for cablecast. Emphasis will be placed on pre-production preparation and post-production using professional editing software. Students will also learn the skills required for a studio shoot as they work as members of a larger crew to shoot a variety of multi camera productions. Honors students will be responsible for assessing and critiquing shots and productions. This class will require a high level of commitment and is recommended for serious students only. Prerequisites: A grade of $\mathbf{C}$ or better in Video Production 1.

8210 Wood Technology 1 (CP) - Gr. 9, 10, 11, 12 - 2.5 Cr.
Students taking this course will learn how the nature of the material has affected the design and manufacture of wood products and how technology has changed to allow the construction of previously impossible designs. Students will be required to demonstrate a high level of initiative, creativity and professionalism as the work in this course is expected to be of an individualized nature. Safe use of tools and equipment will be required. Subjects covered will include studies of a variety of lumber grades and species, coated abrasives, uses of adhesives, fasteners, joinery techniques, and wood finishes.

## 8220 Wood Technology 2 (CP) -- Gr. 9, 10, 11, 12 -- 2.5 Cr.

Wood Technology II was created to offer students a more in-depth challenge in the field of woodworking. Machine tool safety and techniques will be emphasized, as will more intricate and involved processes and projects within the realm of wood technology with an emphasis on furniture design and manufacturing. Quality and individuality of work will be expected and required. Prerequisite: A grade of C or better in Wood Technology 1.

## ENGLISH

## Jane Betar, Department Chairperson

## COURSE OFFERINGS

Advanced Placement English Language \& Composition

Advanced Placement English Literature \& Composition

Contemporary Literature
Creative Writing

Environmental Humanities

Fairytales, Myths, \& Legends
Freshman English

Journalism

Junior English
Literature of Asia \& Latin America

Newspaper Production

Silenced Voices

Sophomore English
The Evolution of Comedy and Satire
Writing Center Studies 1 \& 2

Writing Workshop

The goal of the English department is to develop skilled and confident readers and writers. To that end the department teaches writing as a process and emphasizes peer review and revision and employs a reading pedagogy based in reader response and literary analysis. Courses move from foundation courses in the freshman, sophomore and junior years that provide a background in writing, literary genre, and close-reading to more specialized courses in the senior year. In addition to two AP courses, the department has rich and varied elective offerings. College Prep courses are designed to help students develop a thorough understanding of the fundamentals of a subject. Curriculum is presented at a deliberate pace, and class time is devoted to reading, discussion, skills development, and collaborative activities intended to enrich students' open-mindedness and understanding of literature, non-fiction texts, and, to some extent, media. Honors courses are designed to engage the students who have a genuine interest in the subject matter. In an atmosphere that requires initiative and an accelerated pace with little repetition of previous work, students with demonstrated academic achievement and independence will expand their mastery and appreciation of the course content.

The department maintains a strong publications program through the high school newspaper and the literary magazine. The student-run Algonquin Writing Center fosters collaboration among peers to support growth in student writing across the curriculum.

English: 20 Credits Required for Graduation
English is required each semester for all four years of your high school career. The options and progression are as follows:


1694 AP English Language \& Composition - Gr. 11, 12 - 5 Cr.
The purpose of the AP English Language and Composition course is to enable students to read complex texts and to write prose of sufficient richness and complexity to communicate effectively. Students read and analyze a broad and challenging range of non-fiction prose selections and evaluate non-fiction texts: essays, biographies, autobiographies, speeches, sermons, and passages from writing in the arts, history, social science, politics, science, as well as images, media, and imaginative literature. 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. During the course, a wide variety of texts and writing tasks provide the focus for an energetic and demanding study of language, rhetoric, and argument. Students prepare for and are encouraged to take the AP exam in English Language and Composition in May.
Prerequisite: Students must be recommended for this course by their previous year's English teacher. Because of the demanding curriculum, students bring to this course motivation and independent initiative, sufficient command of mechanical conventions, and an ability to read, write, and discuss prose at a mature level. Students who have had success in this A.P. course were those who maintained consistent attendance, strong writing skills, a desire to grow, and a B+ or higher average in English the previous year.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 1693 AP English Literature \& Composition - Gr. 11, 12 - 5 Cr.

Designed for students who possess outstanding reading, writing and analytical skills as well as a love of literature, this course draws on habits of close reading and clear, sophisticated writing. AP students must be able to work independently at an accelerated pace. Students will examine a number of sophisticated texts that challenge even the most accomplished reader. These texts will emphasize imaginative literature: poetry, fiction, and drama. In addition to a focus on analytical papers, students will be asked to complete projects and to create fiction, poetry, and dramatic scenes. They will be asked to memorize sections of text for recitation and for oral interpretation. They will work both independently and in groups. They will create their own essays, participate in peer response groups, and engage in the production of collaborative projects. In summary, they will be asked to conduct their study of literature on the college level. With this in mind, students are encouraged to take the AP Literature and Composition exam in May.
Prerequisites: Students must be recommended for this course by their previous year's English teacher. Because of the demanding curriculum, students bring to this course motivation and independent initiative, sufficient command of mechanical conventions, and an ability to read, write, and discuss prose at a mature level. Students who have had success in this A.P. course were those who maintained consistent attendance, strong writing skills, a desire to grow, and a B+ or higher average in English the previous year.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

1561 Contemporary Literature (CP) - Gr. 11, 12 - 2.5 Cr .
1562 Contemporary Literature (H) - Gr. 11, 12 - 2.5 Cr.
Through a study of literature of the twentieth century and contemporary literature, students will analyze how literature explores the universal human experience and provides a window into another perspective. The course also emphasizes close reading, expository, and personal writing. This course is designed to reinforce that reading can be enjoyable and that there are genres each person can connect with. Reading, discussion, reflections, analysis, and creative expression are major parts of this course. At the College Prep. level, materials are presented at a deliberate pace, and a good deal of class time is devoted to reviewing concepts and problems encountered in the reading and writing associated with the course.

1550 Creative Writing (H) - Gr. 9, 10, 11, 12 - 2.5 Cr.
1551 Creative Writing (CP) - Gr. 9, 10, 11, 12-2.5 Cr.
Creative Writing allows students the opportunity to step away from novel study and literary analysis. Students enrolled in this course will find their familiar English classrooms transformed into a more relaxed workshop environment. As such, students must be able to use class time productively and to work Independently to meet deadlines. Collaboration with the teacher and classmates, and the willingness to share writing and feedback with the class are essential components of the curriculum. The energy that students put into helping each other is a key part of our work together. Genres explored in this writing course include poetry, the short story, personal writing, screenwriting, the graphic novel, and the college essay. Students will read models in each genre and should expect to share their writing in peer response groups. In lieu of a final exam, all students will produce a polished portfolio. A student's grade will depend primarily on their personal growth and engagement in the writing process, including revision and peer response. Their ability to be present and to participate is paramount to success . Students taking the course for honors credit must have the desire and ability to work independently and complete additional readings and written pieces. Be vulnerable and try something new; art can come from the most unexpected places.

## 1736 Environmental Humanities (CP) - Gr. 11, 12 - 2.5 Cr.

1737 Environmental Humanities (H) - Gr. 11,12-2.5 Cr.
What happens when we seed environmental science with environmental literature? How might an interdisciplinary approach to environmental studies deepen our awareness of the natural world and the ongoing climate crisis and compel us to take meaningful eco-action? In this class we will study the interconnectedness of ecosystems and humanity, alongside environmental literature, poetry and film to examine our ecological past and present and to build hopeful visions for the future.
Students taking this course for Honors credit will be required to complete additional reading and writing as well as advanced course work. Honors students should exhibit genuine curiosity about the subject.

1720 Fairy Tales, Myths, and Legends (CP) - Gr. 11, $12-2.5 \mathrm{Cr}$.
1721 Fairy Tales, Myths, and Legends (H) - Gr. 11, 12 - 2.5 Cr.
This course delves into the study of classical folklore and its reoccurrence in contemporary literature, film, and art. Students will collaborate with each other and the instructor on this undertaking as we seek to understand why we tell stories and what they reveal about our daily lives. Whereas the magic, talking animals, and faraway settings of most fairy tales soften the violence and serve as distractions from the harsh realities within the stories, this class will face the darker side of fairy tales head on. The curriculum is designed to follow the growth of a reader, beginning with Maria Tatar's famed anthology of classic fairy tales and ending with George R.R. Martin's more mature Game of Thrones prequel, A Knight of the Seven Kingdoms. Martin will ironically deconstruct many familiar fairy tale tropes in order to revive the old stories and their cast of archetypal characters-the king, the good wife, the second son, the adventurer, and so on-with distinct analogues in medieval history, literature, religion, and legend. In between the fairy tales and Martin's seminal work, we will read selections from Kelly Link's short story collection, Magic for Beginners, and Rebecca Solnit's memoir, The Faraway Nearby. The readings will help us reconnect with the imaginative experiences that held us spellbound as children and expand our understanding of why we tell stories. Honors students should have a genuine interest in the subject matter and demonstrate a willingness to work at an accelerated pace. Advanced reading, writing, and analytical skills are required for Honors students. Students at the CP level will focus on more fundamental concepts associated with the curriculum and work at a moderate pace. Basic reading, writing, and analytical skills are required for CP students.

## 1113 Freshman English (CP) - Gr. 9 - 5 Cr.

Freshman English acknowledges the diverse cultural, racial, and personal experiences with which students enter high school. This course seeks to expand how students see themselves as citizens, readers, and writers through the exploration of the genres of nonfiction, fiction, poetry and drama. Students will hone skills and habits in reading, writing, listening, speaking and presenting. Materials are presented at a deliberate pace with class time devoted to enhancing comprehension, critical thinking, independence and stamina.

1103 Freshman English (H) - Gr. 9-5 Cr.
Freshman English acknowledges the diverse cultural, racial, and personal experiences with which students enter high school. This course seeks to expand how students see themselves as citizens, readers, and writers through the exploration of the genres of nonfiction, fiction, poetry and drama. Students will hone skills and habits in reading, writing, listening, speaking and presenting. This course will provide an accelerated pace. Students should have a genuine interest in the subject and have demonstrated academic achievement and a high level of maturity. Independent initiative, outside preparation and critical thinking will all be expected.

## 1641 Journalism (H) - Gr. 9, 10, 11, 12-2.5 Cr.

Have you always wanted to contribute to The Harbinger, Algonquin's award-winning student news publication? In this class you can! Learn to write news articles, reviews, and opinion pieces that are submitted for print and/or online publication. Students will work individually and in teams interviewing sources, working as reporters, and coaching each other's stories. Students may also have the opportunity to learn the basics of photojournalism and create videos and infographics for The Harbinger's website. This is a deadline-oriented course and much class time is spent working on stories and collaborating with classmates. You will also gain a background in First Amendment law and journalistic ethics. Honors-level students will also independently study an aspect of journalism they find interesting.

## 1581 Journalism (CP) - Gr. 9, 10, 11, 12-2.5 Cr.

Have you always wanted to contribute to The Harbinger, Algonquin's award-winning student news publication? In this class you can! Learn to write news articles, reviews, and opinion pieces that are submitted for print and/or online publication. Students will work individually and in teams interviewing sources, working as reporters, and coaching each other's stories. Students may also have the opportunity to learn the basics of photojournalism and create videos and infographics for The Harbinger's website. This is a deadline-oriented course and much class time is spent working on stories and collaborating with classmates. You will also gain a background in First Amendment law and journalistic ethics.

## 1626 Junior English (CP) - Gr. 11-5 Cr.

In this world literature course, students will examine the role our social, cultural, political, and natural environments play in shaping our identities. By engaging with texts from across the globe, they will work to understand their place in a diverse and rapidly evolving world. Students will continue to develop their analysis skills by applying critical lenses to a variety of texts, including literature, film, essays, and poetry. There will be an emphasis on developing strategies related to writing, close reading, research, and discussion. Materials are presented at a deliberate pace, as a good deal of class time is devoted to reviewing concepts encountered in the reading and writing associated with the course. As students advance in their English classes, they will find reading is just the starting point for not only understanding but also appreciating the value stories from around the world hold.

## 1625 Junior English (H) - Gr. 11-5 Cr.

In this world literature course, students will examine the role our social, cultural, political, and natural environments play in shaping our identities. By engaging with texts from across the globe, they will work to understand their place in a diverse and rapidly evolving world. Students will continue to develop their analysis skills by applying critical lenses to a variety of texts, including literature, film, essays, and poetry. There will be an emphasis on developing strategies related to writing, close reading, research, and discussion. To meet with success, students working at the honors level should demonstrate strong reading, writing, and thinking skills, a willingness to grow and work at an accelerated pace, and independent initiative. As students advance in their English classes, they will find reading is just the starting point for not only understanding but also appreciating the value stories from around the world hold.

1670 Literature of Asia and Latin America (H) - Gr. 11, 12 - 2.5 Cr.
In this course, you will have the opportunity to grow your awareness of Asia, and Latin America through our study of mythology, poetry, literature, and film. We will explore the social, religious, cultural, and historical influences specific to each author and region, with special attention given to the female perspective. Students will examine a variety of perspectives within each region to avoid, as Chimamanda Adichie puts it, "the danger of a single story." There is an emphasis on close reading, discussion, and analysis with an aim at developing cultural awareness.

1585 Newspaper Production I, II, III (H) - Gr. 9, 10, 11, 12 - 2.5 Cr .
If you've already taken Journalism ( CP or H ) and want to continue producing work for The Harbinger, Newspaper Production is the place to do it. Modeled after working in a newsroom environment, News Pro students pursue their interests and advance their journalistic skills in areas such as writing, editing, layout, graphics, photojournalism, multimedia, advertising, and social media. Students work independently and on teams to produce content of their choice for Algonquin's award-winning school news publication. Students enrolled in the course are expected to be intrinsically motivated and adhere to deadlines while bringing energy and innovation to the publication.
Prerequisite: Journalism (CP) or (H). This course may be taken multiple times for credit as Newspaper Production II, Newspaper Production III, etc. Students may register for two Newspaper Production courses each year.

## 1675 Silenced Voices (H) - Gr. 11, 12-2.5 Cr. <br> 1676 Silenced Voices (CP) - Gr. 11, 12-2.5 Cr.

This discussion-based course will examine those often-silenced voices in American contemporary society. The voices of Indigenous Americans, Black Americans, Latinx Americans, Women, Asian Americans and Pacific Islanders, American Muslims, the LGBTQ+ community, and many more are often misunderstood and overlooked. To combat this silencing, students are exposed to these voices' rich culture through a variety of texts: short fiction, poetry, spoken word, hip-hop and other music genres, video clips, films, documentaries, personal essays, opinion and current news pieces, and popular culture. By discussing contemporary issues regarding oppression, equality and equity, prejudice, privilege, racism, gender, identity, and power, students will recognize the importance of surpassing the single story of any group, learn to honor both the differences and similarities of the many cultures within our society, and strive to become allies. This course requires participation in daily class discussions, both small group and whole class, and students' assessments include self-evaluation, written reflections, research tasks, and creative projects. Though there exists no difference between Honors and College Preparatory levels for topics and participation expectations, the levels are differentiated in terms of writing requirements and due dates; additional readings may be assigned for the honors level. Students are encouraged to enroll in the honors level, but regardless of level, all students should exhibit an independent initiative, a willingness to participate, and an open mind.

## 1215 Sophomore English (CP) Gr. $10-5 \mathrm{Cr}$.

In this American literature-focused course, students sharpen their reading comprehension skills and analyze important universal themes.Through a variety of texts, students will explore American identities and what it means to live a good life. Students will also have the opportunity to select books to foster a love of reading and improve reading comprehension and stamina. Through close reading, discussion, and various forms of writing, students will develop arguments that demonstrate their insights and personal connections with the text. From drafting to peer feedback and revising, students will engage in all steps of the writing process. Students will develop vocabulary skills and refresh their knowledge of grammar, usage, and mechanics. At the CP level, a good deal of class time is devoted to reading, writing, and skills development.

1205 Sophomore English (H) - Gr. 10-5 Cr.
In this American literature-focused course, students sharpen their reading comprehension skills and analyze important universal themes. Through a variety of texts, students will explore American identities and what it means to live a good life. Students will also have the opportunity to select books to foster a love of reading and improve reading comprehension and stamina. Through close reading, discussion, and various forms of writing, students will develop arguments that demonstrate their insights and personal connections with the text. From drafting to peer feedback and revising, students will engage in all steps of the writing process. Honors students will be expected to work more independently on their reading and writing; they should be prepared for an accelerated pace and depth of inquiry.

