# PROGRAM OF STUDIES



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# FROM THE HEADMASTER



Welcome to the latest edition of the Thornton Academy Program of Studies. This publication represents all that is unique and exciting about Thornton Academy—the breadth and diversity of opportunities we offer each of our students.

We believe that a school should offer more than a "one size fits all" experience. Our students arrive with varied interests and abilities, and with strengths and needs that span a broad continuum. It is our responsibility and honor to answer in kind, providing many doors of possibility for students to open and enter. At Thornton Academy, we strive to extend a friendly hand to each student, offering a fresh start and new ways to learn, explore, and grow.

This latest edition of our Program of Studies is the starting point to personalizing your Thornton Academy experience. Between its covers, you will find the foundational courses and programs that will move you forward. You will also encounter exciting elective courses—opportunities to delve more deeply into topics you may be curious about, and an invitation to discover entirely new interests. There are as many different avenues of exploration as there are different kinds of students at Thornton Academy. We invite you to find the path that is right for you.

Remember that you are able to start anew each year. If you excelled last year and want to challenge yourself this year, add an honors or AP class. You might decide to learn to play a new instrument, explore a new language, or audition for the school play. Whatever choices you make, we encourage you to take advantage of all that Thornton Academy has to offer. Know that we are here to support you and celebrate all that you will accomplish this year.

Best wishes in 2020-21!

# FROM THE PRINCIPAL



Learning comes to life at Thornton Academy Middle School!

TAMS is a place where students create, dream, and inspire. It's a place where everyone knows your name and you are more than just a student in the classroom. At TAMS, each student is valued as an integral member of our learning community. Our teachers work hard to create an atmosphere where all different types of learning may take place. As a small school, we are able to take a personalized approach toward recognizing the individual needs and accomplishments of each student.

TAMS is a leader in bringing innovative programs to middle school students. In fact, we pride ourselves in the comprehensive offerings available to our students. From our academic extension courses and off-campus expeditions, to the many opportunities for support that are available, we meet each student with enthusiasm and care—right where they are.

TAMS offers an environment where students can figure out exactly what excites and inspires them. Middle school is a time for learning, exploration, and growth. We encourage our students to take the time to explore their interests outside of academics—whether that means getting involved in a school club, participating in the performing arts, or joining one of our athletic teams. At TAMS, you can take risks and try new things.

We look forward to supporting you as you navigate your middle school journey!

# WHAT SETS US APART

#### Support During a Crucial Period of Growth and Development

The Thornton Academy community is warm and welcoming. We are a school where students build strong relationships with dedicated teachers, and student friendships last a lifetime. Our faculty and staff recognize that each child has strengths and challenges and takes into account the well-being of individuals at each stage of social, emotional, and intellectual development.

#### An Individualized Approach to Supporting the Future of Each Student

Our experienced college counselors work with students one-on-one in grades 9-12 to plan college and career trajectories. We encourage real-world experience through internships, job shadows, and part-time work. Our university partnerships offer students the opportunity to test out areas of study even before university enrollment.

#### Diversity That Fosters Compassion and Respect

With students from more than 30 local towns and 39 different countries, we celebrate the diversity and multiculturalism of our community. The geographic, cultural, and socioeconomic diversity of our student body creates a unique and dynamic learning environment that fosters a greater appreciation of both individual differences and shared values. Among those shared values are Thornton Academy's Core Pillars—respect, responsibility, compassion, and investment. These values guide our work and reflect how we treat one another within our school community.

For more information about how to set up a campus tour, shadow a current student, or submit an application, contact us at 207-282-5383 or visit thorntonacademy.org/admissions.

Students from the surrounding communities of Saco, Dayton, and Arundel may attend Thornton Academy's upper school without submitting an application. TAMS (Thornton Academy Middle School) is a school-choice option for students in Dayton and Arundel. For students outside that community, an application is required.



# **OUR PILLARS**

The Thornton Academy Pillars stand on tradition and uphold our community. They are the guiding principles that enhance our shared experiences. Developed in collaboration with faculty, staff, and students, these concepts inform our actions and attitudes.



**Respect** defines treatment of one's self and others. We recognize differences among members of our community, act with character and integrity, and are aware of how our actions impact others. To honor our surrounding environment, we are polite, humble, proud, and appreciative.



Investment is a quality that involves the act of being both present and aware of one's actions. People who are invested have appropriate goals, and consistently assess their value and progress toward these goals. Investment takes many forms, but the best practitioners will be engaged, committed, persistent, caring, energetic and willing to take risks. By being invested in our school, our time and efforts are valued by all.



We show **responsibility** by embracing individual ownership of behaviors and choices. We make informed decisions and are aware of potential outcomes. We demonstrate maturity, accountability, preparedness, timeliness, integrity, and purpose.



The **compassionate** person knows how to relate to and understand the opinions and experiences of others. By showing thoughtfulness and gratitude as we encounter new perspectives, not only is our empathy increased, but so is the quality of our school community. Connection, acceptance, and the celebration of differences foster our continued growth and relevance.

# MIDDLE SCHOOL PROGRAMS



# **GRADE 6 ACADEMICS**

#### Writing

Students will practice a wide variety of writing, ranging from journal entries and poetry to essays crafted about unique experiences in the classroom and beyond. The Six Traits of Writing program will be used to help all students continue to improve their work. Spelling, vocabulary, and grammar will be integrated into daily writing work.

#### Reading

Students will explore a variety of books as a class, both independently and in literature circles of four to six students. Students will have the ability to read a large selection of Newbery Award and Honor books. Student activities will include book projects, response journals, reading notebooks, guided reading, and Reader's Theater. Students will also learn the elements of a short story, reading several in the process.