1544 The Evolution of Comedy \& Satire in Film, Literature, and the Media (H) - Gr. 11,12-2.5 Cr. 1545 The Evolution of Comedy \& Satire in Film, Literature, and the Media (CP) - Gr. 11,12-2.5 Cr. This course is designed around analyzing what is funny and why we laugh. Using comedy as our central theme we will travel through genres and time to reflect on various types of comedy such as satire, screwball and romantic comedy. Through literature, film, and television we will examine how these forms hold cultural, social, or political significance for their audiences and how comedy and satire has evolved from Ancient Greece to now. From silent films to the transition of sound we will look at the works of Charlie Chaplin to Abbott and Costello and journey our way to films such as "Some Like It Hot" and "The Naked Gun." Television will take us from "I Love Lucy" to "Saturday Night Live." And finally, through the world of literature we will read such authors as Oscar Wilde, Nora Ephron, Neil Simon, and Kurt Vonnegut. Comedy, we will find, is a method of storytelling, meant immediately to elicit laughs. But, more significantly, it is oftentimes used as a form of social and political criticism and to provide commentary on how we live our lives. Requirements for Honors and College Prep levels will be differentiated with regard to pace, rigor and the number of assignments required.

## 1569 Writing Center Studies 1 (H) - Gr. 9, 10, 11, 12-2.5 credits

This course prepares students to work in the Algonquin Writing Center (AWC) and introduces tutors-to-be to the field of writing center studies. Students engage in an in-depth study of writing center research and converse about the challenges faced by high school writers. Tutors are trained in and practice strategies to help writers navigate those challenges with the goal of helping them become more conscientious communicators. All our work in this course is guided by the AWC's four core values: Agency, Inclusivity, Collaboration, and Growth Mindset. Writing Center Studies 1 students are assessed on participation, writing projects, and understanding of writing center theory. This course is a prerequisite for Writing Center Studies 2.

## 1572 Writing Center Studies 2 (H) - Gr. 10, 11, 12 -- 2.5 credits

The three pillars of this course are writing, research, and mentorship. Veteran tutors have the opportunity to explore areas of interest through research and writing. Participants in this course are encouraged to write with the goal of publishing their work in the form of a journal article or presentation at a national or regional writing center conference. Students in this class also serve in a variety of mentor roles to both new tutors and writers at ARHS. Writing Center Studies 2 students are assessed on participation, individual and group writing projects, and the quality of their contributions to the field of writing center research. Prerequisite: Writing Center Studies 1.

1571 Writing Workshop (CP) - Gr. 9, 10, 11, 12 - 2.5 Cr.
1570 Writing Workshop (H) - Gr. 9, 10, 11, 12 - 2.5 Cr.
This course uses a writing-as-a-process approach to teaching composition. It is designed to help students improve their skills in the areas of description, narration, persuasion, and exposition and to develop a clear, concise writing style through critical thinking and the logical development of ideas. The course includes keeping a writer's notebook or journal, the critical analysis of essays, individual student conferences, and a variety of other assignments designed to improve the student's ability to communicate in writing. A highlight of the course for juniors and seniors is time spent on college/personal essays. Students of all grade levels will find that the writing instruction in this course transfers nicely to many of their other courses across disciplines. Students should expect to read models in each genre and to meet in peer response groups to discuss these models as well as their own writing and their peers' writing. In this course, students choose what they write about; an emphasis is placed on coming up with topics and revision strategies and techniques. Students who have good attendance and a growth mindset or the willingness to experiment with writing styles will find this course a good match for them. Honors students will be required to complete additional readings, writings, and more frequent peer response.

## FINE \& PERFORMING ARTS Amy Collins, Department Chairperson

## COURSE OFFERINGS

## FINE ARTS:

Advanced Art
Advanced Ceramics
Advanced Photography
AP Studio Art- 2D Art \& Design
AP Studio Art- Drawing
Art I, II
Art Gallery Management
Ceramics I, II
Digital Art
Digital Photojournalism
Graphic Design for Publications
Mixed Media/ Alternative Materials Exp.
Photography I, II
Unified Art Explorations

## PERFORMING ARTS:

Advanced Drama Workshop
American Pop Music
AP Music Theory
Beginning Guitar Class
Beginning Piano Class
Camerata Singers
Chamber Choir
Concert Choir
Drama Workshop I, II
Jazz Improvisation Workshop
Learn To Jam
Music Theory
Musical Theater Workshop
String Orchestra
Symphonic Band
Wind Ensemble

The arts makes us human. The arts helps us to make sense of our own lives and identify with the lives of those around us. It is often recognized as a driver of the creative and innovative thinking needed to solve our world's most pressing problems. Learning and practicing in the arts, and tapping into your own creativity, can make you better at whatever you do!


#### Abstract

Take advantage of the dynamic array of fine and performing arts classes offered at Algonquin. Your high school years will race by, and now is when you have an opportunity to explore and make art, create music, or perform in a play as part of your school experience. With a wide breadth of course offerings, you will be sure to find your opportunity to successfully participate in the arts.


The arts stand alone in promoting, among other skills, communication, self-discipline, innovation, teamwork, self-expression and confidence. The arts teach us to observe, self-reflect, manage stress and help create wholeness. Through the Arts classes, students discover and explore their inner artist.

## "Art is the only way to run away without leaving home."

-Twyla Tharp

Fine and Performing Arts: 2.5 Credits are Required in Fine and Performing Arts (or in Applied Arts and Technology - see page 5)

| Lower School |  | Upper School |  |
| :---: | :---: | :---: | :---: |
| Grade 9 | Grade 10 | Grade 11 | Grade |
| Performing Arts: $\qquad$ American Pop <br> Music(CP)(H) <br> __ Beginning Guitar (CP), (H) <br> __ Beginning Piano (CP), (H) <br> _ Concert Choir (H) <br> __Concert Choir/ Symphonic Band(H) <br> __ Drama Workshop 1 (CP)(H) $\qquad$ Drama Workshop 2 (CP)(H) <br> __ Learn to Jam (CP)(H) <br> __ Music Theory (H) <br> __ String Orchestra (H) <br> __ Symphonic Band (H) <br> Fine Arts: <br> _ Art I (CP), (H) <br> __ Art II (CP), (H) <br> __Ceramics I 9/10 (CP), (H) <br> __ Digital Art (CP), (H) <br> __ Digital Photojournalism (H) <br> __ Graphic Design for <br> Publications (H) $\qquad$ Mixed Media/Alternative Materials Exploration (CP), (H) __ Photography I (CP), (H) | Performing Arts: ```_ Advanced Drama Workshop (H) __American Pop Music(CP)(H) _ Beginning Guitar (CP)(H) _ Beginning Piano (CP)(H) __ Camerata Singers (H) __Chamber Choir (H) _ Concert Choir (H) __ Concert Choir/ Symphonic Band(H) __ Drama Workshop 1 (CP)(H) __ Drama Workshop 2 (CP)(H) __Jazz Improv Workshop (H) __ Learn to Jam (CP)(H) __ Musical Theater Workshop (CP )(H) _ Music Theory (H) __ String Orchestra (H) _ String Orchestra/Camerata (H) __ Symphonic Band (H) __ Wind Ensemble (H) _ Wind Ensemble/Chamber Choir (H)``` <br> Fine Arts: <br> __ Advanced Art (H) <br> __ Art I (CP), (H) <br> _ Art II (CP), (H) <br> __ Art Gallery Management (H) <br> __Ceramics I 9/10 (CP), (H) <br> __Ceramics II (CP), (H) <br> _ Digital Art (CP), (H) <br> __ Digital Photojournalism (H) <br> __Graphic Design for <br> Publications (H) <br> _ Mixed Media/Alternative <br> Materials Exploration (CP), (H) <br> __ Photography I (CP), (H) <br> __ Photography II (CP), (H) <br> __Unified Art Explorations (CP),(H) | Performing Arts: ```__ Adv Drama Workshop (H) __ American Pop Music (CP)(H) _ AP Music Theory __ Beginning Guitar (CP)(H) __ Beginning Piano (CP)(H) _ Camerata Singers (H) _ Chamber Choir (H) _ Concert Choir (H) __Concert Choir/ Symphonic Band(H) __Drama Workshop 1 (CP)(H) __Drama Workshop 2 (CP)(H) __Jazz Improv Workshop (H) __ Learn to Jam (CP)(H) __ Musical Theater Workshop (CP) (H) __ Music Theory (H) __ String Orchestra (H) __ String Orchestra/Camerata (H) __ Symphonic Band (H) __ Wind Ensemble (H) __ Wind Ensemble/Chamber Choir (H)``` <br> Fine Arts: <br> __ Advanced Art (H) <br> __ Advanced Ceramics (H) <br> __ Advanced Photography (H) <br> __ AP Studio Art- 2D Art \& Design <br> _ AP Studio Art- Drawing <br> __ Art Gallery Management (H) <br> _ Art I (CP), (H) <br> __ Art II (CP), (H) <br> _ Ceramics I (CP), (H) <br> _ Ceramics II (CP), (H) <br> __ Digital Art (CP), (H) <br> __ Digital Photojournalism (H) <br> _ Graphic Design for Publications (H) <br> _ Mixed Media/ Alternative <br> Materials Exploration(CP), (H) <br> __ Photography I (CP), (H) <br> __ Photography II (CP), (H) <br> __Unified Art Explorations (CP),(H) | Performing Arts: <br> _ Adv Drama Workshop (H) <br> __American Pop Music(CP)(H) <br> _ AP Music Theory <br> _ Beginning Guitar (CP)(H) <br> _ Beginning Piano (CP)(H) <br> _ Camerata Singers (H) <br> _ Chamber Choir (H) <br> _ Concert Choir (H) <br> _ Concert Choir/ Symphonic <br> Band(H) <br> __ Drama Workshop 1 (CP)(H) <br> __Drama Workshop 2 (CP)(H) <br> _ Jazz Improv Workshop (H) <br> _ Learn to Jam (CP)(H) <br> __ Musical Theater Workshop <br> (CP) (H) <br> _ Music Theory (H) <br> _ String Orchestra (H) <br> _ String Orchestra/Camerata (H) <br> __ Symphonic Band (H) <br> _ Wind Ensemble (H) <br> _ Wind Ensemble/Chamber <br> Choir (H) <br> Fine Arts: <br> _ Advanced Art (H) <br> _ Advanced Ceramics (H) <br> __Advanced Photography (H) <br> _ AP Studio Art- 2D Art \& Design <br> _ AP Studio Art- Drawing <br> _ AP Music Theory <br> __Art I (CP), (H) <br> _ Art II (CP), (H) <br> _ Art Gallery Management (H) <br> _ Ceramics I (CP), (H) <br> __Ceramics II (CP), (H) <br> __ Digital Art (CP), (H) <br> __ Digital Photojournalism(H) <br> __ Graphic Design for <br> Publications (H) <br> _ Mixed Media/Alternative <br> Materials Exploration (CP), (H) <br> __ Photography I (CP), (H) $\qquad$ Photography II (CP), (H) $\qquad$ Unified Art Explorations (CP), (H) |

FINE AND PERFORMING ARTS
FINE ARTS:

|  | 2D Visual Arts | Media Arts |  | 3D Visual Arts | Art Connections |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intro | Mixed Media | Art I | Digital Art | Graphic Design | Photojournalism | Photo I | Ceramics I | \(\left.\begin{array}{c}Unified Art <br>

Explorations\end{array}\right]\)

9770/9760 Art I (CP) (H) - Gr. 9, 10, 11, $12-2.5 \mathrm{Cr}$.
This course is an introduction for any student looking to explore 2D visual arts. The course is designed to break down techniques such as drawing, painting, and collage into attainable skills. Through step-by-step guidance, students will get to develop their abilities using various mediums and materials. This course is perfect for both beginning art students with little (no) previous skill, as well as those students looking to hone their technical skills. At the honors level, students will be expected to keep a personal sketchbook outside of class that they will use to experiment and expand their artistic habits of mind.

9773/ 9763 Art II (CP) (H) — Gr. 9, 10, 11, 12 - 2.5 Cr.
This course will continue to develop drawing and painting skills. More challenging projects will be presented and more opportunities for individual ideas will be provided. Various drawing mediums such as charcoal, conte and pastel; painting mediums such as watercolor and acrylic, and collage will be used to encourage students' visual literacy and creativity. At the honors level, students will be expected to keep a personal sketchbook that they will use to experiment and expand their artistic habits of mind.
Prerequisite: any of the following courses: Art I, Mixed Media, or Digital Art

9791 Advanced Art (H) - Gr. 10, 11, 12 - 2.5 Cr.
This course is designed for students to advance their technical and creative art skills. Students will begin to develop independent, self-directed studio habits. Projects and prompts will be given to help students create pieces to be used in the development of a formal Art Portfolio. Outside of class students will have semester long projects to work on independently. Prerequisite: Art II

## 9797 AP Studio Art- Drawing (AP) - Gr. 11, 12 - 5 Cr.

This course is for the highly motivated student who is seriously interested in the many aspects of drawing, painting and other two dimensional art forms. The course involves significant commitment and self-discipline, as extensive work outside the classroom is required. Students will pursue college-level art studio studies following a curriculum derived from The College Board Advanced Placement Program guidelines. In addition to working on the portfolio requirements, students are expected to maintain a consistent self-directed process journal. The portfolio in its entirety will be digitally submitted to the College Board, along with five original works by mail, to be judged for college credit.
Prerequisite: B+ or better in Advanced Art.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

Whether online or in print, almost every publication we encounter has been visually designed by a graphic designer. This course explores the intersection of text and visual information as they come together on pages, printed and virtual. Students build an awareness of effective visual design in the areas of typography, visual hierarchy, information design, and vector graphics. Students complete a range of assigned and self-directed projects using Adobe Creative Suite, as it would be used in a professional setting, including best practices for digital design collaboration, file management, and workflow. Skills learned in this class are applicable to any profession in which people publish work, including journalism, business, STEM, and the arts and humanities.

9756/9755 Digital Art (CP) (H) - Gr. 9, 10, 11, 12 - 2.5 Cr .
If you think you can't draw a straight line, you can in this class! Whether you're new to digital drawing, or already skilled with an Apple Pencil, Digital Art will help you advance your skills. Learn how to select and take good reference images, improve proportions and color, and create depth in your work. Find out how an image needs to be prepared to make large-scale inkjet prints, and how professional artists save time with layers. At the CP Level, students are expected to learn skills and perform to specified criteria, while at the Honors level, students are expected to take more ownership for their learning with independent assignments, contribute to the classroom community, and express vision and creativity in original work. During the course, students have access to the full suite of Adobe applications, for use at school and at home.

9515/9516 Photography I (CP) (H)-9, 10, 11, 12-2.5 Cr.
Film photography is at the center of Photo 1 . In the darkroom, students can take their time, and watch their images materialize before their eyes. Through a mix of film and digital photo assignments, students explore the power images have to communicate, and what elevates a great photo from the thousands that exist in our phones. At the CP level, students are assessed more heavily on darkroom skills, visual design, and work completion. At the Honors level, students are expected to work more independently, and create original images that convey meaning, emotion, and cultural significance to the viewer. During the course, students have access to the full suite of Adobe applications, for use at school and at home. Students may borrow a camera, or use their own, depending on the model. It should be noted that darkroom photography requires students to work independently and responsibly, even without direct supervision. Students who cannot follow safety guidelines may not be candidates for this course.

## 9525/9526 Photography II (CP) (H)— Gr. 10, 11, 12 - 2.5 Cr .

After learning basic camera and darkroom skills in Photo I, students deepen their understanding of photography by learning manual camera settings, also applicable to digital photography. At the CP level, students are expected to combine manual camera settings with visual design to create visually interesting images. At the Honors level, students are challenged to connect technique with expression, originality, and meaning. Students may borrow a film camera, or use their own, depending on the model and function of the camera. Prerequisite: Photo I.

9814 Digital Photojournalism (H) - Gr. 9, 10, 11, 12 - 2.5 Cr.
Students explore practices of reputable news media photography while taking pictures for The Harbinger, Algonquin's award-winning student newspaper. Once students learn basic principles of news photography and digital workflow using Smartphones, DSLR's are introduced for more complex photography situations, such as low-light and sports photography. This is a deadline-oriented course; time outside class is required to take photos. Students gain a background in First Amendment law, photojournalism ethics, photography workflow and editing, caption writing, and advanced photography techniques. During the course, students have access to the full suite of Adobe applications, for use at school and at home.

## 9530 Advanced Photography (H) - Gr. 11, 12 - 2.5 Cr.

In this advanced level course, students consider qualities and techniques that distinguish fine art photography, why artists create, and where they get their inspiration. Students are guided in making expressive images with personal meaning through establishing a photographic style and using advanced camera, darkroom and digital techniques. This course often runs alongside AP-2D Design, and is a great alternative for students who want a semester of advanced photo, as opposed to a whole year. Students are required to have the use of a digital camera with manual controls for the entire semester. During the course, students have access to the full suite of Adobe applications, for use at school and at home.

## Prerequisite: $\mathbf{2}$ Semesters of an ARHS photography class

9796 AP Studio Art- 2D Art \& Design (AP) - Gr. 11, 12 - 5 Cr.
In this yearlong course, students further their knowledge of visual design and expression, using photography, digital art, or graphic design. Within a structured calendar of deadlines and critiques, students work independently and within the classroom community to create in-depth bodies of work on topics that speak to their interests and passions In addition to producing photos, students explore and analyze the work of contemporary photographers, reflecting on others' and their own work in writing, discussion, and artistic response. Regular commitment outside the classroom, independence, and summer homework are required. The portfolio in its entirety will be digitally submitted to the College Board. During the course, students have access to the full suite of Adobe applications, for use at school and at home.

Prerequisite: 2 Semesters of any ARHS media arts class: digital art, graphic design, photojournalism, photo I, photo II, and/or Permission of Teacher.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/ commitment.

9615a/9616a Ceramics I (CP) (H) - Gr. 9 \& 10 -2.5 Cr.
This course is an introduction to ceramics. Students will explore hand-building techniques in order to create both functional and abstract artworks. These techniques will include pinch, coil, stamp and slab methods as well as certain techniques in glazing and ceramic safety. There is an emphasis on creativity, craftsmanship, and studio care. At the honors level, students will learn the basics of the ceramic wheel outside of regular class time. Students enrolled will be required to participate in an afterschool wheel-throwing tutorial, which will lead to a required wheel thrown artwork project in addition to regular in class assignments. Determination for $(\mathrm{H})$ will be set by the date scheduled in the course expectations at the start of the term.

9615/ 9616 Ceramics I (CP) (H) - Gr. 10, 11, $12-2.5 \mathrm{Cr}$.
This course is an introduction to ceramics. Students will explore hand-building techniques in order to create both functional and abstract artworks. These techniques will include pinch, coil, stamp and slab methods as well as certain techniques in glazing and ceramic safety. There is an emphasis on creativity, craftsmanship, and studio care. At the honors level, students will learn the basics of the ceramic wheel outside of regular class time. Students enrolled will be required to participate in an afterschool wheel-throwing tutorial, which will lead to a required wheel thrown artwork project in addition to regular in class assignments. Dates for honors wheel tutorials will be listed in the course expectations at the start of the term.

9617/9618 Ceramics II (CP) (H) - Gr. 10, 11, 12 - 2.5 Cr .
This course introduces wheel throwing skills while also building upon techniques learned in Ceramics I. Students will create more complex artworks and experiment with unique techniques. Students will be expected to push their ideas to a new level, with focus on craftsmanship and idea-generation. At the honors level, students will be required to keep constant documentation of their artistic process and create artworks with an emphasis on innovative concepts and ideas. Additionally, students will begin exploring the world of art as a common practice. Prerequisite for Ceramics II (CP): Ceramics I.
Prerequisite for Ceramics II (H): Ceramics I \& permission of teacher.
9833 Advanced Ceramics (H) - Gr. 11, 12-2.5 Cr.
What is your artistic style? This course will encourage students to investigate themselves as artists through the use of complex and abstract ideas and artworks. Students will use their repertoire of techniques in order to identify their artistic style through a body of work. They will also be required to keep constant documentation of their artistic process, and develop their own artist statement.

## Prerequisite: Ceramics II

9752/9753 Mixed Media/Alternative Materials Exploration (CP) (H)- Gr. 9, 10, 11, 12-2.5 Cr. This course will introduce students to the fundamental principles, techniques, and the variety of materials that may be used to create 2 D art. Students will have the ability to experiment with traditional and non-traditional materials, learn to express themselves in a myriad of mediums, and learn about contemporary artists who push the boundaries of the art world. Students will have the chance to create representational and abstract artworks that express their creativity and problem-solving abilities. Materials introduced include but are not limited to: collage, embroidery, and printmaking. At the honors level, students will be expected to create additional artwork that they will work on throughout the semester outside of regular class time that will reinforce concepts introduced to them in class.

## 9559 Art Gallery Management (H) - Gr. 10, 11, 12 - 2.5 Cr .

This hands-on course is developed to be collaborative and student-driven. Students in this course develop and utilize their leadership skills in order to manage Algonquin's in-school art gallery, Gallery of the Boroughs. Students will set their own goals, learning how to discover local artists, network, exhibit, promote and budget along the way. They will collaborate in order to select, curate, and open our school's gallery with a show that they have developed to share with the school community. Students may re-enroll in this course for additional credit, as each semester projects will vary based on different individual roles, teamwork experience, themes and artists. Prerequisite: Any ARHS Fine Arts course

This inclusionary visual arts course is designed to be a cooperative exploration in art that meets the individual needs of students in a small group setting with lessons designed to foster individual physical, developmental, and social-emotional needs. Mediums may include painting, drawing, clay, darkroom, digital arts and illustration, and collage. Students will explore the use of artistic media for self-expression and communication while working towards individualized goals. Students may take the course more than once as the student goals will differ with growth, and mediums will vary each semester. Students who learn together and work together create a strong path to friendship and understanding. Students who wish to take this for honors credit will need to have a teacher recommendation and/or instructor approval and complete additional work.

## PERFORMING ARTS:

## (in alphabetical order)

9460 Advanced Drama Workshop (H) - Gr. 11, 12 - 2.5 Cr.
Advanced Drama is a semester-long performance-based course designed for students who enjoy performing in a supportive setting or who might want to pursue a career in the arts or communications. Students will work as an ensemble to create original scenes and plays, perform for a live audience, and work with scripted material. This course will also provide opportunities for students who are also interested in technical theater, backstage work, and directing. Prerequisite: Drama Workshop II \& permission of instructor.

9366/9365 American Pop Music: From Billie Holiday to Billie Eilish (H/CP) - Gr. 9, 10, 11, 12 - 2.5 Cr. This class is a guide to understanding and enjoying American popular music from the late nineteenth century to the present. We will survey a variety of popular genres, including rock, blues, jazz, country, R\&B, and hip hop, probing the links between music and issues of race, gender, class, economics, and politics. In this project-based course, students will listen, interpret, discuss, and study the origins of today's popular music.

9223 AP Music Theory - Gr. 11, 12 - 5 Cr.
Music theory gives us a deeper understanding of music and helps us communicate and perform better as musicians. This rigorous course expands upon the skills learned in Music Theory Honors and is designed to develop a student's ability to recognize, understand, and describe the function and processes of music. AP Music Theory develops musical skills that will lead to a thorough understanding of music composition and theory and to prepare musicians who plan to further pursue any level of music at the collegiate level. Students cultivate their understanding of music theory through listening to and analyzing performed and notated music as they explore concepts like pitch, rhythm, form and design. Musical terminology, notation, analysis, aural skills, sight singing, composition skills and arranging will be studied and a systematic study of the historical tonal music styles will be stressed. Students will learn solfége and sight singing techniques, in addition to working on harmonic and melodic dictation and ear training skills. Students will follow a curriculum derived from the College Board Advanced Placement Program guidelines.

## Prerequisite: Music Theory $(\mathrm{H})$ and/or permission of the teacher.

Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/ commitment.

9151/9153 Beginning Guitar Class (CP) (H) - Gr. 9, 10, 11, 12-2.5 Cr.
This course is a 'hands on' course designed for beginning students with some basic skills and for those who are interested in learning to play the guitar and have had no prior experience. The course will include familiarization with the guitar, music reading and basic theory, playing single note melodies as well as chords. By the end of the semester students should be able to play several popular songs. Student progress will be measured and graded by periodic performance exams. It is preferred that students have access to a guitar that they can bring to class; the school owns a limited number of guitars for students to use. Students opting to take the course at the honors level will be required to complete additional assignments and performance assessments, and perform more challenging repertoire.

## 9150/9152 Beginning Piano Class (CP) (H) - Gr. 9, 10, 11, 12 - 2.5 Cr .

This course is a 'hands on' class designed for beginning students with some basic skills and for those who have had little or no prior piano instruction and would like to learn how to play the piano. The course will include familiarization with the keyboard, music reading, basic theory, playing single note melodies as well as melodies accompanied by chords. By the end of the semester students should be able to play well-known songs. Student progress will be measured and graded by periodic performance exams. Access to a piano or keyboard at home is beneficial, but not required. Students opting to take the course at the honors level will be required to complete additional assignments and performance assessments, and perform more challenging repertoire.

9423 Camerata Singers (H) -- Gr. 10, 11, 12 -- 5 Cr.
This is a chorus of select singers who are interested in an intensive and challenging vocal music experience. Enrollment is limited, an audition is required, and there are very strict attendance requirements for rehearsals and performances. Students must be prepared to learn their music on their own and perform in concerts outside of school in the community. Prerequisite: Concert Choir, and an audition.

9121 Chamber Choir (H) - Gr. 10, 11, 12-5 Cr.
This is a chorus of select singers who have the highest performance standards. Music literature studied will include choral music for most all eras and musical styles including vocal jazz. Enrollment is limited and an audition is required. Attendance at all concerts is required and there are frequent community concert appearances as well as attendance at music festivals. Chamber Choir members join Concert Choir during select performances in concerts and festivals. Prerequisite: Concert Choir, and an audition.

9113 Concert Choir (H) - Gr. 9, 10, 11, 12 - 5 Cr.
Concert Choir is a vocal performing organization open to all voice ranges and levels of experience. This course prepares special programs for school and public performances. Members are given the opportunity to experience a wide range of choral music and to improve their music reading skills. Concerts are frequent and attendance is required at all concerts. This group meets five times per week for the full year.

9395 Concert Choir/Symphonic Band (H) - Gr. 9, 10, 11, 12 - 5 Cr.
The outline of both courses will apply. Students will split time between the two groups according to a schedule determined by the directors.

9430/9435 Drama Workshop 1 (CP/H) - Gr. 9, 10, 11, 12 - 2.5 Cr.
This class develops basic acting and communication skills through unrehearsed scenarios, devised (or group) theater, monologue, and scene work. No previous acting experience is required, although students who have performed will be equally challenged. Actor training has been used in various corporate settings and business schools to improve collaboration, communication, empathy, social skills, and self-confidence. The ultimate goal of this class is for students to feel more comfortable in their own skin both on stage and in everyday life.

9440/9445 Drama Workshop 2 (CP/H) - Gr. 9, 10, 11, 12 - 2.5 Cr.
This course is for the student who enjoyed Drama I and wants to refine their acting skills with a new ensemble of actors. Drama II also uses improvisation, devised theater, monologue, and scene work to teach stage skills, but with an increased focus on strengthening voice and improving physicality. It will also prepare students for in-school performances throughout the semester. Prerequisite for Drama Workshop 2 (CP): Drama Workshop 1. Prerequisite for Drama Workshop 2 (H): Drama Workshop I \& Permission of Instructor

9355 Jazz Improvisation Workshop (H) - Gr. 10, 11, 12 - 2.5 Cr.
A performance-based course for students who want to learn to improvise in the jazz idiom. Students will be taught chords, scales, patterns, and stylistic considerations for improvisation over chord changes on standard jazz pieces. Students will also study jazz history, influential jazz artists, and notable compositions. Students should be able to read and notate music and have an established proficiency on their instruments. Members of the class are expected to perform in all concerts and events as determined by the director.
Prerequisite: Concurrent enrollment in Band, Chorus, or Orchestra, and permission of the teacher.

9360/9361 Learn to Jam (CP/H)- Gr. 9, 10, 11, 12- 2.5 Cr .
This class is open to all students in grades 9 thru 12 with any level of music experience from the absolute beginner to advanced. In this class students will learn how to play multiple instruments. Students will learn the fundamentals of music through performing with others. Units will include four chord songs, bucket drumming, and rock/pop covers. Students will be provided with school instruments and equipment as needed.

9226/9227 Musical Theater Workshop (CP/H) - Gr. 10. 11. 12-2.5 Cr.
In this half year elective, students will be introduced to the techniques used by actors and singers to perform musical theater scenes. Students will prepare scenes and songs from various musicals spanning different eras of musical theater from the golden age through contemporary pieces. Students will perform select scenes in a culminating performance at the end of the semester.

9213 Music Theory (H) - Gr. 9, 10, 11, 12 - 2.5 Cr.
In this course, students will learn the basic and intermediate elements of musical notation, music theory, and ear training. They will gain familiarity with those elements through in-class activities and homework assignments that involve writing and performing music. Students will be able to apply the skills learned in this course to playing, singing, arranging, and composing music.

9133 String Orchestra (H) - Gr. 9, 10, 11, 12 - 5 Cr.
This course is an extension of the string instruction begun in earlier grades and is open to any student that plays violin, viola, cello, or string bass. A balanced repertoire of music of the classical composers and popular music is presented. This ensemble meets after school on a weekly basis to rehearse full orchestra music with wind, brass, and percussion players. Attendance at all concerts is required as well as attendance at music festivals. The course meets five times per cycle for the entire year.

9130 String Orchestra/Camerata Singers (H) - Gr. 10, 11, 12 - 5 Cr.
The outline of both courses will apply. Students will split time between the two groups according to a schedule determined by the directors. Prerequisites: Auditions

## 9013 Symphonic Band (H) - Gr. 9, 10, 11, 12 - 5 Cr.

This ensemble performs music of the highest quality from the standard band repertory as well as contemporary works. This group performs music at grade level $4 / 5$. Attendance at all public performances is required as well as attendance at music festivals. The group meets five times per cycle for a full year.

9134 Wind Ensemble (H) - Gr. 10, 11, 12 - 5 Cr.
This is an ensemble of select instrumentalists who have the highest performance standards. Enrollment is limited and an audition is required. This ensemble performs music of the highest quality from the standard band repertory as well as contemporary works. Attendance at all concerts is required and there are frequent community concert appearances as well as attendance at music festivals. This group meets five times per cycle for a full year. Prerequisite: Symphonic Band, and an audition.

9136 Wind Ensemble/Chamber Choir (H) - Gr. 10, 11, 12 - 5 Cr.
The outline of both courses will apply. Students will split time between the two groups according to a schedule determined by the directors. Prerequisites: Auditions

## HEALTH \& FITNESS

## Brian Mawson, Department Chairperson

## COURSE OFFERINGS

Students are required to enroll in a health and fitness class all four years of high school. Students can only enroll in the designated health and fitness class for their grade level. Enrollment in one of the elective courses will be in addition to the required course. Elective courses cannot be substituted for the required grade level course.

## The following are the required courses for each grade level:

Grade 9 Health and Fitness 9
Grade 10 Health and Fitness 10
Grade 11 Health and Fitness 11
Grade 12 Health and Fitness 12

## Electives:

Wellness Mentor (CP)
Weight Training and Conditioning (CP) Team Sports (CP)

Health and Fitness is an integral part of our educational program designed to contribute to the student's overall well-being.

We firmly believe that the potential of any student to achieve depends upon a healthy body, a sound mind, strong emotional intelligence and a positive self-concept. Without these basic attributes of physical, mental, emotional and social health, advancement toward other educational goals will be difficult.