#### **Mathematics**

Units of study include decimals, fractions, algebra, geometry, graphing, ratios, and proportions. Whenever possible, connections between the math concepts being taught and their real-world application will be integrated into lessons through mini labs and interdisciplinary projects. Middle school teachers use the flexible grouping model to organize learning communities of students based on mathematical aptitude. Criteria for establishing these groups include fifth grade math average, NWEA and NECAP scores, entrance mastery assessment, and teacher observations.

Middle School Counselor: Haley Carter

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#### Science

Students will perform hands-on labs and create related projects using a unit-based approach that focuses on energy, weather, astronomy, and oceans. Whenever possible, science will be integrated with other areas of the curriculum, including a natural overlap with social studies and math.

#### **Social Studies**

Students will learn about the world and its people with a focus on Latin America, Asia, and Africa. The social studies program will also be integrated with world art. Students will become more aware of the people of the world with a focus on their economies, demographics, geography, and culture. Important local, national, and world current events will be explored and discussed.

#### Health/Wellness

Instruction is divided between physical activity and health-oriented classroom lessons. Physical activities are often integrated with core curriculum concepts in science and social studies. Health units of study include mental, emotional, family, and social health; growth and nutrition; personal health and safety; drugs and disease prevention; community and environmental health; and current events that deal with health.

#### **Music & Performing Arts**

Students will learn to read and write music, sing a variety of songs that support learning experiences in other subject areas, play percussion to the classics, and complete a focus study on listening to music. To help develop songwriting skills, students use the GarageBand program on their laptops. Additionally, dancing, choreography, and drama improvisation are an active part of class. Students are invited to demonstrate skills learned throughout the year at the annual music concert.

#### **Visual Arts**

Students will engage in hands-on activities with a variety of art media. Lessons facilitate an exploration of the visual arts through experiences integrated with the social studies curriculum. Students will learn about traditional arts and crafts across the world and create their own authentic works of art. Students practice the language and understanding of the elements of art while developing confidence in the areas of drawing, painting, and sculpting.

# **GRADE 7 ACADEMICS**

**English Language Arts (ELA)** 

The seventh grade ELA curriculum will focus on reading, writing, listening, and speaking. Students will become more effective thinkers and active learners through communication, reflection, and understanding. Students will have many opportunities to work with various types of writing, including narrative, descriptive, expository, and persuasive writing. Becoming familiar with literary terms, learning to read for detail, using details to support interpretation of characters, and becoming aware of the beauty and power of the written word are key curriculum outcomes.

#### **Mathematics**

The seventh grade mathematics curriculum includes decimals, algebra and statistics, linear equations and functions, fractions, proportional reasoning, geometry, and measurement. Acceleration, extension, and enrichment opportunities are offered within the classroom.

#### **Life Science**

Seventh grade students will learn about a number of different life science topics. These include defining life, relationships in nature, food webs, scientific method, photosynthesis, cells, organ systems, genetics, and evolution. Students will be asked to use a variety of methods; in particular, STEM-related activities will explore key concepts of each unit.

#### **Social Studies**

Maine culture is the focus of seventh grade social studies. Students will examine questions such as: What is social studies? What makes a place a place? What happens when cultures interact with one another? What is required to create a community? How does a place change over time? Students will explore many facets of social studies, including history, geography, economics, government, anthropology, and sociology.

#### Languages

The languages program provides students with a foundation for future language study and promotes awareness of cultures related to languages. Spanish and French are taught in a two-year loop so that students are able to achieve maximum exposure to the structures of a language. The course is organized around thematic units that integrate vocabulary, grammatical structures, culture, and communication.

Seventh grade students will focus on learning the basic language skills of listening, speaking, reading, and writing—all taught through themes such as the classroom, school, family, home, and holidays. Popular culture, food, art, music, and other content areas are regularly connected to lessons. Skills in participation, tolerance, and cooperation are also strongly emphasized.

#### Health/Wellness

Instruction is divided between physical activity and health classroom lessons. Physical activities are often integrated with core curriculum concepts in science. Health units of study include mental, emotional, family, and social health; community and environmental health; anatomy; and current events related to health.

#### **Visual Arts**

Students will expand their knowledge of the elements and principles of art through an investigation of current uses of art and design. Visual arts activities are regularly designed to extend and complement academic areas of study; this integrated approach will help students develop an appreciation for art in daily life.

#### **Music & Performing Arts**

Seventh graders focus on African percussion, using authentic instruments from Ghana. An introduction of complex rhythms through ensemble and individual activities help students develop teamwork and cultivate a greater understanding of the music of other cultures. Students use GarageBand, software available on their laptops, to create original works. They also complete a unit focusing on American music in history (Ellis Island). African dance, drama activities, and studying the annual high school musical are also highlights in class. Students are invited to demonstrate skills learned throughout the year at the annual music concert.



## **GRADE 8 ACADEMICS**

**English Language Arts (ELA)** 

The eighth grade ELA curriculum focuses on developing writing skills by encouraging a critical review of a variety of texts and writing genres. Four thematically driven quarters focus on teaching students to approach literature and information analytically through close, purposeful reading. Through high frequency writing and revision, students learn to distinguish the elements of craft in the three common genres of academic writing—argument, informative, and narrative—and employ these specific strategies in their own pieces. Whole-class novels include *The Outsiders, The Giver, The Other Wes Moore*, and *The Boy Who Harnessed the Wind*.