Our primary objective is to help our students better prepare themselves to meet the demands of daily living both in adolescence and as they move into adulthood. Students are taught health and fitness principles and provided the opportunity to experience an array of activities that will help them establish and maintain a lifestyle of health and fitness. By understanding the effects of physical activity on their bodies and the importance of healthy lifestyles, our students will learn that health and fitness are life-long efforts. Our program also allows students a break from the academic rigor of the classroom to enjoy social interaction with classmates and to participate in fun physical activities

## HEALTH \& FITNESS REQUIRED PROGRAM

Students are required to enroll in one semester of health and fitness each vear for a total of 10 credits ( $\mathbf{2 . 5}$ per year) to graduate.

| Lower School |  | Upper School |  |
| :---: | :---: | :---: | :---: |
| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| Required: <br> Health \& Fitness 9 | Required: <br> Health \& Fitness 10 <br> Elective: <br> __Weight Training and Conditioning (CP) __Team Sports(CP) | Required: <br> Health \& Fitness 11 <br> Electives: <br> __Weight Training and Conditioning(CP) <br> __Team Sports(CP) | Required: <br> Health \& Fitness 12 <br> Electives: <br> __Wellness Mentor(CP) $\qquad$ Weight Training and Conditioning(CP) $\qquad$ Team Sports(CP) |

3609 Health and Fitness Grade 9 (CP) - 2.5 Cr.
This course is designed to enable students to participate in a variety of individual sport skills and fitness activities that promote a healthy lifestyle. Students will actively acquire specific sport skills, an understanding of health-related and skill-related fitness components, guidelines for exercise, principles of training, and goal setting. Lifetime sport and fitness skills will be introduced, instructed and practiced in a positive learning environment that will enhance each student's physical, emotional, and social development.

## 3610 Health and Fitness Grade $\mathbf{1 0}$ (CP) - $\mathbf{2 . 5}$ Cr.

This course provides students with the necessary skills for achieving health and fitness. Students will be able to apply responsible decision-making to their daily lives regarding personal health issues such as substance abuse, suicide prevention, teen pregnancy, sexually transmitted infections, healthy relationships, and fitness concepts. Active learning strategies will include knowledge assessments, processing information through class discussions, cooperative learning activities, role playing, and journal writing.

## 3611 Health and Fitness Grade 11 (CP) - 2.5 Cr.

This course is designed to help students develop and demonstrate self-confidence, problem solving and decision-making skills, individual fitness strategies, teamwork, and respect for diversity through active and cooperative learning activities. Students will work toward the acquisition and application of knowledge and life skills, thus providing the framework for a lifetime of healthy living.

## 3612 Health and Fitness Grade 12 (CP) - 2.5 Cr .

This course is designed to equip students with the knowledge and skills necessary to obtain a lifelong healthy lifestyle with emphasis placed on the post graduate years. Course content will include a wide range of activities in the area of Health and Fitness as well as exposure to occupations in the Health and Fitness Field.
The course is a combination of personal fitness activities as well as team intramural sports. As Health and Fitness 12 students, they will also be given the opportunity to select activities of interest to them.

## Electives:

## 3430 Wellness Mentor (CP) - Gr. 12-2.5 Cr.

This is an elective course designed for students, who want to improve their leadership, team-building, organizational, communication, and decision-making skills. Curriculum activities include becoming a positive role model for other students, increasing personal health-related fitness components, and engaging in practical classroom management skills. Other responsibilities could include officiating activities, developing a mini-unit as a culminating project, or keeping a portfolio of individual accomplishments. Interested students should contact the teacher they wish to mentor with. A brief interview with the Health and Fitness Department Chairperson is also necessary before electing this course.

3550 Weight Training and Conditioning (CP) Gr. 10, 11, 12 - 2.5 Cr .
This course is designed for those students who are interested in weight training and conditioning. The curriculum will include lifting skills and techniques, individualized conditioning programs and an opportunity to alleviate stress through exercise. This is an ideal class for those who want to start up or continue with their weight training and exercise programs but who have difficulty finding time to work out after school and a facility in which to train.

## 3530 Team Sports (CP) Gr. 10, 11, 12 - 2.5 Cr.

Stay healthy and emotionally fit by participating in some favorite team sports. Students will participate in activities that include touch football, soccer, ultimate Frisbee, softball, basketball, team handball, volleyball and floor hockey. Additionally, physical fitness components will be discussed as well. This is a vigorous program and, in order to participate, it is mandatory that students have a change of clothes.

## STUDENT SUPPORT DEPARTMENT

## Caroline Flynn, Department Chairperson

The Student Support Services Department offers a continuum of programs and services to support students in grades 9-12 and post secondary students, with the goal of improving student access to curriculum. Students and staff gain a better understanding of a student's individual learning style and specific strategies that support how they learn best. Students may receive instruction in developing efficient study skills, test taking skills, assistance with organization, and how to use technology to improve their learning. Student Support Services also provide help to students who require social, emotional, and behavioral support.

Members of the Department include School Nurses, School Psychologists, Special Education Teachers, Speech/Language Pathologist, Physical and Occupational Therapists, Tutors, School Adjustment Counselors, Reading Specialist, Educational Support Professionals, Transition Coordinator, English Language Development Teachers and the Assistant Director of Student Support Services.

## Support Services for all Students

- Focus Study
- ACCESS
- Peer Tutor Program
- ELD - English Language Development
- Student Health Services


## Special Education Services

- Learning Centers
- Inclusion Support
- Related Services
- Programming


## SUPPORT SERVICES FOR ALL STUDENTS

Students may access academic support for a variety of skills, such as organization, study, and test taking strategies in their directed studies and from content specific resource centers. Students are strongly encouraged to stay after school with their content area teacher when needing extra help in their classes.

## Student Health Services

Two full time school nurses offer a variety of medical support for students and staff throughout the school day to ensure that our students are healthy and safe. The nurses provide skilled nursing care, nursing assessments, nursing intervention for chronic health issues and mental health support. Every student who enters the district has an up to date medical record including state mandated screenings and immunizations. Other duties for the school nurse include: on-going health education for students, parents and staff and specialized health care plans for students with chronic illness. Nurses are critical members of the building based crisis team and act as a resource for families who may need help accessing medical information. Nurses play a critical role in helping members of the school reach their optimal level of wellness.

## Focus Study (By Recommendation)

Students can utilize a class period scheduled into their day to access instruction in study skills, test taking strategies, and organization. They can gain greater insight into how they learn best and develop strategies that are most appropriate to their individual learning styles. Students learn time management, organizational strategies (including use of an assignment notebook), note taking, summarizing, research strategies and graphic organizers, utilizing the students' classroom assignments. The overall emphasis is for students to develop self-advocacy strategies to meet their educational needs. This study is staffed by a full time tutor.

## ACCESS- (By Recommendation)

ACCESS is a short term program designed to promote the stabilization, resiliency and reintegration of students experiencing temporary medical or mental health challenges in a supportive school environment. The program is staffed by a licensed school adjustment counselor and academic tutor.

## Peer Tutoring Program

Students needing support can access peer tutoring in a variety of ways. The Algonquin Writing Center is available to support any student with writing across the curriculum. Students can schedule appointments with the AWC through the Algonquin website. The Math and Science National Honor Societies provide peer tutors after school. Students can inquire about tutoring through their Math/Science teacher. The Guidance department maintains a list of fee based tutors. Families should contact their student's counselor for more information.

## SPECIAL EDUCATION SERVICES

The Special Education Department provides specially designed instruction and services to support students with their specific needs in the areas of education, vocation and community access. Special education programming and placement are determined by the IEP (Individual Education Program) team.

## Academic Learning Centers - Grades 9, 10, 11, 12-2.5 credits per semester

Students access learning centers based on their Individual Education Program. Students receive academic support per the goals and objectives identified in their IEP. Learning centers are staffed with a special education teacher and an instructional aide. Students on an IEP participate in the general education curriculum with support provided by their Special Education teachers in consultation with their general education teachers. Students can also receive related services provided by School Psychologist, School Adjustment Counselor, Speech/Language Pathologist, Occupational Therapist, and Adaptive Physical Education Teacher.

## Inclusion Support

Students are assigned to supported classes, based upon their level of need and the service delivery of their Individual Education Program. Special education teachers or Educational Support Professionals provide support within the general education classrooms. Support can range from assistance with organizational strategies, reading, writing, and math within the context of curriculum being delivered.

## SPECIAL EDUCATION PROGRAMS

## Language Based Program (LBLD)

The Language-Based Learning Disabilities Program follows the core values and beliefs of the District. The program promotes high expectations and excellence for all in a dynamic learning environment that inspires opportunities for thinking critically, solving problems, and engaging intellectual curiosity. It supports diversity, inclusion, discovery, resiliency, and effective communication in a safe learning environment.

This is an intensive instructional program designed for students with a specific learning disability who require small group instruction with special education staff or a combination of general education and special education staff. These students struggle with meeting their potential in more than one of the following skill areas: Reading Skills (inclusive of decoding, fluency, and comprehension), Spelling Skills (encoding), Written Language, Mathematics, Executive Function Skills and/or Expressive Language.

Instruction is delivered using a direct, systematic, multisensory, structured language teaching approach with instruction focused on the attainment of decoding/encoding skills, oral reading fluency, comprehension skills, writing skills, and vocabulary development.

Placement in this program is a result of a Team meeting determination by the student's Individualized Education Program (IEP) Team.

## Transitional Learning Center 1 (TLC 1):

The Transitional Learning Center is an individualized program designed for students needing more intensive academic, social and communication support. The TLC offers a variety of courses to address the full range of needs and skill levels of students with varying disabilities including but not limited to Intellectual, Autism, Neurological and Communication. Student's individual needs are addressed in their IEP with the focus of participating in general education classes to the maximum extent possible. The TLC teachers focus on teaching the core content areas of Reading, English/Language Arts, Mathematics, Science and Social Studies at the student's instructional level through a variety of instructional models.

Placement in this program is a result of a Team meeting determination by the student's Individualized Educational Program (IEP) Team.

## Transitional Learning Center 2 (TLC 2):

The TLC 2 Program is designed for students who require intensive specialized instruction across the school day to support their learning challenges. The TLC 2 Program is individualized to meet the specific needs of the individual student. The program is based on the principles of Applied Behavior Analysis (ABA). Instruction may be provided in the general education classroom or in the sub separate classroom for small group instruction and/or one-to-one instruction. One to one instruction is heavily based on the principles and procedures of ABA which embedded systematic teaching to help students generalize learned skills across settings. Additionally, an individualized curriculum is developed and implemented for each student as needed using the highly specialized web based ACE Curriculum. Areas of focus for the program include functional communication, activities of daily living, academics, Augmentative Assistive Communication (AAC), vocational, communication skills, and social pragmatic skills. The program has a Team approach to services. Staff include a lead special education teacher, educational support professionals, speech and language therapist, physical therapist, and an occupational therapist. The program is also supported by a Board Certified Behavior Analyst, Assistive Technology Specialist, AAC consultant, School Psychologist and Transition Coordinator.

Placement in this program is a result of a Team meeting determination by the student's Individualized Educational Program (IEP) Team.

## Reaching Individualized Success Educationally (RISE):

The RISE Program is an individualized program designed for students with social/emotional challenges. These social emotional challenges impede the students' ability to succeed in the inclusion setting and as a result receive their primary academic instruction in the therapeutic program from a combination of content-specific general education teachers and special education staff, in a small group model. Students work to overcome their challenges and develop skills to better manage their emotions. Students receive their primary support from the special education teacher and additionally are assigned a School Adjustment Counselor who works closely with family and outside providers with the goal of returning students to the general education setting whenever possible.

Placement in this program is a result of a Team meeting determination by the student's Individualized Educational Program (IEP) Team.

## The Community Access Program (CAP)

The Community Access Program (CAP) is a full day program for postgraduate, Algonquin students between the ages of 18-22, with varying disabilities including but not limited to Intellectual, Autism, Neurological and Communication. CAP is designed to provide the training necessary for successful supported employment and independent living. The goal of CAP is to provide direct, hands-on, specialized instruction that will help students make progress towards transitioning successfully from the public school setting to the adult world.

This program emphasizes the development and enhancement of functional skills in the areas of: Vocation/Employment, Social Skills/Communication, Health/Self-Care, Functional Daily Life Skills, Leisure and Community Access. Enrollment in the CAP occurs through the IEP Team process.

Placement in this program is a result of a Team meeting determination by the student's Individualized Educational Program (IEP) Team.

## NECC Partnership Program:

Provides intensive, specialized instructions to students who have a disability that causes significant cognitive, social and behavioral challenges. Components of this special education, instructional program include: 1:1 staffing ratio, varied but controlled learning environment(s), specific teaching strategies including a heavy emphasis on Applied Behavioral Analysis, systematic data collection across settings throughout the school day, consistent analysis of data for trends, related therapies and modified curriculum. Instruction is focused on academic skills, functional life skills, social pragmatics, emotional regulation and behavioral management.

Placement in this program is a result of a Team meeting determination by the student's Individualized Educational Program (IEP) Team.

## MATHEMATICS

## Elizabeth Dore, Department Chairperson

## Course Offerings

Advanced Algebra (CP)
Algebra 1 (H/CP/Fundamentals)
Algebra 2 ( $\mathrm{H} / \mathrm{CP} /$ Fundamentals)
AP Calculus AB or BC
AP PreCalculus
AP Statistics
Calculus (CP)
Calculus (H)
Contemporary Applied Mathematics (CP)
Geometry (H/CP/Fundamentals)
Individual Mathematics (CP)
Math Mentor
PreCalculus (H/CP/Fundamentals)
Statistics (CP)

In accordance with the Massachusetts Mathematics Curriculum Frameworks, it is our goal that students studying mathematics at Algonquin become confident in their ability to do mathematics, become mathematics problem solvers and learn to reason and communicate mathematically. The math courses described in the following pages are designed to help students achieve that goal. Students should consult with their current teacher as to the best course selection for them.

| Lower School |  | Upper School |  |
| :---: | :---: | :---: | :---: |
| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| Required: <br> Choose one of these: <br> __Algebra 1 (H) <br> __Algebra 1 (CP) $\qquad$ Algebra 1 <br> Fundamentals (CP) $\qquad$ Algebra 2 (H) $\qquad$ Algebra 2 (CP) $\qquad$ Individual Math (CP) | Required: <br> Choose one of these: <br> __Geometry (H) <br> __Geometry (CP) <br> __Geometry <br> Fundamentals (CP) <br> __Individual Math(CP) | Required: <br> Choose one of these: <br> __Algebra 2 (H) <br> __Algebra 2 (CP) $\qquad$ Algebra 2 <br> Fundamentals (CP) $\qquad$ AP PreCalculus $\qquad$ _AP Statistics $\qquad$ _Contemporary Applied <br> Mathematics (CP) $\qquad$ Individual Math (CP) _Math Mentor (CP) $\square$ _PreCalculus (H) __PreCalculus (CP) <br> __Statistics (CP) | Electives: <br> You can select from these: ```__Advanced Algebra(CP) __AP Calculus AB & BC _- AP PreCalculus __ AP Statistics __Calculus (H) __Calculus (CP) __Contemporary Applied Mathematics (CP) __Individual Math (CP) __Math Mentor (CP) __PreCalculus (H) __PreCalculus (CP) __PreCalculus Fundamentals (CP) __Statistics (CP)``` |

4325 Advanced Algebra (CP) - Gr. 12-5 Cr.
The goal of this course is to complete and reinforce learning of core high-school-level mathematics for college and career readiness. Students will continue to develop their algebraic proficiency in manipulating expressions and equations as well as explore non-linear functions, including quadratic, exponential, and logarithmic functions. Students will also develop their understanding of triangle trigonometry, projectile motion, and vectors. Successful students will be fully prepared for further math courses such as precalculus and for meeting college math requirements. Prerequisite: Successful completion of Algebra 2 Fundamentals.

## 4103 Algebra 1 (H) - Gr. 9-5 Cr.

The honors course is designed for those students who seek a challenge beyond the college preparatory approach. All of the topics covered in Algebra 1 CP will be studied but in more depth and at a faster pace. Advanced topics include operations on rational expressions, solving radical equations, and the exploration of quadratic functions and their graphs.
Eighth grade teacher recommendation is required.

4113 Algebra 1 (CP) - Gr. 9-5 Cr.
In this course, students will build on the algebraic foundation learned in earlier courses. They will learn more about algebraic expressions, rational numbers, proportional reasoning, polynomials, factoring, and topics in statistics. Students will investigate one variable and fractional equations. Students will study linear equations, inequalities, and quadratic functions. Demonstrating the ability to graph these equations and use appropriate functions to solve problems are essential to this course.

Eighth grade teacher recommendation is required.

## 4123 Algebra 1 Fundamentals (CP) - Gr. 9-5 Cr.

In this course, students will build on the algebraic foundation learned in prior courses. This course covers basic algebraic skills essential to the study of mathematics. Course topics include linear expressions, equations and inequalities; graphing on the coordinate plane; systems of equations and inequalities, operations with monomials and polynomials including factoring and solving equations with factoring; simplifying radicals and basic operations with radicals; and topics in statistics.

## 4303 Algebra 2 (H) - Gr. 9, 10, 11 - 5 Cr.

In the honors level course all of the topics covered in Algebra 2 CP will be studied, and requires the ability to learn at an accelerated pace and to grasp more complicated mathematical concepts in greater depth. In addition, students will explore matrices (including $3 \times 3$ and applications), binomial expansion, and statistics (normal distribution, correlation, variance, and standard deviation). Students who have been successful in Algebra $2(H)$ have maintained a B or better in Geometry $(H)$ or have eighth grade teacher recommendation. A graphing calculator is required for this course.

4313F Algebra 2 (CP)- Gr. 9- 5 Cr.
Students will further develop skills introduced in Algebra 1. Students will investigate the properties of linear, quadratic and logarithmic functions. They will extend their knowledge of solving systems of equations to include matrices, and will learn about complex numbers. They will expand their knowledge on the topics of exponents, radicals, and statistics. Students who have been successful in Algebra 2 CP have maintained a C+ or better in Algebra 1 (CP).

4313 Algebra 2 (CP) - Gr. 10, 11, 12 - 5 Cr.
Students will further develop skills introduced in Algebra 1. Students will investigate the properties of linear, quadratic and logarithmic functions. They will extend their knowledge of solving systems of equations to include matrices, and will learn about complex numbers. They will expand their knowledge on the topics of exponents, radicals, and statistics. Students who have been successful in Algebra 2 CP have maintained a C+ or better in Algebra 1 (CP) and Geometry (CP).

## 4315 Algebra 2 Fundamentals (CP) - Gr. 11, 12 - 5 Cr.

Students will investigate the properties of linear and quadratic functions. They will extend their knowledge of the number system to include complex numbers. They will expand their knowledge on the topics of linear inequalities, exponents, and radicals, and will explore systems of equations, matrices, factoring, and rational expressions. Emphasis will be placed on applications and practice.

## 4503 AP Calculus AB - Gr. 12-5 Cr.

In this course students will differentiate and integrate elementary functions and apply these techniques to selected applications. The content follows the prescribed Advanced Placement program. All the topics specified in the Advanced Placement syllabus for level AB calculus are covered. Students may earn college credit and/or advanced standing by satisfactory performance on an Advanced Placement examination administered in May. Part of the exam requires use of a graphing calculator. Regular use of the graphing calculator is required in the course work as well. Also, students are required to complete a summer assignment in preparation to begin Calculus AB. Prerequisite: B- or better in term 1 and term 2 in Pre-Calculus (H) or AP PreCalculus.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 4523 AP Calculus BC - Gr. 12-5 Cr.

Calculus $B C$ is an extension of Calculus $A B$. Calculus $B C$ covers all of the topics presented in Calculus $A B$, and extends them to include the following analysis of parametric, polar and vector functions, including their derivatives, Euler's Method for differential equations, geometric interpretations of differential equations via slope fields, L'Hopital's Rule, improper integrals, polynomial approximations and series, and Taylor Series. The course is open to students, with their teachers' recommendation, who have completed Pre-Calculus at the honors level. Also, students are required to complete a summer assignment in preparation for beginning Calculus BC.
Prerequisite: A- or better in term 1 and term 2 in Pre-Calculus (H) or AP PreCalculus.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

This accelerated course is a comprehensive study of mathematics in preparation for AP Calculus. The class focuses heavily on the development of higher order problem-solving skills. The pace is rigorous; topics taught will include polynomial, rational, exponential, logarithmic, and trigonometric functions, as well as advanced applications with parametric equations, polar coordinates, vectors, and matrices. Students may earn college credit and/or advanced standing by satisfactory performance on an Advanced Placement examination administered in May. Regular use of the graphing calculator is required in the course. Students are required to complete a summer assignment focused on topics covered in Algebra II $(\mathrm{H})$ in preparation for beginning AP Precalculus.
Prerequisite: B or better in Algebra $2(H)$ and Geometry $(H)$ or teacher recommendation. Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 4603 AP Statistics - Gr. 11, 12-5 Cr.

In this course students will study the major concepts and tools for collecting, analyzing and drawing conclusions from data in preparation for the Advanced Placement Exam. Regular use of the graphing calculator is required in the course work as well. Students will investigate four major conceptual themes: Exploring data by observing patterns; planning a study by deciding what and how to measure; anticipating patterns; producing models using probability and simulation; statistical inference by confirming models.
Prerequisites: Successful completion of or concurrently with Pre-Calculus.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 4513 Calculus (CP)- Gr. 12-5 Cr.

This course is intended for those students who will take Calculus in college. Key topics in this course include: analysis of graphs, limits of functions, the concept of a derivative, the computation and applications of derivatives, interpretations and properties of definite integrals, applications of integrals, the Fundamental Theorem of Calculus. Prerequisite: C or better Pre-Calculus (CP).

## 4533 Calculus (H) - Gr. 12-5 Cr.

In this course, students will learn differentiation and integration of elementary functions with selected applications. Key topics in this course include: analysis of graphs, limits of functions, the concept of a derivative and the applications of derivatives especially those in business. Students will learn the properties of definite integrals, applications of integrals, and the Fundamental Theorem of Calculus. Regular use of the graphing calculator is an integral part of the course. Many of the topics of the Advanced Placement syllabus are included in this course. Prerequisite: B+ or better Pre-Calculus (CP) or successful completion of Pre-Calculus (H).

This course will be based on a college math-for-liberal-arts textbook, For All Practical Purposes, and will have an emphasis on math use in today's world. In this course students will learn to explore and analyze data in order to make informed decisions. Students will describe, explore, graph, and compare various data sets. Students will solve problems based on normal distributions and construct confidence intervals to describe broader populations. Correlation and regression for two variables will be studied. Additionally, students will investigate topics chosen from the following: business and management problems involving planning, scheduling, efficiency, and optimization; voting systems and social choice; fairness and game theory; the mathematics of the digital revolution; and the mathematics of personal finance.

Prerequisite: Successful completion of Algebra 2 Fundamentals, Algebra 2 CP, or higher, or by teacher recommendation.

## 4203 Geometry (H) - Gr. 10-5 Cr.

Logic, analysis and proof of concepts are integral parts of the course. Transformational geometry is also studied. The pace is more intense and the students study more topics in greater depth. Deductive reasoning will be developed through the study of formal geometric proofs. Real-life applications are integrated throughout the course. Topics include the study of lines, angles, parallels, congruent triangles, special quadrilaterals, similar triangles and proportion, right triangles, circles, concurrence theorems, area, solids, volume, coordinate geometry and the postulates and theorems related to each topic. Students who have been successful in Geometry (H) have maintained an A- or better in Alg. 1 (H) and/or B in Alg. 2 (H).

4213 Geometry (CP) - Gr. 10-5 Cr.
In this course students will integrate and maintain algebraic skills while developing geometric concepts. Students will conduct hands-on activities which afford the opportunity to discover geometric relationships using inductive reasoning. Deductive reasoning will be developed through the study of formal geometric proofs. Real-life applications are integrated throughout the course. Topics include the study of lines, angles, parallels, congruent triangles, special quadrilaterals, similar triangles and proportion, right triangles and trigonometry, circles, area and volume, coordinate geometry and the postulates and theorems related to each topic. Students who have been successful in Geometry (CP) have maintained a C or better in Alg. 1 (CP).

## 4215 Geometry Fundamentals (CP)

In this course, students will extend their geometric knowledge while continuing to build on their algebraic skills. Topics covered include the study of lines, angles, congruent triangles, similar triangles and proportion, right triangles and trigonometry, circles, perimeter area, and volume. Students who are successful in Geometry Fundamentals have completed Algebra I Fundamentals.

4143/4163 Individual Math (CP) - Gr. 9, 10, 11, 12 - 5 Cr.
This course is designed to meet the needs of students who require an individualized program. Students work on sharpening their skills and advance in their study of Algebra and Geometry at a pace consistent with their learning style and abilities.

Prerequisite: Students must be signed into this course by current teacher and Math Department Chair.

This program is for upper school students who want to work with an underclassmen math class, while improving their leadership, communication, and decision-making skills. Mentors are expected to be a positive role model for other students, and to assist the classroom teacher with curriculum and management tasks. An interview with the Mathematics Department Chairpersons will be required before students are admitted to this course. Students may take this class for community service requirements instead of credit.

## 4403 PreCalculus (H) - Gr. 11, 12-5 Cr.

This honors course is a comprehensive study of mathematics in preparation for AP Calculus or Calculus Honors. The pace is accelerated; topics taught include polynomial, rational, exponential, logarithmic, and trigonometric functions, with an emphasis on real world applications. Students will study vectors, the binomial theorem, proof by mathematical induction, arithmetic and geometric sequences and series, conic sections, polar coordinates, and parametric equations, as well as an introduction to the derivative. Regular use of the graphing calculator is required.

## Prerequisite: B- or better in Algebra $2(H)$ and Geometry $(H)$ or by teacher recommendation.

4413 PreCalculus (CP) - Gr. 11, 12-5 Cr.
Students will explore all topics of trigonometry with special emphasis on trigonometric graphs; solving exponential and logarithmic functions including applications; exploration of quadric and higher degree polynomial equations including exploration of symmetry and transformations; an introduction to polar coordinates. Students will be instructed on the use of graphing calculators. The prerequisite for Precalculus (CP) is maintaining a C+ or better average in Algebra 2 (CP)

4412 PreCalculus Fundamentals (CP) - Gr. 12 - 5 Cr .
This is a $4^{\text {th }}$ year math course that provides an opportunity for students to further analyze high school mathematics concepts in preparation for college-level math courses. Topics covered include algebraic functions, exponential and logarithmic functions with applications, introduction to trigonometric functions and graphs, an introduction to statistics including measures of central tendency and the normal distribution, and linear regression. Students who take this course have maintained a C- or better in Algebra 2 (CP).

4633 Statistics (CP) - Gr. 11, $12-5 \mathrm{Cr}$.
This full year course is designed to provide students with a comprehensive understanding of statistical concepts and their practical applications in various fields. Students will be introduced to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Prerequisite: Successful completion of Algebra 2 Fundamentals, Algebra 2 (CP) or higher, or by teacher recommendation.

## SCIENCE

## Lorraine Zanini, Department Chairperson

## Course Offerings

## Core Courses for Graduation <br> Requirement:

Biology
Chemistry
Physics
Electives:
AP Biology
AP Chemistry
AP Environmental Science
AP Physics C
Astronomy
Biotechnology
Environmental Science
Forensic Science
Human Anatomy and Physiology
Innovations
Introduction to Mechanical \&
Electrical Engineering
Organic Chemistry

The science program offers courses designed to acquaint students with the means of inquiry used by scientists, to acquire knowledge that comprises the essential structure of each of the sciences, and to develop a respect for and an enduring curiosity about the natural world in which one lives.

With respect to course levels, the Honors program is set up to meet the needs of the highly capable student who demonstrates excellent reading, writing, technological and thinking skills, a willingness to work at an accelerated pace and has a genuine interest in the subject matter. The College Prep level program is set up to meet the needs of the college bound student. Students are required to pass a science MCAS test to graduate from high school in Massachusetts. Algonquin students who take and pass the Biology MCAS test at the end of $9^{\text {th }}$ grade will fulfill this state requirement.

Students are required to complete the following three full years of science: Biology, Chemistry, and Physics. Students have the opportunity to experience a wide variety of other science courses, in addition to these requirements.

Science: 15 Credits Required for Graduation

| Lower School |  | Upper School |  |
| :---: | :---: | :---: | :---: |
| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| Required: <br> Choose one of these: $\begin{aligned} & \text { _Biology }(\mathrm{CP})(\mathrm{H}) \\ & \text { _Biology Fundamentals } \\ & (\mathrm{CP}) \end{aligned}$ | Required: <br> Choose one of these: <br> __Chemistry (CP)(H) $\qquad$ Chemistry <br> Fundamentals (CP) <br> Electives: $\begin{aligned} & \text { Environmental Science } \\ & (\mathrm{CP})(\mathrm{H}) \end{aligned}$ | Required: <br> Choose one of these: $\qquad$ Physics(CP)(H) $\qquad$ Physics Fundamentals (CP) <br> Electives: $\qquad$ _AP Biology AP Chemistry AP Environmental $\square$ Astronomy (H) $\square$ Biotechnology (H) $\qquad$ Environmental Science (CP)(H) $\qquad$ Forensic Science(H) $\qquad$ Human Anatomy \& Physiology (CP)(H) $\qquad$ Innovations (H) __Organic Chemistry (H) | Electives: <br> Choose any course listed for Grade 11 <br> OR: <br> __AP Physics C $\qquad$ Introduction to Mechanical and Electrical Engineering (H) |

## SCIENCE

5223 AP Biology - Gr. 11, 12-7.5 Cr.
This course is a rigorous college level program that adheres to and exceeds the national College Board Advanced Placement curriculum. AP Biology incorporates the four College Board themes: Evolution, Energetics, Information Storage and Transmission, and Systems Interactions in the curriculum and lab investigations throughout the year. This course consists of biology lectures on: biochemistry, cell structure and function, cell energetics, cell communication and cell cycle, heredity, gene expression, biodiversity, and ecology. The collaborative laboratory investigations apply the course content and require formal reporting. AP Biology requires critical thinking and application of advanced principles, including statistical analysis. Written review papers enhance the understanding of complex and innovative biological topics. Assessments are representative of the higher cognitive domain. This course meets for two periods during semester one and one period during semester two. Students enrolled in the course are encouraged to take the College Board Advanced Placement Exam in May. Prerequisites: 83 or higher in honors Biology or a 93 or higher in CP Biology; and a B or better in honors Chemistry or a 93 or higher in CP Chemistry.Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 5323 AP Chemistry - Gr. 11, 12-7.5 Cr.

This course is open to intellectually capable, highly motivated, and mathematically advanced students who have successfully completed a year of chemistry. Students who enroll in this course indicate their acceptance of responsibility for meeting the demands of college-level work. This is a second year chemistry course designed to provide more in-depth education in chemistry that began in first year chemistry. It is modeled after a first year college chemistry course. This course meets for 2 scheduling periods for the first semester and for 1 scheduling period for the second semester. Students enrolled in this course are encouraged to take the Advanced Placement Examination in Chemistry offered by the College Entrance Examination Board.
Prerequisite: 83 or higher in Honors Chemistry or a 93 or higher in CP Chemistry.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 5225 AP Environmental - Gr. 11, 12-7.5 Cr.

The goal of the course is to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and man-made, to evaluate the relative risks associated with these problems and to examine alternative solutions for resolving or preventing them. This course will meet for 2 scheduling periods for the first semester and for 1 scheduling period the second semester. Students enrolled in this course are encouraged to take the Advanced Placement Examination in Environmental Science offered by the College Entrance Examination Board in the spring. Prerequisites: 83 or higher in Biology (H), or 93 or higher in CP Biology, and successful completion of Chemistry. Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 5523 AP Physics C-Gr. 12-7.5 Cr.

AP Physics $C$ serves as a foundation for students planning college majors in the physical sciences or engineering. Students must be concurrently enrolled in AP Calculus as the methods of calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems. The subject matter is principally mechanics and electricity and magnetism, with approximately equal emphasis on these two areas. All students are expected to take both exams in May. Prerequisites: $\mathbf{8 3}$ or better in honors Physics, or $\mathbf{9 3}$ or better in CP Physics. Co-requisite: AP Calculus AB or BC. Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 5533 Astronomy (H) - Gr. 11, and $12-2.5 \mathrm{Cr}$. (Semester Course)

This semester course provides the student with an introduction to astronomy. This course covers topics including the Big Bang, stars, galaxies, the Sun \& Moon, the Planets, exoplanets, and the search for extraterrestrial life. Students will experience astronomy through a variety of laboratories (hands-on and computer simulations with data analysis), videos, and observations. Required successful completion of Algebra II.

## 5203 Biology (H) - Gr. 9- 5 Cr.

This rigorous, fast paced, full-year biology course is designed for a mature student with well-developed study skills. The student is capable of higher-order thinking, has strong analytical writing skills, and can also work independently at an accelerated pace. Topics include: from molecules to organisms: structures and processes, ecosystems, heredity, and biological evolution, and human body systems. Laboratory investigations, extensive note-taking and projects are part of the course. This course prepares students for the biology MCAS exam in June. Placement is based on the recommendation of the $8^{\text {th }}$ grade science teacher.