#### **Mathematics**

The eighth grade mathematics curriculum includes real numbers and algebra, percentages, geometry and measurement, probability and statistics, and linear and nonlinear functions. Acceleration, extension, and enrichment opportunities are offered within the classroom. Honors Algebra I is offered (in place of eighth grade math) to students who demonstrate a high level of competence with the mathematical concepts listed above. Honors Algebra I is taught at the upper school.

#### **Physical Science**

Eighth grade students learn and use scientific inquiry methods to explore and discover answers to key questions that are posed at the beginning of each activity. The topics of scientific method, interactions and energy, forces, and chemistry are each reviewed. Students will work collaboratively to carry out hands-on STEM experiments.

#### **Social Studies**

The focus of eighth grade social studies will be on the United States of America and the global community. Students will examine questions such as: What is the United States of America? What basic rights should EVERY human being have? How are consumer choices connected to the world around you? What does the world need from YOU? Students will explore many facets of social studies, including history, geography, economics, government, anthropology, and sociology.

#### Health/Wellness

Instruction is divided between physical activity and health-related classroom lessons. Physical activities are often integrated with core curriculum concepts in science and social studies. Health units of study include mental, emotional, family, and social health; community and environmental health; anatomy; and current events related to health.

#### Languages

The languages program provides students with a foundation for future language study and promotes awareness of different cultures. Spanish and French are taught in a two-year loop so that students may achieve maximum exposure to the structures of each language. The course is organized around thematic units that integrate vocabulary, grammatical structures, culture, and communication. For eighth grade students, listening, speaking, reading, and writing skills are strengthened with more advanced language learning. Themes such as clothing, food, travel, and sports provide the basis for learning. Popular culture, food, art, music, and other content areas are regularly connected to lessons. Skills in participation, tolerance, and cooperation are also strongly emphasized.

#### **Visual Arts**

Throughout the year, students will focus on the overarching theme of "Art for Change." Students connect what they are learning about world events through research in social studies and ELA classes, and with integrated visual arts projects. This collaborative approach allows students to better understand the concepts studied and analyze how the practice of creating can bring about innovative solutions. Students work with a variety of two-dimensional and three-dimensional art media and are encouraged to make creative choices in their work whenever possible.

#### **Music & Performing Arts**

Applying music to our world is the eighth grade theme. Students will learn to play the ukulele, investigate historical composers, and discover why their music is still remembered today. They will also have the opportunity to create original songs and podcasts on GarageBand, a program available on their laptops. Our dance unit starts with the 50s and 60s and goes back to the 40s, teaching students how to dance with a partner and learn firsthand what the American swing era was all about. The elements of music are reviewed and used to help students articulate what they hear. Students are invited to demonstrate skills learned throughout the year at the annual music concert.

# SCHOOL COUNSELING DEPARTMENT

Students are assigned a school counselor and will stay with that counselor throughout the course of their TA career. The arc of our work begins with 9th grade where our focus is on life in secondary school. We emphasize the transition to Thornton Academy, self-awareness, and how best to become an involved community member. In 10th grade, we expand the development of students' interests, abilities, and career awareness. This work clears the way for more in-depth post-secondary and college planning, which is the crux of the work with 11th and 12th graders.

#### Director

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# DESIGNING AN UPPER SCHOOL SCHEDULE

Thornton Academy's goal is to prepare each student for success in institutions of higher learning and in the workplace. To help students identify and follow a pathway to post-secondary study, TA has identified standards which prepare students for higher education. Thornton Academy offers hundreds of classes, which can be overwhelming. However, our school counselors work with advisors, teachers, and parents to aid students with the design of an academic program that meets individual needs and goals.

Students may consider a variety of levels of study, each of which is designed to meet the demands of differing post-secondary placements. They are placed in an appropriate level by subject, depending on learning needs.



# **GRADUATION REQUIREMENTS**

COURSES	CARNEGIE UNITS (credits)*
English	4
Math	3
Social Studies/History *	3
Science	3
Wellness	1.5
Fine Art	1
Additional/Electives	6.5

\*A Carnegie Unit (credit) is defined as two semesters of course work.

\*Includes 1 credit US History

To qualify for a Thornton Academy diploma, students must complete four years of study with a minimum of 22 credits. Students transferring from other high schools utilizing the Carnegie Unit system will have credit applied toward graduation requirements. Only Thornton Academy grades will be used to calculate student grade point average.

Thornton Academy regards four years of sequential high school study as educationally, pedagogically, and developmentally appropriate. Therefore, Thornton Academy does not grant requests for early graduation.

School counselors work with students to create appropriate course schedules. **Each student's actual program will be individually crafted to meet interests and post-secondary goals.** All students are expected to complete a minimum of five to six credits per year. Courses may be a half credit (0.5), 1 credit, or 2 credits, depending on the length and frequency with which the class meets.

# - UPPER SCHOOL-COURSE SELECTION

Students may choose to use this worksheet to map out possibilities and guide conversations with the school counseling team. The Thornton Academy schedule has eight possible classes (four on each gold and maroon day). *Not all classes can be accommodated, but are certainly worth listing.* 

	FR	ESHMAN YEAR	SOPHOMORE YEAR	JUNIOR YEAR	SENIOR YEAR
NUMBER OF CREDITS	(4)	English	English	English	English
	(3)	Math	Math	Math	Math
	(3)	Science	Science	Science	Science
	(3)	Social Studies	Social Studies	Social Studies	Social Studies
NUMBER	(1.5)	Wellness Principles of Personal Fitness (semester) and	Wellness Current Issues (semester) and	Elective	Elective
	(6.5)	Language Course or Elective	Language Course or Elective	Language Course or Elective	Language Course or Elective
	(1)ART	Elective	Elective	Elective	Elective
		Elective	Elective	Elective	Elective

# **COURSE SELECTION PROCEDURE FOR NEW STUDENTS**

Parents and students are encouraged to take an active role in the course selection process. Consultation with school counselors is advised whenever there is a question or concern.