5213 Biology (CP) - Gr. 9-5 Cr.
This full-year biology course investigates the diversity, complexity and interconnectedness of life on earth. Topics include: from molecules to organisms, structures and processes, ecosystems, heredity, and biological evolution, and human body systems. Laboratory investigations, note-taking and projects are part of the course. This course prepares students for the biology MCAS exam in June. Placement is based on the recommendation of the $8^{\text {th }}$ grade science teacher.

## 5613 Biology Fundamentals (CP) - Gr. 9-5 Cr.

This full-year course investigates biology through a small class setting and tailored instruction designed to meet the needs of diverse learners with diverse learning styles. Topics include: from molecules to organisms, structures and processes, ecosystems, heredity, biological evolution, and human body systems. Laboratory investigations, note-taking and projects are part of the course. This course prepares students for the biology MCAS exam in June. Placement is based on the recommendation of the $8^{\text {th }}$ grade science teacher.

5235 Biotechnology (H) - Gr. 11, 12-5 Cr. (Full Year Course)
5238 Biotechnology (H) - Gr. 11, 12-2.5 Cr. (Semester Course)
This comprehensive laboratory course is designed to provide students with hands-on experience in cutting-edge biotechnological techniques that are revolutionizing the field. Students will gain proficiency in Polymerase Chain Reaction (PCR), Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR), Bioinformatics, and Gel Electrophoresis. Prerequisite: Successful completion of Honors or CP Biology and Honors or CP Chemistry.

5303 Chemistry (H) - Gr. 10-5 Cr.
In this introductory chemistry course, students will explore the fundamental principles of chemistry which characterize the properties of matter and how it reacts. Laboratory experiments are used to stress lab technique and mathematical analysis of data that is more suitable for preparation of Advanced Placement chemistry. The primary objectives are to increase understanding about the fundamental nature and characteristics of the materials of which the universe is composed, and to train the student to organize, analyze, and develop critical thinking skills both in lecture and laboratory situations. Students working at the Honors level must demonstrate excellent math, reading, writing, technology and analytical skills, a willingness to work at an accelerated pace, genuine interest in the subject matter and self-motivation. Students who have been successful in Chemistry (H) have been successful in honors level math courses.

## 5313 Chemistry (CP) - Gr. 10-5 Cr.

This is an introductory chemistry course, students will explore the fundamental principles of chemistry which characterize the properties of matter and how it reacts. Laboratory experiments are used to stress lab technique and mathematical analysis of data, while reinforcing what is learned in lecture through collaboration within groups. The primary objectives are to increase understanding about the fundamental nature and characteristics of the materials of which the universe is composed, and to train the student to organize, analyze, and develop critical thinking skills. Students working at the college preparatory level must demonstrate competence in basic algebra, reading, writing, technology and analytical skills, a willingness to consistently work both independently and cooperatively, and a genuine interest in learning.

5334 Chemistry Fundamentals (CP) - Gr. 10-5 Cr.
This is a full-year course covering the basic topics in chemistry. Concepts are developed through classroom discussion, practice problems, labs, and activities. The course is designed for students with a range of learning styles. Students will be encouraged to think critically about issues in chemistry that they might encounter in their personal or professional lives. Students working at the fundamental chemistry level must demonstrate a willingness to work both independently and in a collaborative environment with a general interest in learning.

## 5733 Environmental Science (H) - Gr.10, 11 and 12-2.5 credits (Semester Course)

This semester course will enable students to develop an understanding of fundamental environmental principles, natural resources, energy sources and uses, and human population dynamics. Students will investigate the major environmental issues facing the world, discuss potential solutions to environmental problems, improve their scientific and social literacy skills, and make predictions about future environmental problems. Human interactions with the environment and the student's personal and civic responsibilities toward the environment will be emphasized. This course is designed for a motivated student capable of higher-order thinking, has strong analytical writing skills and can also work independently at an accelerated pace. Laboratory investigations, extensive note-taking, projects and tests are a part of this course. Prerequisites: Successful completion of Biology.

## 5732 Environmental Science (CP) - Gr. 10, 11 and 12-2.5 credits (Semester Course)

This semester course will enable students to develop an understanding of fundamental environmental principles, natural resources, energy sources and uses, and human population dynamics. Students will investigate the major environmental issues facing the world, discuss potential solutions to environmental problems, improve their scientific and social literacy skills, and make predictions about future environmental problems. Human interactions with the environment and the student's personal and civic responsibilities toward the environment will be emphasized. Prerequisites: Successful completion of Biology.

## 5761 Forensic Science (H) - Gr. 11 and 12-2.5 credits (Semester Course)

Forensic science is a comprehensive subject incorporating Biology, Chemistry, Physics, Entomology, Earth Science, Genetics, Anatomy, Physiology, Anthropology, as well as other aspects of science. The focus of this introductory blended level course is for students to learn how science is used to solve crimes. Major topics include processing a crime scene, collecting and preserving evidence, identifying types of physical evidence, analysis of a variety of types of evidence including DNA, fingerprints, and blood spatter. This is a lab-based course requiring active participation on the part of the student; they will use technology to participate in activities that closely resemble those used by law enforcement personnel and forensic scientists. The experiments used reinforce previously learned scientific principles rooted in Biology, Chemistry and Physics. Case studies, current events, and career opportunities will also be explored. Students that have successfully completed biology and chemistry.

## 5826 Human Anatomy and Physiology (CP) - Gr 11, 12 - 5 Cr. (Full Year Course)

The structure and function of the human body is studied, with the goal being to understand the interdependence of the various organ systems. This knowledge will enable young adults to make intelligent choices regarding their present and future health and safety. Successful completion of this course will also prepare students for college-level life science courses. Clinical studies and exploratory laboratories, including several dissections, are an important part of this course. Students must have successfully completed Biology and Chemistry.

## 5825 Human Anatomy and Physiology (H) - Gr. 11, 12 -5 Cr. (Full Year Course)

The structure and function of the human body is studied in depth, with the goal being to understand the interdependence of the various organ systems. This knowledge will enable young adults to make intelligent choices regarding their present and future health and safety. Successful completion of this course will also prepare students for college-level life science courses. At the honors level, students are asked to comprehend and recall a large amount of biological information, think critically and creatively about the clinical aspects of physiology, and complete independent work that supplements the lectures and labs. Laboratory work includes several dissections. Students that have been successful in this course have excelled in honors Biology and have successfully completed Chemistry.

## 5770 Innovations (H) - Gr. 11, 12 - 2.5 Cr . (Semester course)

If school had no subjects and the only criteria were learning, what would you choose to learn? Innovations is a single semester course that combines technology and problem solving skills with the meaningful exploration of community and global issues. This course is intended to cultivate leadership skills and a growth mindset as students choose their project topics based upon their passions. Students will gain valuable experience in research by observing problems, posing questions, and analyzing data to create solutions as they explore what it means to be an innovator. Students will utilize digital communication tools (social media platforms and blogs) to share their progress and collaborate with community members, experts, and learners around the globe. A student enrolling in this class should be a self-directed learner who is comfortable working independently and thinking critically. Placement is based on the recommendation of their science teacher and requires successful completion of biology, chemistry and physics (or concurrent enrollment in physics).

## 5752 Introduction to Mechanical and Electrical Engineering (H) - Gr. 12-2.5 credits (Semester Course)

Intro to Mechanical and Electrical Engineering explores topics students will encounter in a college engineering program. The course comprises two main sections: mechanics and electricity. Topics will be explored through a combination of physics lessons, lab experiments and projects.
The mechanics portion of the course will include study of static equilibrium, force, and torque, and their applications to rigid truss structures. Students will design, build, and test a bridge truss. During the fluid mechanics unit, students will design and build a steam powered boat.

The electrical portion of the course will focus on both analog and digital circuits. Students will study circuits, design, build and test circuits on breadboards using a variety of electrical components. Students will also learn about digital logic and will design and build circuits with logic gates.
Students will develop basic engineering skills such as soldering and the use of a variety of tools.

## Prerequisite: Honors Physics (completed), Pre-Calculus CP/H (concurrent or completed)

## 5340 Organic Chemistry (H) - Gr. 11 and 12-2.5 credits (Semester Course)

Organic Chemistry will be offered as a single semester class to introduce students to the chemistry of carbon. The course will begin with a review of concepts from first year chemistry including bonding, resonance, VSEPR, bond hybridization and molecular orbitals. Other topics include nomenclature, functional groups, properties and reactions of alkanes, alkenes, and aromatic compounds, chirality and stereoisomerism. Spectrometry and methods of analysis will be included if time permits. Labs and practical examples will be used to enhance the course. This class will be particularly useful for any student considering a career in biology, chemistry, environmental science, medicine, nursing or other health sciences. Students who have been successful in Organic Chemistry have excelled in their first year chemistry class.

5403 Physics (H) - Gr. 11-5 Cr.
Honors Physics is an Algebra 2/Trigonometric- based approach to the physics concepts of forces and motion, conservation laws, electricity and magnetism, waves and light, heat and radioactivity. Upon completion of this course the students will understand (both conceptually and mathematically) the physics of the everyday world. The primary objectives are to increase understanding about the fundamentals of nature and characteristics of the physical world and to train the student to apply concepts, analyze experimental data, and develop critical thinking and problem-solving skills. Students who are successful in this course can solve complex and advanced mathematical problems using Algebra 2 and trigonometry.

5413 Physics (CP) - Gr. 11-5 Cr.
College-Prep Physics is both a conceptual and mathematical approach to physics. Students will study the concepts of forces and motion, conservation laws, electricity \& magnetism, waves and light, heat and radioactivity. Activities and projects are done to develop the concepts of physics and how they relate to the student's everyday life. The primary objectives are to increase understanding about the fundamental nature and characteristics of the physical world and to train the student to apply concepts, analyze experimental data, and develop critical thinking and problem-solving skills. Students who are successful in this course can solve fundamental mathematical problems using algebra and trigonometry.

5430 Physics Fundamentals (CP) - Gr. 11 - 5 Cr
Physics Fundamentals covers the basic topics of Physics using a fundamental mathematical approach. Concepts are developed through classroom discussion, practice problems, labs, multimedia, and activities. The course is designed for students with a range of learning styles. Students will be encouraged to identify Physics applications in their everyday lives and the modern world.

## Brittany Burns, Department Chairperson

## COURSE OFFERINGS

## Required:

U.S. History I

## U.S. History II College Prep or

Honors
Or AP United States History

World History College Prep or Honors

Or AP World History

## Electives:

AP Human Geography
AP Psychology
AP United States Government \& Politics
Ancient Healers, Modern Medicine, \&
The Power of Connection
Behavioral Economics*
Criminal Justice in America
History of Women in the United States
History through Film
Holocaust and Human Behavior
Positive Psychology
Psychology
Public Speaking
Race in America
Sociology

The Social Studies Department's vision is to prepare students for active, informed participation in our democratic society by building the knowledge and skills necessary for citizenship in an increasingly globalized environment. This includes building strong foundational writing, reading, research, and speaking skills. Curriculum and content are supported with various technologies to enhance and supplement student learning. In all Social Studies classes, students will collaborate to think critically, analyze sources, and solve problems. By offering thought-provoking core courses in U.S. History and World History and various elective courses in civics, social science, and law, we hope that students are inspired to become committed and responsible citizens of the world.

The course offerings that follow permit students to choose between two levels for core graduation requirements after Grade 9. Additionally, qualified students who seek an accelerated course of study in their sophomore, junior, or senior year may elect Advanced Placement courses in various topics. Semester electives are offered at the Honors level and are open to all students; they are high-interest courses focused on particular topics and subject-based skill development. Students should choose those courses because they are interested in the content and not be deterred by the Honors level, even if they have taken core courses at the College Prep level.

Social Studies: $\mathbf{1 5}$ credits required for graduation

| Lower School |  | Upper School |  |
| :---: | :---: | :---: | :---: |
| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| Required: <br> U.S. History I | Required: <br> Select one: <br> - U.S. History II (CP) <br> - U.S. History II (H) <br> - AP U.S. History <br> Electives: <br> - AP U.S Government \& Politics <br> - Ancient Healers, Modern Medicine \& the Power of Connection (H) <br> - Behavioral Economics (H) <br> - Criminal Justice in America (H) <br> - History of Women in the U.S. <br> (H) <br> - History through Film (H) <br> - Holocaust \& Human Behavior <br> (H) <br> - Positive Psychology (H) <br> - Psychology (H) <br> - Public Speaking (H) <br> - Race in America (H) <br> - Sociology (H) | Required: <br> Select one: <br> - World History (CP) <br> - World History (H) <br> - AP World History <br> Electives: <br> - AP Psychology <br> - AP U.S. Government \& Politics <br> - AP U.S. History <br> - Ancient Healers, Modern Medicine \& the Power of Connection ( H ) <br> - Behavioral Economics (H) <br> - Criminal Justice in America (H) <br> - History of Women in the U.S. (H) <br> - History through Film (H) <br> - Holocaust \& Human Behavior (H) <br> - Positive Psychology (H) <br> - Psychology (H) <br> - Public Speaking (H) <br> - Race in America (H) <br> - Sociology (H) | Electives: <br> - AP Human Geography <br> - AP Psychology <br> - AP U.S. Government \& Politics <br> - AP U.S. History <br> - AP World History <br> - Ancient Healers, Modern Medicine, \& the Power of Connection (H) <br> - Behavioral Economics (H) <br> - Criminal Justice in America (H) <br> - History of Women in the U.S. (H) <br> - History through Film (H) <br> - Holocaust \& Human Behavior (H) <br> - Positive Psychology (H) <br> - Psychology (H) <br> - Public Speaking (H) <br> - Race in America (H) <br> - Sociology (H) |

## SOCIAL STUDIES

## 2704 Advanced Placement (AP) Human Geography Grade 12-5 Credits

In this full-year course, students are introduced to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. Students learn how to interpret maps, analyze geospatial data, and forge connections about the cultural values, political structures, and economic regulations that affect a geographic region and the land itself. Students explore the regionalization process and analyze factors affecting regionalization from local, regional, national, and global levels. In addition, students analyze interconnections among places in the world. This course is for highly motivated learners excited about the challenge of a rigorous college-level course. Students are required to complete a summer assignment before the start of the course. At the end of the current school year, course enrollment for the next year will be verified; students must pick up their summer assignments at a course meeting (dates will be announced with enrollments). Prerequisite: Successful completion of World History CP/H or AP World History.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 2853 Advanced Placement (AP) Psychology Grade 11, 12-5 Credits

This full-year course introduces students to the systematic and scientific study of behavior and mental processes. Students are exposed to the psychological facts, principles, and phenomena associated with major subfields in Psychology. They also learn about the ethics and methods psychologists use in their practice. Topics of study include history and research methods, social psychology, personality, development, biology of behavior, learning, cognition, testing and individual differences, motivation and emotion, sensation and perception, psychological disorders, therapies, and states of consciousness. This course is for highly motivated learners excited about the challenge of a rigorous college-level course. Students are required to complete a summer assignment before the start of the course. At the end of the current school year, course enrollment for the next year will be verified; students will receive access to a Canvas course where the summer assignments will be posted.

## Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

2813 Advanced Placement (AP) United States Government and Politics Grade 10, 11, 12-5 Credits In this full-year course, students learn important facts, concepts, and theories about United States government and politics. Rather than a history course, the focus is on contemporary issues and the functioning of government in modern society. Five units serve as the organizational structure for this class, including Foundations of American Democracy, Interactions among Branches of Government, Civil Liberties and Civil Rights, American Political Ideologies and Beliefs, and Political Participation. This course is for highly motivated learners excited about the challenge of a rigorous college-level course. Students are required to complete a summer assignment before the start of the course. At the end of the current school year, course enrollment for the next year will be verified; students must pick up their summer assignments at a course meeting or access summer assignments and materials online (dates will be announced with enrollments).
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 2703 Advanced Placement (AP) United States History Grade 10, 11, 12-5 Credits

In this full-year course, students are provided with an overview of American history. Students closely examine problems and themes in United States History by analyzing and evaluating primary and secondary sources. This course is for highly motivated learners excited about the challenge of a rigorous college-level course. Students are required to complete a summer assignment before the start of the course. At the end of the current school year, course enrollment for the next year will be verified; students must pick up their summer assignments at a course meeting (dates will be announced with enrollments). While this course is open to students in grades 10, 11, and 12, priority will be given to sophomores completing their U.S. History II graduation requirement.
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 2227 Advanced Placement (AP) World History Grade 11, 12-5 Credits

In this full-year course, students learn world history using a thematic approach. Six themes are used to organize the course. They are Humans and the Environment, Governance, Economic Systems, Cultural Developments and Interactions, Social Interactions and Organization, and Technology and Innovation. Students' study of World History begins in 8000 B.C.E. and ends in the present. This course is for highly motivated learners excited about the challenge of a rigorous college-level course. Students are required to complete a summer assignment before the start of the course. At the end of the current school year, course enrollment for the next year will be verified; students must pick up their summer assignments at a course meeting (dates will be announced with enrollments). While this course is open to students in grades 11 and 12, priority will be given to juniors completing their World History graduation requirement. Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

2875 Ancient Healers, Modern Medicine, \& the Power of Connection (H) Grade 10, 11, 12-2.5 Credits In this semester-long course, students will explore various cultural traditions, beliefs, customs, medicines, and healing methods from the prehistoric age to the modern era, focusing on the global impact of health and healing. Students will study various cultures' wellness traditions, beliefs, and practices, including prehistoric medicine, ancient Egyptian, Greek, and Roman traditions, and indigenous groups such as Native Americans, Aztecs, Incas, and Aboriginal peoples. The course will also explore modern medicine, alternative medicine, and the modern wellness industry as students seek to understand human well-being and the traditions and practices of keeping ourselves healthy. Students will examine the real-life applications of the skills and techniques used by our ancestors to connect the mind and body and promote overall health and healing. This interactive course will be project-driven and will include presentations and discussions.

## 7341 Behavioral Economics (H) Grade 10, 11, 12- 2.5 Credits

In this semester-long interdisciplinary course, students will explore how and why economic choices and behaviors affect psychological health, happiness, and economic wealth. The traditional study of economics is based on the assumption that consumers are rational decision-makers, but through combining principles and theories from the field of psychology with economics, another picture of consumers as "predictably irrational" emerges. Students in this course will gain an appreciation and understanding of why individuals participate in risky behaviors, choose various saving and investment options, overspend, and how social media impacts decision-making. Students will become more savvy consumers as they think about how cognitive biases affect behavior and how to take control of their economic decision-making. This course is co-taught by Social Studies and Applied Arts department teachers. This course does not fulfill the economics graduation requirement.

## 2883 Criminal Justice in America (H) Grade 10, 11, 12-2.5 Credits

This semester-long course introduces students to the basics of the American criminal justice system. Students gain a legal and practical understanding of crime, investigations, the trial process, sentencing, and incarceration in the United States while exploring issues impacting the justice system, including race, gender, and poverty. Three major course components include an interactive fictional criminal investigation, a modern case study of a current court case trial, and a criminal justice reform project. This course requires in-class participation and will give students an opportunity to build their knowledge of the criminal justice system.

## 2750 History of Women in the United States (H) Grade 10, 11, 12- 2.5 Credits

This semester-long course explores the evolving role of women from the Colonial Era to the present. Students participate in project-based learning and discussion to investigate the social, cultural, and economic trends that have impacted, and continue to impact, women and their families. Contemporary topics that impact teens, such as the influence of social media on relationships, self-confidence, and communication, will also be examined. Students must evaluate and synthesize information as independent thinkers in writing and demonstrate sophisticated thinking in discussions.

2833 History through Film (H) Grade 10, 11, 12- 2.5 Credits
In this semester-long elective course, students learn how and what historical drama and feature films portraying historical events say about the people who created them, the political climate behind their creation, and the larger debates of the time. The class examines how film can be used to understand, interpret, and analyze historical memory. Students participate in discussions and write comparative essays, film reviews, and commentaries. The course utilizes an online classroom to continue class discussions, submit work, respond to articles, and engage more fully in the content. The films cover United States history from the American Revolution to the Wars on Terror in Afghanistan and Iraq.

## 2831 Holocaust \& Human Behavior (H) Grade 10, 11, 12- 2.5 Credits

In this semester-long course, students examine the topics of human rights, genocide, civic responsibility, and social justice through an in-depth study of the Holocaust. Students explore the causes, events, and legacy of the Holocaust through an interdisciplinary lens of history, sociology, and psychology. They analyze the social conditions leading up to genocide and take an in-depth look at the behaviors and choices of various participant groups, including perpetrators, victims, bystanders, and upstanders. Students utilize a variety of primary sources, including memoirs, films, photographs, and the testimonies of guest speakers, to better understand historical events and concepts of human behavior. The course culminates in a project that considers the role of civic activism and responsibility in ending and preventing genocide, bringing the lessons of the Holocaust into the $21^{\text {st }}$ century.

## 2854 Positive Psychology (H) Grade 10, 11, 12- 2.5 Credits

In this semester-long course, students will explore the field of positive psychology, which seeks to understand the conditions under which human beings flourish. The course will cover a wide range of topics, including developing character strengths, understanding the power of emotions, practicing kindness and gratitude, recognizing the impact of technology on well-being, and exploring and enhancing happiness. As part of their journey, students will utilize and reflect on evidence-based strategies that cultivate well-being and happiness. Daily participation, outside reading, and reflective writing assignments are integral components of the course.

## 2866 Psychology (H) Grade 10, 11, 12- 2.5 Credits

This semester-long course is an introduction to Psychology and the study of behavior and mental processes. Topics include the history of psychology as a science, research methods, the biological bases of behavior, childhood development, social psychology, memory, states of consciousness, and psychological disorders. Student participation in role plays, demonstrations, experiments, and discussions is required. Students must show higher-order thinking skills in class discussions, debates, and writing.

2880 Public Speaking (H) Grade 10, 11, 12-2.5 Credits
In this semester-long interactive elective course, students learn essential techniques highly valued in high school, college, and the job market. Improved communication, confidence, presentation, leadership, networking, and stage fright management skills will significantly enhance accomplishments in school, college search, employability, and success in future careers. Students will learn to communicate persuasively and confidently while engaging an audience. In addition, students develop skills for effective speaking, presenting, and listening as they deliver a variety of speeches, offer feedback to peers, participate in mock interviews, and perform improvisational scenes and speeches. This course is designed for accomplished public speakers who want to develop their skills further and students who may be reluctant to speak due to performance anxiety and lack of confidence.

## 2862 Race in America (H) Grade 10, 11, 12- 2.5 Credits

In this semester-long course, students will explore the history and legacy of race in American society and how to dismantle racism in contemporary society. The course examines the development of racial ideologies and stereotypes over time and analyzes the impact of those ideas on American culture, laws, and politics. Students will study the histories of racial minority groups and examine topics such as the Eugenics Movement, civil rights, and anti-racism. Through class discussions, projects, and research assignments, students will think critically about the development and consequences of racism and how it has shaped the histories and experiences of different groups of Americans. The class culminates in a unit on anti-racism, where students consider their agency in dismantling and fighting back against systems of oppression.

## 2861 Sociology (H) Grade 10, 11, 12-2.5 Credits

This semester-long course examines various aspects of society, including culture, social structure and stratification, socialization, and social problems. Students also explore the role that social class, race, gender, education, and media play in society. Students are required to prepare for and participate in class discussions. Students research and discuss the role of family, schools, groups, and classes in our society and write responses, discussion posts, and one longer research piece that allows them to learn more about available sociological research in the field. Additional class activities will allow students to explore the curriculum with their peers.

## 2133 United States History I Grade 9-5 Credits

This full-year course is the first year of a two-year study of United States history required for graduation; this unleveled course covers U.S. History from the colonial era to the end of the $19^{\text {th }}$ century. Following a chronological approach, the course begins with an examination of the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras and ends with imperialism. Students will study the events of the 18th and 19th centuries, including the Civil War, industrialization, urbanization, and immigration. Through closely examining early American history, students will develop the following skills: historical questioning, primary source analysis, active reading, historical writing, and oral communication. Students in U.S. History I also participate in "Big Group" activities, which bring together multiple freshman classes for collaborative and engaging learning experiences unique to this program. For the purpose of GPA calculation, this unleveled course will be equivalent to a College Prep course for all students.

2153 United States History II (CP) Grade 10-5 Credits
This full-year course is the second year of a two-year study of United States history required for graduation; this course examines U.S. history from the Progressive Era to the present. The course begins with a unit on modern America (2000-present), examining recent events and issues that shape our concept of what it means to be an American. Following a chronological approach, the rest of the course examines how America's growing global role and evolving domestic policies throughout the $20^{\text {th }}$ and $21^{\text {st }}$ centuries have led to the modern era. Students continue to develop their skills from U.S. History I and work with primary sources. In addition, research, discussion, reading, presentation, and writing skills are emphasized.

## 2143 United States History II (H) Grade 10-5 Credits

This full-year course is the second year of a two-year study of United States history required for graduation; this course examines U.S. history from the Progressive Era to the present. The course begins with a unit on modern America (2000-present), examining recent events and issues that shape our concept of what it means to be an American. Following a chronological approach, the rest of the course examines how America's growing global role and evolving domestic policies throughout the $20^{\text {th }}$ and $21^{\text {st }}$ centuries have led to the modern era. Honors students must complete outside readings and writing assignments emphasizing historical analysis, critical thinking, reflection, and problem-solving. Students are challenged to connect to information learned in U.S. History I and to develop and defend arguments and positions related to historical events. In addition, collaboration, research, discussion, reading, presentation, and writing skills are emphasized.

## 2225 World History (CP) Grade 11- 5 Credits

In this full-year course, students learn about World History and current events through a global lens. This class uses a chronological, thematic, and project-based approach to exploring and understanding major concepts and events in World History through the present day. Students explore revolution, conflict, international relations, and the stages and steps of genocide by examining current and historical events. This course builds on students' research and communication skills and emphasizes project-based learning, collaboration, technology, and presentation skills. The final exam is a civic action project that meets the state graduation requirement. Students will choose one of the United Nations' 17 sustainable development goals and create a final project to raise awareness around the chosen issue and research steps to bring about positive outcomes.

## 2226 World History (H) Grade 11- 5 Credits

In this full-year course, students learn about World History and current events through a global lens. Students connect to present-day situations by exploring various regions' cultures and major historical events from varied perspectives. Honors students must complete outside readings and writing assignments emphasizing historical analysis, critical thinking, reflection, and problem-solving. Students are challenged to connect to information learned in their U.S. History courses and develop and defend arguments and positions related to historical events. Students will explore revolution, conflict, international relations, and the stages and steps of genocide by examining current and historical events. The final exam is a civic action project that meets the state graduation requirement. Students will choose one of the United Nations' 17 sustainable development goals and create a final project to raise awareness around the chosen issue and research steps to bring about positive outcomes.

# WORLD LANGUAGES 

## Emily Squires, Department Chairperson

## Course Offerings

French 1-5, AP
Latin 1-4, AP
Portuguese for Heritage Speakers 1, 2
Spanish 1-5, AP
Spanish for Heritage Speakers 1

Ancient Greek History \& Culture
Human Language
Intro to Philosophy
Linguistics
Roman History \& Culture
Spanish History Through Film

The World Language Department offers a proficiency-based program in which students engage in active and purposeful interactions in the target language.

Our language classes focus on a proficiency approach that emphasizes communication and context through the use of the three modes: interpretive (one way communication through reading \& listening), interpersonal (two way spontaneous communication between individuals) and presentational (one way communication using speaking or writing).

Students who complete two consecutive years of language study in our program are expected to demonstrate intermediate-low performance in the three communication modes. Students who continue language study beyond two years and complete four full years of study are expected to be capable of demonstrating intermediate high language performance in the three communication modes across a variety of topics.

Honors classes proceed at a faster pace than CP courses with an emphasis on focusing on the next level of proficiency, or 'leveling up'. College Prep courses are conducted with emphasis on successfully performing at the targeted proficiency level.

The World Language department has offerings for heritage speakers. A heritage speaker is an individual who is "raised in a home where a non-English language is spoken, who speaks or at least understands the language, and who is to some degree bilingual in that language and English" (Valdés, 2001, p. 38). Students may take Spanish or Portuguese for Heritage speakers provided they meet the definition outlined above. These classes are fully conducted in Portuguese and Spanish and will focus on strengthening reading and writing skills as well as building their connection to the target language culture of the class.

## WORLD LANGUAGES

## No Graduation Requirement

| Lower School |  | Upper School |  |
| :---: | :---: | :---: | :---: |
| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| You can elect one of these: <br> French 1 Novice (CP) <br> French $2(\mathrm{CP})(\mathrm{H})$ <br> Latin 1 Novice (CP) <br> Portuguese for Heritage Speakers 1 (H) <br> Spanish 1 Novice (CP) <br> Spanish 2 (CP)(H) <br> Spanish for Heritage Speakers 1 (H) | You can elect anything from Grade 9, or one of these: <br> French 3 (CP)(H) <br> Human Language ((H) <br> Latin 2 (CP)(H) <br> Linguistics (H) <br> Portuguese for Heritage Speakers 2 <br> Spanish 3 (CP)(H) | You can elect anything from Grade 9, Grade 10, or one of these: <br> Ancient Greek History and Culture (H) <br> French 4 (CP)(H) <br> Latin 3 (CP)(H) <br> Philosophy (H) <br> Portuguese for Heritage Speakers 2 <br> Roman History and Culture (H) <br> Spanish 4 (CP)(H) <br> Spanish History Through Film (CP)(H) | You can elect anything from Grade 9 (besides French 1 Novice CP, Latin 1 Novice CP, or Spanish 1 Novice CP), Grade 10, Grade 11 or one of these: <br> AP French Language <br> AP Latin: Vergil and Caesar <br> AP Spanish Language <br> French $5(\mathrm{H})$ <br> Latin 4 (CP) (H) <br> Spanish 5 (CP)(H) |

* Language offerings in Level 1 are not always available to seniors.
**All courses in world languages must be taken in sequence by level. Any changes in this procedure will be on an individual basis.

6493 AP French Language-Gr. $12-5 \mathrm{Cr}$.
This course is a rigorous preparation for the AP French Language and Culture Exam. Students who show strong evidence of intermediate high language are eligible to enroll. The main text, THEMES, covers the six themes of the AP French Language and Culture Exam: Families and Communities, Personal and Public Identities, Beauty and Esthetics, Contemporary Life, Science and Technology, and World Challenges. Students interpret a variety of authentic texts and audio material from several different French speaking countries. There is a strong emphasis on preparation for the four free response tasks of the exam: email (interpersonal writing), argumentative essay (presentational writing), simulated conversation (interpersonal speaking), and cultural comparison (presentational speaking). Consistent participation and practice exams along with teacher's evaluation and self-assessments prepare students to succeed on the AP French Exam in May. Prerequisite: Teacher recommendation
Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 6283 AP Latin: Vergil and Caesar-Gr. 12 - 5 Cr.

Advanced Placement Latin - Vergil and Caesar - offers students the opportunity to study Latin at the college level. The course is designed to complete the AP Latin - Vergil and Caesar - syllabus. Students will read the entire Aeneid in English, and translate the required lines from Latin into English. Students will also translate select passages of Caesar's De Bello Gallico. Throughout the year students will examine the historical, social, cultural and political context of both authors. In addition they will study and discuss the implications and uses of both authors' stylistic and metrical techniques. Prerequisite: Teacher recommendation or final Grade of A- or A in Latin 3 Honors. Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

## 6333 AP Spanish Language -Gr. 12-5 Cr.

This course is a rigorous preparation for the AP Spanish Language and Culture Exam. Students who show strong evidence of intermediate high language are eligible to enroll. The main text, TEMAS, covers the six themes of the AP Spanish Language and Culture Exam: Families and Communities, Personal and Public Identities, Beauty and Esthetics, Contemporary Life, Science and Technology, and World Challenges. Students interpret a variety of authentic texts and audio material from several different Spanish speaking countries in order to complete the multiple choice sections of the test. There is also a strong emphasis on preparation for the four free response tasks of the exam: email (interpersonal writing), argumentative essay (presentational writing), simulated conversation (interpersonal speaking), and cultural comparison (presentational speaking). Prerequisite: Teacher recommendation Enrollment in AP courses is subject to eligibility. The College Board will require students to commit to taking AP Exams by early November, exam fees will be collected at the time of registration/commitment.