#### **Incoming Freshmen**

- Students in area sending middle schools will begin the scheduling process by meeting with Thornton Academy school counselors in late winter.
- Eighth graders from outside the sending communities may schedule a visit with Thornton Academy's admission team who will connect interested students with a member of the school counseling staff.
- All students and families are encouraged to attend the annual Academic Expo in February to explore the variety of course offerings that are available.

#### **Incoming International Students**

- Upon arrival, international students will take an English language test and a math placement test.
- Following testing, school counselors will meet individually with international students to select courses.
- Each international student will receive a class schedule during orientation and will start classes on the first day of school.

## The following is the required course of study for international students wishing to earn a Thornton Academy diploma:

1-year students (i.e., incoming students enrolled as seniors) must earn a minimum of 6 credits including: 1 English, 1 math, 1 science, 1 US history, 2 additional/electives.

2-year students (i.e. incoming students enrolled as juniors) must earn a minimum of 11 credits including: 2 English, 2 math, 2 science, 1 US history, 1 wellness and/or arts credit, 3 additional/electives.

3-year students (i.e. incoming students enrolled as sophomores) must earn a minimum of 16 credits including: 3 English, 3 math, 3 science, 1 US history, 1 social studies, 1 art, 0.5 wellness, 3.5 additional/electives.

All students entering as 4-year students (freshmen) must follow the 22-credit requirement with core minimums.

\*Please note that Thornton Academy does not accommodate course requests or changes based on teacher assignment or friends' schedules.

## COURSE SELECTION PROCEDURE FOR RETURNING STUDENTS

Students and parents are encouraged to consult the four-year plan that each student has developed with their school counselor.

- In late winter, students receive a copy of the Program of Studies and should begin discussions with teachers, school counselors, and parents regarding their course of study for the following year.
- With the help of school counselors, students complete the course selection process using Powerschool. Current teachers make recommendations available to students based on current course performance and prerequisite requirements.
- The master schedule is created when all course requests have been submitted.
- Returning students receive completed schedules upon return to school in the fall.

The Arts Department provides students with opportunities to acquire comprehensive knowledge about the visual and performing arts.

Many classes qualify for the one credit fine arts graduation requirement. Specific prerequisites are required for advanced art disciplines and may only be waived with special permission from the school counselor in consultation with the arts department. In addition to class work, course assignments may include materials collection, research, writing, drawing, practicing, rehearsing, and working in the studios before and after school.



#### Courses in the order that they appear in this section:

(\* fulfills requirement, 1 credit is needed for graduation)

Dance I \* Dance II \* Dance III \*

Performance & Repertory: Dance Company \*

Piano Lab \* Guitar Fundamentals \* Songwriting \* Music Theory \* AP Music Theory \* Concert Choir ^\* Chamber Singers \* Treble Choir \* Concert Band \* Iazz Band \* Wind Ensemble \* String Orchestra \*

Orchestra \* Acting I: Performance & Design \* Acting II \* Theater Basics & Design for Stage Visual Arts I \* Photography \* Potterv \* Sculpture \* (next offered in '21-'22) Honors Drawing \* Honors Painting \* AP Art and Design \*

# DANCE

#### Dance I

1 credit

Grades 9, 10, 11, & 12

Students will learn the basic elements and principles of modern dance from various perspectives. Students will develop skills through directed practice and improvisational exercises and studies. They will learn the language of dance as an expressive medium through the processes of critiquing and refining small and large group dances. Understanding the history and aesthetics of dance will be a part of developing dance literacy. Assignments and outside tasks will include reading, writing, and choreographic work.

#### Dance II

1 credit

Grades 10, 11, & 12 Prerequisite: Dance I

Students will focus on expanding movement vocabulary, improving confidence, and developing technical skills, as well as acquiring the knowledge and skills needed for effective performance. The development of 20th century modern dance will be expanded upon. Students will perform dances in different mediums, such as musical theatre, film, and video. Class assignments and outside tasks may include reading, writing, choreographic work, rehearsal, and performance projects. Participation in public performances may be required.

#### Dance III

1 credit

Grades 11 & 12

Prerequisite: Dance II and approval of the instructor Students will build on the skills and techniques gained in Dance I and Dance II. This course stresses the development of strength, flexibility, and endurance of the physical body; the ability of students to work cooperatively with others; and the maturation of performance skills, including the range of dynamics, projection, and expression. Also included are technical requirements, such as lighting, sets, costuming, performance spaces, and the documentation and notation of dances. Out-of-school rehearsals and performances are required.

# Performance & Repertory: Dance Company 1 credit

Grades 10, 11, & 12

Prerequisite: Dance I and an audition in the spring
This is an opportunity for experienced dancers to gain
performing and choreographic experience. Students will
refine kinesthetic and spatial awareness, working toward
greater musicality and expressiveness with a variety of
choreographers. The company will perform at Thornton
Academy as well as at other schools and venues.
Students will learn about approaches to building a
repertory, as well as the many technical aspects of
performance and company management. Outside
rehearsal and performance time is required.
Note: This course may be repeated for credit.

## **MUSIC**

The Thornton Academy music program offers student-musicians the chance to participate in introductory courses, as well as high caliber ensembles with unique and challenging performance opportunities.

#### Piano Lab

0.5 credit

Grades 9, 10, 11, & 12

Open to all who want to learn piano, this class is taught on MIDI keyboards with a computer program to guide students through the basics of reading music, and the proper techniques of playing the piano. Students will learn how to read and perform a variety of music, including classical, jazz, and pop. Learning to play the piano is the perfect stepping-stone to playing any instrument as students will learn theory that can be applied to all music. Since access to the computer program is only available during class, regular attendance is critical to success in this course.

#### **Guitar Fundamentals**

0.5 credit

Grades 9, 10, 11, & 12

This course focuses on the fundamentals of beginner guitar playing. Students will learn tablature, chord frames, and sheet music, starting with the 4-chord song. This is a hands-on class that requires each student to have an acoustic (non-amplified) instrument.

#### **Songwriting**

0.5 credit

Grades 9, 10, 11, & 12

During this class, students will explore the ingredients of songwriting and audio production from various music genres. The semester begins with an introduction to digital music and audio recording, and culminates with an independent student-designed songwriting project. Previous experience with a musical instrument or choir is recommended, but not required.

#### **Music Theory**

1 credit

Grades 9,10,11, & 12

In this course, students will learn skills that include reading music, identifying notes, playing basic rhythms, and hearing major and minor chords. Online tools and paper resources will assist students as they learn to read and associate the written and aural music in this class. This class also offers an in-depth look at music theory through analysis, modulations, chord progressions, and transposition. Projects include arranging for band, orchestra, and rock ensembles.

#### **AP Music Theory**

1 credit

Grades 10, 11, & 12

Prerequisite: Music Theory or permission from the instructor This yearlong class is designed for students who have an intense interest in music theory and/or who plan to major in music in college. Students will focus on musical terminology, notation skills, basic compositional skills, score analysis, and aural skills. This course also includes more sophisticated and creative tasks, such as melodic and harmonic dictation, sight-singing, and the realization of figured bass. Students will be well prepared for and required to take the AP Exam.



#### **Concert Choir**

1 credit

Grades 9, 10, 11, & 12

Open to those interested in singing as a means of expression, students will study a wide variety of music as well as develop the ability to read and understand vocal music. Students will have the unique opportunity to perform with an impressive number of students at concerts in the winter and spring. Concerts and after-school rehearsals are required.

#### **Chamber Singers**

1 credit

Grades 10, 11 & 12

Prerequisite: By audition only

Chamber Singers is an auditioned performance group of advanced singers. Students will perform a wide variety of music that ranges from sacred literature to secular, and includes foreign languages and jazz. Outside rehearsal time is needed to perfect the skills for performance-level singing. Members of this choir will also perform as part of the Concert Choir.

#### **Treble Choir**

1 credit

Grades 9, 10, 11, & 12

Prerequisite: By audition only

Treble Choir is an auditioned group of female singers who want a unique experience of learning treble music only, and who are dedicated to learning more about music and the voice. Students will learn to use good breath support and to develop their voices by applying important vocal techniques. Members of this choir will perform as part of the Concert Choir.

Members of the *Concert Band, Jazz Band,* and *Wind Ensemble* form the **Combined Concert Band.** (See descriptions of each course in this section.) The Combined Concert Band performs at the annual holiday and spring concerts, as well as the Veterans and Memorial Day parades. Additional rehearsal time after school and individual practice is required. Members are eligible to audition for and participate in MMEA District I and statewide festivals.

#### **Concert Band**

1 credit

Grade 9

Prerequisite: Ability to play a band instrument
This ensemble will practice and perform
contemporary and classic concert band literature.
To participate, a student must already know how
to play a band instrument.

#### **Jazz Band**

1 credit

Grades 9, 10, 11, & 12

Prerequisite: By audition only

This band is for the serious jazz enthusiast. The student must have the technical skills and artistic ability necessary to perform advanced jazz music, including improvisation. The student must be fluent in key signatures up to four sharps and four flats. Performances are part of the course grade and include festivals and concerts in the spring semester.

Members of the *String Orchestra*, *Orchestra*, and *Wind Ensemble* form the **Symphony Orchestra**. (See descriptions of each course in this section.) The Symphony Orchestra will perform a wide variety of literature, from traditional to contemporary, in twice yearly performances. Opportunities for other seasonal and community performances exist, such as the themed concert series scheduled in February. Members are eligible to audition for and participate in MMEA District II and statewide festivals. Outside practice is required, as are after-school and evening rehearsals, concerts, and special performances.

#### **String Orchestra**

1 credit

Grades 9, 10, 11 & 12

Prerequisite: Ability to play violin, viola, cello, or string bass at any level; placement audition required

This instrumental performance group is made up of strings and combines with other classes to perform. See Symphony Orchestra for more information.

#### **Orchestra**

1 credit

Grades 9,10,11, & 12

Prerequisite: By audition only

This select group of strings will study and perform more advanced orchestral literature, as well as advanced string techniques.

#### **Wind Ensemble**

1 credit

Grades 11 & 12

Prerequisite: Concert Band and by audition only
This select group explores traditional chamber and
concert band music and performs with both the
Combined Concert Band and Symphony Orchestra.