6513N French 1 Novice (CP)-Gr. 9, 10, 11 - 5 Cr.
This course is an introductory French course intended for students who have not taken French before. It is grounded in a proficiency-based approach in which students are introduced to a variety of contexts and communicative purposes made for the Novice language learner. This course emphasizes communication across three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students also learn to investigate, explain, and reflect on different cultural products, practices, and perspectives in order to develop intercultural competence. The proficiency target is Novice High on the ACTFL scale. Students who have completed a middle school French program (the equivalent of Novice French) should register for French 2H or CP. Department chair approval is required for a student who has had middle school French and is requesting to take this course

## 6533 French 2 (CP)-Gr. 9, 10, 11, 12 - 5 Cr.

This is the next level course for students who have successfully completed 8th grade French or French 1 Novice and are still working at the Novice High Proficiency level. The course is grounded in a proficiency approach, with primary emphasis on the context and purpose of communication of the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students also learn to investigate, explain and reflect on products, practices and perspectives of the target language in order to develop intercultural competence. The proficiency target is Intermediate-Low on the ACTFL scale. Prerequisite: Teacher recommendation

6523 French 2 (H)-Gr. 9, 10, 11, 12 - 5 Cr.
This is the next level course for students who have successfully completed 8th grade French or Novice French and are starting to show evidence of intermediate low language. The course is grounded in a proficiency approach, with primary emphasis on the context and purpose of communication of the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students also learn to investigate, explain, and reflect on different cultural products, practices, and perspectives in order to develop intercultural competence. The proficiency target is High Intermediate-Low on the ACTFL scale. Prerequisite: Teacher recommendation

6553 French 3 (CP)-Gr. 10, 11, 12 - 5 Cr
This is the next level course for students who have demonstrated some evidence of intermediate low language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate learners. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students continue to investigate different cultural products, practices, and perspectives to develop intercultural competence. The proficiency target is strong intermediate low on the ACTFL scale. Prerequisite: Teacher recommendation

6543 French 3 (H)-Gr. 10, 11, 12-5 Cr.
This is the next level course for students who have successfully demonstrated some evidence of Intermediate-Mid language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate learners. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. The proficiency target is Intermediate Mid on the ACTFL scale. Prerequisite: Teacher recommendation

## 6573 French 4 (CP)-Gr. 11, 12 - 5 Cr.

This is the next level course for students who have successfully demonstrated some evidence of Intermediate-Mid language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate-Advanced learners. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. The proficiency target is strong Intermediate Mid on the ACTFL scale. Prerequisite: Teacher recommendation

## 6563 French 4 (H)-Gr. 11, 12 - 5 Cr.

This is the next level course for students who have successfully demonstrated strong evidence of Intermediate-Mid language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate-Advanced learners. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. The proficiency target is Intermediate High on the ACTFL scale. Prerequisite: Teacher recommendation

This is the next level course for students who have successfully demonstrated strong evidence of Intermediate-High language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate-Advanced learners. Topics and contexts are connected to the following themes: global challenges, beauty and aesthetics, families and communities, science and technology, contemporary life and personal and public identities. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. Prerequisite: Teacher

## recommendation

6023N Latin 1 Novice (CP)-Gr. 9, 10, 11-5 Cr.
This is an introductory course in the Latin language sequence. In this course students will gain a basic understanding of Latin grammar, vocabulary and syntax which will enable them to read simple Latin texts for comprehension. Students will learn common English derivatives from the vocabulary presented. Through short papers, projects and presentations, they will demonstrate their understanding of the perspectives of Roman culture as revealed in its art, architecture, and customs. Students will study Pompeii and Alexandria and the Roman connections. Other areas of study are the forms and uses of Roman numerals, the expansion of the Roman world and daily Roman life. There is homework every night. Class participation and preparedness are priorities and will be assessed regularly.

6223 Latin 2 (CP)-Gr. 10,11,12-5 Cr
In second year Latin, students will continue their study of basic Latin grammar, syntax and vocabulary through reading and translation. Some Latin literary styles will be introduced along with basic compositions. Students will also learn more about ancient Greek and Roman culture through reading in both Latin and English. Presentations and projects will enhance previously learned topics and homework is assigned nightly to reinforce techniques and syntax learned in class. Class participation and preparedness are priorities and will be assessed regularly. Prerequisite: Teacher recommendation

6213 Latin 2 (H)-Gr. 10,11,12-5 Cr.
In this accelerated course, students will review and reinforce all forms of grammar and skill in comprehension covered in Level I Honors. Due to the increased emphasis placed on the development of vocabulary and grammatical syntax, students will study translations that have more depth through the use of technology, selected readings and workbook material. Research, speaking and writing skills will be improved through a series of short papers, projects and oral presentations. Greek and Roman culture will be studied further. Honors students should expect more homework, additional reading and translation both at school and at home. More comprehensive forms of assessment will be included at this level. Classroom participation and preparedness are priorities and will be assessed regularly.
Prerequisite: Teacher recommendation

6243 Latin 3 (CP)-Gr. 11, $12-5 \mathrm{Cr}$.
In Latin 3CP, students are presented with a systematic review of grammar and vocabulary from Latin I and Latin II prior to the introduction of new grammar. Students will practice through reading comprehension, worksheets and audio. Students will read and translate Latin stories with more advanced grammar and syntax. Cultural topics include oracles and prophecies, gladiators, festivals, and the city of Rome. Homework is assigned nightly. Class participation and preparedness are priorities and will be assessed regularly. Prerequisite: Teacher recommendation

6233 Latin 3 (H)-Gr. 11, 12 - 5 Cr.
In Latin 3H, students master more complex Latin grammar and syntax. The relationship between Latin words and their English derivatives is emphasized at this level. Students work on improving reading, comprehension and translation skills. Cultural topics include oracles and prophecies, gladiators, festivals, and the city of Rome. Honor students should expect more homework, additional reading and translations both at school and home. More comprehensive forms of assessment will be included at this level. Prerequisite: Teacher recommendation

6273 Latin 4 (CP)-Gr. $12-5 \mathrm{Cr}$.
Latin 4CP continues the study of grammar and syntax through literary readings and translations. Students strive to advance in their skills in translation from English to Latin. Historical contexts continue as integral components of curriculum and cultural connections. Homework is nightly. Class participation and preparedness are priorities that are assessed regularly. Prerequisite: Teacher recommendation

6253 Latin 4 (H)-Gr. 12 - 5 Cr.
Students continue their in depth study of grammar and syntax through literary readings and translations. In Latin 4 Honors, students read, interpret and translate the prose and poetry of selected Latin authors such as Cicero, Vergil, Ovid and Catullus. Students study features of genre, style, and poetic meter as well as the authors' lives, cultural and historical contexts, motivations and literary merit. Honor students should expect more homework, additional readings and translations both at school and home. More comprehensive forms of assessment will be included at this level. Prerequisite: Teacher recommendation

6338 Portuguese for Heritage Speakers 1 (H)-Gr. 9, 10, 11, 12 - 5 Cr .
This course is designed for students who speak Portuguese as a heritage language or at the recommendation of the department chair. A heritage speaker speaks and/or understands Portuguese as a result of the language being the primary language of the home. This course is aimed at students who already speak Portuguese and are looking to improve literacy skills in the language. Students will develop their language in an academic setting that is grounded in reading and writing. The goal of the course is to help heritage speakers develop advanced language and literacy skills and connect with their heritage culture. The course will be conducted in Portuguese. Prerequisite: Teacher recommendation

6339 Portuguese for Heritage Speakers 2 (H)- Gr. 10, 11,12-5 Cr. This course continues to guide students in their acquisition of literacy skills in Portuguese. The goal of the course is to help heritage speakers continue to develop advanced academic language skills and connect with their heritage culture based on their progress from Portuguese for Heritage Speakers 1. The course will be conducted in Portuguese. Prerequisite: Teacher recommendation

6353N Spanish 1 Novice (CP)-(Gr. 9, 10. 11, 5 Cr)
This course is an introductory Spanish course intended for students who have not taken Spanish before. It is grounded in a proficiency-based approach in which students are introduced to a variety of contexts and communicative purposes made for the Novice language learner. This course emphasizes communication across three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students also learn to investigate, explain, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. The proficiency target is Novice High on the ACTFL scale. Department chair approval is required for a student who has had middle school Spanish and is requesting to take this course

## 6373 Spanish 2 (CP)-Gr. 9,10,11,12-5 Cr.

This is the next level course for students who have successfully completed 8th grade Spanish or Spanish 1 Novice and are still working at the Novice High Proficiency level. The course is grounded in a proficiency approach, with primary emphasis on the context and purpose of communication of the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are expected to investigate, explain and reflect on products, practices and perspectives of the target language in order to develop intercultural competence. The proficiency target is Intermediate-Low on the ACTFL scale. Prerequisite: Teacher recommendation

6363 Spanish 2 (H)-Gr. 9,10,11,12-5 Cr.
This is the next level course for students who have successfully completed 8th grade Spanish or Novice Spanish and are starting to show evidence of intermediate low language. The course is grounded in a proficiency approach, with primary emphasis on the context and purpose of communication of the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are expected to investigate, explain and reflect on products, practices and perspectives of the target language in order to develop intercultural competence. The proficiency target is strong Intermediate-Low on the ACTFL scale. Prerequisite:

## Teacher recommendation

6393 Spanish 3 (CP)-Gr. 10, 11, 12 - 5 Cr.
This is the next level course for students who have demonstrated some evidence of intermediate low language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate learners. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students continue to investigate different cultural products, practices, and perspectives to develop intercultural competence. The proficiency target is strong intermediate low on the ACTFL scale. Prerequisite: Teacher recommendation

6383 Spanish 3 (H)-Gr. 10, 11, 12 - 5 Cr.
This is the next level course for students who have successfully demonstrated some evidence of Intermediate-Mid language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate learners. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. The proficiency target is Intermediate Mid on the ACTFL scale. Prerequisite: Teacher recommendation

## 6423 Spanish 4 (CP)-Gr. 11, 12-5 Cr.

This is the next level course for students who have successfully demonstrated some evidence of Intermediate-Mid language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate-Advanced learners. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. The proficiency target is strong Intermediate Mid on the ACTFL scale. Prerequisite: Teacher recommendation

## 6413 Spanish 4 (H)-Gr. 11, 12 - 5 Cr.

This is the next level course for students who have successfully demonstrated strong evidence of Intermediate-Mid language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate-Advanced learners. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. The proficiency target is Intermediate High on the ACTFL scale. Prerequisite: Teacher recommendation

This is the next level course for students who have successfully demonstrated strong evidence of Intermediate-Mid language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate-Advanced learners. Topics and contexts are connected to the following themes: global challenges, beauty and aesthetics, families and communities, science and technology, contemporary life and personal and public identities. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. Prerequisite: Teacher

## recommendation

## 6457 Spanish 5 (H)-Gr. $12-5$ Cr.

This is the next level course for students who have successfully demonstrated strong evidence of Intermediate-High language. It is grounded in a proficiency-based approach in which students explore a variety of contexts and communicative purposes appropriate for Intermediate-Advanced learners. Topics and contexts are connected to the following themes: global challenges, beauty and aesthetics, families and communities, science and technology, contemporary life and personal and public identities. In this course communication is emphasized across the three modes: Interpersonal (Two-way, spontaneous communication between individuals); Interpretive (One-way communication using listening and reading skills); and Presentational (One-way communication using speaking or writing). Students are also expected to investigate, explain variations between, and reflect on different cultural products, practices, and perspectives to develop intercultural competence. Emphasis is also placed on the importance of taking the perspective of those from different cultures to build empathy. Prerequisite: Teacher recommendation

6428 Spanish for Heritage Speakers 1 (H)- Gr. 9, 10, 11, 12 - 5 Cr .
This course is designed for students who speak Spanish as a heritage language or at the recommendation of the department chair. A heritage speaker speaks and/or understands Spanish as a result of the language being the primary language of the home. This course is aimed at students who already speak Spanish and are looking to improve literacy skills in the language. Students will develop their language in an academic setting that is grounded in reading and writing. The goal of the course is to help heritage speakers develop advanced language and literacy skills and connect with their heritage culture. The course will be conducted in Spanish. Prerequisite: Teacher recommendation

6424 Spanish History Through Film (CP) - Gr. 11, 12 - 5 Cr.
This course presents a general introduction to the main aspects of Spanish History through various films and texts. This course will provide students with the opportunity to communicate in the target language and acquire a deep understanding of Spanish and Latin American history. A more in-depth look at historical events will be discussed and analyzed through stories, poems, articles and films. The curriculum will include a vast span of Spanish history, such as the Muslim conquest of Spain in 711, the European invasion beginning in 1492, the Spanish conquest of the Aztecs and Incas in the $16^{\text {th }}$ century, the Spanish Civil War in the $20^{\text {th }}$ century, and immigration and proponents of human rights in the 21st century. Prerequisite: Teacher recommendation

## 6425 Spanish History Through Film (H) - Gr. 11, 12 - 5 Cr.

The course presents a general introduction to the main aspects of Spanish History through various films and texts. This course will provide students with the opportunity to communicate in the target language and acquire a deep understanding of Spanish and Latin American history. A more in-depth look at historical events will be discussed and analyzed through stories, poems, articles, and films. The curriculum will include a vast span of Spanish history, such as the Muslim conquest of Spain in 711, the European invasion beginning in 1492, the Spanish conquest of the Aztecs and Incas in the $16^{\text {th }}$ century, and the Spanish Civil War in the $20^{\text {th }}$ century, and immigration and proponents of human rights in the 21st century. Prerequisite: Teacher recommendation

6487 Ancient Greek History and Culture (H) Gr. 11, 12 - 2.5 Cr.
In this semester course, open to juniors and seniors, students will explore the world of one of the foundational cultures of Western Civilization: Ancient Greece. Through the study of some of the outstanding works of the Greek literary tradition, students will examine such topics as: the birth and development of philosophy and science, the nature of Greek mythology and religious culture, the development and challenges of Greek democracy, and the nature and meaning of Greek epic, lyric and dramatic poetry. This course will also seek to ground these works in their historical and cultural context with the assistance of modern classical scholarship, as well as to explore the ways in which Ancient Greek civilization laid the foundation for our own. Students will have the opportunity to reflect on their learning through class discussions, presentations, and written assessments. Prerequisite: Teacher recommendation

6490 Human Language (H) - Gr. 10, 11, 12 - 2.5 Cr.
This course is designed to explore how language both reflects and shapes our social world and how it is used by its speakers. Students will explore language and social class, the development of dialects, the mechanics of conversation, ethnic identity in language, technology's influence on language usage, and the future of language diversity. Students will participate in classroom activities, discussions, and complete readings to support the exploration of these topics. Course will be taught in English. This course is open to all students and can be taken simultaneously as a level 1-4 Spanish, French, or Latin course but it cannot take the place of a level 1-4 Spanish, French, or Latin course. Prerequisite: Teacher recommendation

6650 Introduction to Philosophy (H)-Gr. 11 and 12-2.5 Cr.
In this course, students will read and discuss the writings of a number of philosophers who have addressed some of the world's fundamental questions, such as "What is the good life?", "What is Virtue?", "Is there purpose in life?", "What is Justice?", "To what extent are we responsible for others?" and "What is Truth and how do we know it?" Through their readings, students will study basic philosophical methods and how to use these methods to address philosophical problems. A central aim of this course is to allow students the opportunity to write and think more clearly as they examine issues central to our existence. Prerequisite: Teacher recommendation

6492 Linguistics (H) -Gr. 10, 11, 12-2.5 Cr.
This course is designed to introduce students to the study of linguistics. Students will learn the international phonetic alphabet, morphology, language acquisition, sociolinguistics, and the history of English and the roots of the different language families all over the world. Students will participate in classroom activities, discussions, and complete readings to support the exploration of how languages develop and their role in our lives and society. Experience learning a world language is beneficial but not required. Course will be taught in English. This course is open to all students and can be taken simultaneously as a level 1-4 Spanish, French, or Latin course but it cannot take the place of a level 1-4 Spanish, French, or Latin course. Prerequisite: Teacher recommendation

## 6488 Roman History and Culture (H)-Gr. 11, 12 - 2.5 Cr.

In this semester course, open to juniors and seniors, students will explore the world of one of the foundational cultures of Western Civilization: Ancient Rome. Through the study of some of the outstanding works of the Roman literary tradition, students will examine such topics as: the development of Roman politics and law, military history, the development of Roman literature and its relationship to the culture of Ancient Greece. This course will also seek to ground these works in their historical and cultural context with the assistance of modern classical scholarship, as well as to explore the ways in which Ancient Roman civilization laid the foundation for our own. Students will have the opportunity to reflect on their learning through class discussions, presentations, and written assessments. Prerequisite: Teacher recommendation

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