## **THEATER**

# Acting I: Performance & Design

Grades 9, 10, 11, & 12

Acting I students will focus on the beginning of language, history, and practice of theater and performance. Through class work, viewings, and improvisations, each student will develop a set of skills that will help them more fully appreciate the processes of theater and performance. Class work will include improvisation acting basics, script reading and writing, public performance opportunities, and a focus on story and how the story is performed. On the design side, students will employ a hands-on overview of what are required to support stage productions. A brief introduction to sound, costuming, and makeup combine for support of most productions.

#### **Acting II**

1 credit

Grades 10, 11, & 12

Prerequisite: Acting I or approval by instructor
This workshop-based course is for more serious
performance students interested in advancing their
acting skills. The course will consist of exploratory
exercises in scene study, monologue, improvisation,
and acting technique. Focus will be given to acting
styles and character work using a variety of scripts,
both professional and student-written. Both classroom
performance and participation, and public performance
are required. A variety of live and technological
performance venues will be explored.

#### **Theater Basics & Design for Stage**

1 credit

Grades 9, 10, 11, & 12

Students will employ a hands-on overview of what is required to support stage productions on the design side. Students will learn how to help tell the story, what it takes to create the mood, and how to create composition and focus on the stage. This course combines the basics of sound production, costuming, and makeup to support productions by the TA Players.

# **VISUAL ARTS**

#### Visual Arts I

1 credit

Grades 9, 10, 11, & 12

Students will learn the elements and principles of design, and develop skills and perception through drawing, painting, collage, and other media. Learning about a variety of artists and their work will be embedded in the curriculum. This class stresses creative problem solving as an important part of an artist's work. Reading, research, written work, and sketchbook homework will be assigned on a regular basis. Students will develop a portfolio of work, which will be considered part of their final grade.

#### **Photography**

1 credi

Grades 10, 11, & 12 Prerequisite: Visual Arts I

The objective of this course is to provide a format for students to learn the visual context of fine art photography. Coursework emphasizes conceptual and historical approaches to photography, and will include traditional darkroom and digital photographic techniques. A variety of camera devices and operations, technical skills, printing processes, and subject matter will be explored. Research, project planning, homework completion, and additional time in the studio is essential for student success.

#### **Pottery**

1 credit

Grades 10, 11, & 12 Prerequisite: Visual Arts I

This is a hands-on studio course that focuses on various handbuilding and wheel throwing construction methods. Students will learn about the technical aspects of working with clay and glazes to create both functional and sculptural, well-designed pottery. Clay bodies, the stages of clay, tools, glazes, and the history of pottery are important topics that will be covered. Research, creative problem solving, and group critiques are all integral components for this class. Additional time developing projects in the clay studio will be required.





#### Sculpture (next offered in '21-'22)

1 credit

Grades 10, 11, & 12 Prerequisite: Visual Arts I

This sculpture class is designed for students that have a desire to work within the 3-dimensional format. Students will design and create a variety of 3-dimensional sculptural forms, exploring the use of space in various media, such as paper, clay, wood, plaster, or found objects. Research, the history of sculpture, creative problem solving, and group critiques are all integral components for this class. Additional studio time is required for success.

#### **Honors Drawing**

1 credit

Grades 10, 11, & 12 Prerequisite: Visual Arts I

Students will be introduced to the methods, materials, and aesthetics of drawing. They will work with such media as graphite, conté, charcoal, pastels, and ink. Emphasis will be on direct observation and learning to see in graphic terms. The subject matter and content will include still life, landscape, animals, architecture, and the human form, including self-portraiture. Through class lectures and demonstrations, students will study the history of drawing, and will develop their ability to read the finer aesthetic qualities found within works of art. Weekly sketchbook drawing is a necessary part of successfully completing this course.



#### **Honors Painting**

1 credit

Grades 10, 11, & 12 Prerequisite: Visual Arts I

Students will explore the beginning techniques, processes, and aesthetic issues of working in tempera, watercolor, acrylic, ink, and other paint-based media. Goals for this class include learning how to see and use color with sensitivity and sophistication, understanding and applying the science of color, and how to use painting tools effectively and creatively. Students will study a wide range of subject matter, including still life, landscape, portraiture, abstract, and non-objective themes. Art history, art criticism, and aesthetics will be an integral part of coursework. Work outside of class time will be necessary to complete projects.

#### **AP Art & Design**

1 credit

Grade 12

Prerequisite: Visual Arts I, two studio electives, and recommendation of the instructor

The Advanced Placement Art & Design Program consists of three portfolio options—2D design (includes photography), 3D design, and drawing, which correspond to the most common college foundation courses. AP Art & Design is not based on a written exam; instead, students must submit a portfolio and written commentary in May to the AP College Board. AP Art & Design is a course designed for senior artists who will be applying for admission as a visual art major at the post-secondary level. Summer coursework is assigned upon acceptance in the spring and is due the first day of school in the fall. Quarter one concentrates on portfolio preparation and documentation for the post-secondary art program application process. The art-making pace and process is rigorous and requires an advanced skill set in media and technique, research completion, complex concept, and ideation documentation; and sophisticated work production in and outside of the studio.

# **ENGLISH**

All underclass English classes will include direct grammar instruction and SAT preparation. Writing instruction in the junior year is focused on the mastery of the research paper, writing, and analytical skills introduced during freshman and sophomore years. A varied program of courses is offered to seniors, which allows students to choose a genre focus for both writing and literature.

Note: All AP and honors English classes require completion of a summer reading assignment. Students are responsible for obtaining and completing the summer reading assignment. Summer reading requirements are made available online, in the School Counseling Office, and from English teachers on June 1st.



# Courses in the order that they appear in this section:

(\* fulfills requirement, 4 credits are needed for graduation, # NCAA-approved)

Honors Freshman English \*# Freshman English \*# Foundations of Freshman English \* Honors Sophomore English \*# Sophomore English \*# Foundations of Sophomore English \* AP Language and Composition \*# Honors Junior English \*# Junior English \*# Foundations of Junior English \* AP Literature and Composition \*# Honors Senior English \*# Senior English \*# Senior English for the Real World \* Foundations of Senior English \* Nonfiction Literature/Journalism \*# Creative Writing \*# Literature of American Sport \*# Monsters and Misfits \*#

# **FRESHMEN**

Ninth grade English offers an introduction to composition and literature. There will be a heavy focus on grammar and developing writing skills, with special emphasis on paragraph structure, topic sentences, writing an introduction and conclusion, thesis, and transitions. Facility with the five-paragraph essay format is a goal. An important component of ninth grade English is the short stories unit, which develops students' comprehension and analysis of literature. All ninth-grade students will study *The Odyssey* and read a variety of novels. All freshman English classes receive direct grammar instruction through an online program.

#### **Honors Freshman English**

#### 1 credit

Prerequisite: Placement by instructor and school counselor Students will be introduced to the critical analysis paper and to major genres of literature, with extensive reading and writing required. The curriculum features several novels, including Shakespeare's Romeo and Juliet, poetry, and non-fiction selections. Accelerated pacing and increased work expectations distinguish this course from the core level; students should be motivated for active discussion and participation. Note: A summer reading assignment is mandatory; see details in the introduction to this section.

#### Freshman English

1 credit

Prerequisite: Placement by instructor and school counselor This course will support students to become effective readers, writers, and communicators as they target their post-secondary education to include attendance at a two- or four-year college. Through reading a wide variety of high-interest fiction, short stories, epic poetry, and one Shakespeare play, students will master written responses that focus on effective paragraph structure, with complete sentences and emerging analytical skills. Habits of mind and organizational skills will also be stressed as students launch their high school careers with more challenging academic work.

#### Foundations of Freshman English

1 credit

This course will concentrate on improving skills in reading and writing. Students will improve reading comprehension by engaging high-interest fiction and non-fiction materials. Students will work to improve writing by: a) focusing on the composition of clear and complete sentences, and b) building those into paragraphs. The skills, knowledge, and habits of mind that foster effective communication and an appreciation of literature will be stressed.

# **SOPHOMORES**

Tenth grade English is designed to help students understand literature in the context of its culture. All tenth grade English classes will complete a major unit on poetry. Themes discussed include assumptions about class and gender, and the tensions between an individual and society. Substantial emphasis will be placed on grammar; writing instruction will extend the skills developed in freshman year to include exposure to a wide range of writing experiences, including literary analysis. Tenth grade classes will continue working toward mastery of the literary analysis essay, but will study and experience expository, persuasive, and creative writing. A research component will also be introduced. All sophomore English classes receive direct grammar instruction through an online program.

#### **Honors Sophomore English**

1 credit

Prerequisite: An A in Freshman English or successful completion of Honors Freshman English, and placement by instructor In this rigorous world literature course, students will read texts that reflect various cultural perspectives, with an emphasis on exploring worldviews. Required reading will include Lord of the Flies and at least five additional novels, Shakespeare's Much Ado About Nothing, nonfiction, and short stories. A poetry unit will introduce students to poetic terminology, various poetry forms, and writing poetry. Above average competency in writing and the analysis of literature are expected, with an emphasis on perfecting the traditional literary analysis essay. Note: A summer reading assignment is mandatory; see details in the introduction to this section.

#### Sophomore English

1 credit

Prerequisite: Placement by instructor and school counselor This core-level course is designed to introduce students to new ideas and perspectives using literature as a tool for understanding society and culture. Students will read Lord of the Flies and at least two other novels, as well as a variety of short stories, nonfiction pieces, and a play. There will be a major poetry unit. Skills such as analytical, expository, and creative writing will be stressed, with emphasis on writing a literary analysis essay.

#### **Foundations of Sophomore English**

1 credit

Prerequisite: Placement by instructor and school counselor Students in this course will concentrate on improving their comprehension skills by reading high-interest literature written from various cultural perspectives. Novels, including *The Art of Racing in the Rain*; short fiction; nonfiction; and various poems will be used to explore other cultures. Students will be encouraged to consider the connection between literature and their own lives. Paragraph development, grammar, usage, vocabulary, and real-world communication skills will be emphasized. This class is for students who are planning to go into the workforce immediately after high school.



# **JUNIORS**

Eleventh grade English is a multi-genre literature course that examines the American dream and what it means to be an American. Assigned readings enhance understanding of the historical periods studied in the junior US History courses, with students investigating each reading's historical context and relevance to their own lives. All juniors will study *The Great Gatsby* and The Hate U Give; various short stories, novels, and essays; and works of nonfiction, such as Into the Wild. Eleventh grade classes will continue work on mastery of analysis and research, with attention to critical reviews of authors' claims. Understanding writing for different audiences and purposes will be emphasized, specifically in the context of expository, persuasive, descriptive, and personal narrative writing. All junior English classes receive direct grammar instruction through an online program.

### **AP Language & Composition**

1 credit

Prerequisite: An A in Sophomore English or successful completion of Honors Sophomore English, and placement by instructor

This course is for the highly motivated and skilled English devotee who wants to pursue a rigorous study of language and rhetoric; students will come to understand the complex relationship between writers and readers. This writing intensive course focuses mostly on essays and other forms of nonfiction. It is mandatory for all students to take the AP Exam in May. *Note: A summer reading assignment is mandatory; see details in the introduction to this section.* 

#### **Honors Junior English**

1 credit

Prerequisite: Sophomore English and placement by instructor This rigorous course offers a critical understanding of American literature. Students will be expected to express their understanding in a clear, organized manner through class discussion and written assignments. In addition to the required texts listed above, students will read at least four additional novels, short stories, and non-fiction articles. They will also be asked to work on personal narrative writing (the college essay) and apply a critical eye to research, culminating in a major research paper and year-end, student-driven project. Note: A summer reading assignment is mandatory; see details in the introduction to this section.

#### **Junior English**

1 credit

Prerequisite: Placement by instructor and school counselor Eleventh grade English is a multi-genre literature course that examines the American experience through its inherent multiple perspectives and voices. In addition to the required texts listed above, students will read at least two additional novels, short stories, essays, and other works of nonfiction. Juniors will continue to work on mastery of analysis and research, and understanding writing for different audiences and purposes. There will be a focus on expository, persuasive, descriptive, and personal narrative writing.

#### **Foundations of Junior English**

1 credit

Prerequisite: Placement by instructor and school counselor This course is appropriate for students who plan to go straight into the workforce after graduation, or who plan to further their education with technical or vocational experience and/or coursework. Students will develop reading and writing skills necessary for success in today's world.

## **SENIORS**

While continuing their experience of literature, all seniors will work on their upcoming transition to life after high school. Seniors will be taught skills necessary for various next steps, and encouraged to develop the habits of mind that lead to lifelong resilience and learning. All senior English classes receive direct grammar instruction through an online program.

#### **AP Literature & Composition**

1 credit

Prerequisite: Successful completion of Honors Junior English or AP Language & Composition, and placement by instructor This college-level course offers students who have shown exceptional ability and keen interest in English an opportunity for intensive reading, writing, and discussion. Course readings will span time (from Chaucer and Shakespeare through contemporary authors) as well as genre (short fiction, novels, poetry, and drama). Students will hone the analytic and rhetorical tools necessary for sophisticated and original literary analysis through class activities such as seminar discussions, collaborative projects, writing conferences, and peer review workshops. The course also includes structured exam practice and it is expected that all students will sit for the AP Exam in May. Note: A summer reading assignment is mandatory; see details in the introduction to this section.

#### **Honors Senior English**

1 credit

Prerequisite: Successful completion of Honors Junior English or AP Language & Composition, and placement by instructor This accelerated and demanding course will further develop the skills of reading, writing, and discussing

literature in preparation for life after high school. Students will read from a selection of whole-class texts, as well as complete their own independent reading. Additionally, they will participate in structured, student-centered discussions to further their communication and analysis skills. Daily informal writing will enforce skills and build confidence. Larger written components will include research papers and autobiographical writing; as well as persuasive, informative, and narrative works. Past whole-class texts have included *Educated*, *Hamlet*, *Interpreter of Maladies*, *The Stranger in the Woods*, and *Slaughter-House Five*. *Note: A summer reading assignment is mandatory; see details in the introduction to this section*.

#### **Senior English**

1 credit

Prerequisite: Placement by instructor and school counselor This college preparatory course will use 20th- and 21st-century fiction and nonfiction texts to help students examine the connection between culture and personal identity, and to identify their own core values going forth from high school. Special attention will be paid to close reading of diverse texts, analysis, and honing writing skills across genres. The year will culminate with a multi-genre project that requires students to examine a topic through the production of a variety of genres that are informative, literary or creative, and functional.

#### Senior English for the Real World

1 credit

Prerequisite: Placement by instructor and school counselor This course is designed for those students who plan to enter the workforce, military, vocational training, or community college directly after graduation. Students will read a combination of fiction and non-fiction, as well as develop the writing and critical thinking skills necessary for the adult world. Individual post-graduation plans will be explored in order to find, cultivate, and refine goals. Major topics include personal identity, lifestyle and career, societal issues, and research.

#### **Foundations of Senior English**

1 credit

Prerequisite: Placement by instructor and school counselor This course is designed for those students who plan to enter the workforce, military, or vocational training directly after graduation. Students will continue to develop their reading, writing, and oral communication skills, and will explore the impact of non-fiction and fiction to their daily lives and views. They will read The Poacher's Son, The Stranger in the Woods, and many non-fiction pieces. They will also keep a blog about their reaction to this work that will include a series of five paragraph essays and many informal journals. Emphasis in the spring will be on work-related learning and skills enhancement.

#### **Nonfiction Literature/Journalism**

1 credit

This year-long, college preparatory, reading and writing elective will explore a number of writing styles and genres. Students will read and discuss classic examples of writing, and be asked to create a variety of original pieces. As reporters, photojournalists, designers, and writers for our online news magazine, students will be engaged in real work. Mini-lessons each day will introduce students to the best work in the field. Additionally, for at least part of each class, students will be working in a writing lab/newsroom environment on individual assignments. An emphasis will be placed on understanding specific styles or genres, the historical aspect of this work, and the literary or historical significance of this type of writing.

#### **Creative Writing**

1 credit

This writing-intensive course is designed for students interested in writing, regardless of experience. All students will explore short fiction, poetry, and a variety of creative nonfiction. The course will conclude with an independent study in which students get to explore a genre of choice that was not covered in the class, such as writing for the screen, drama, graphic stories, novel writing, video game narratives, songs, and podcasting, etc.

#### **Literature of American Sport**

1 credit

This college preparatory English course will examine sports and sport issues through fiction, non-fiction, and dramatic reading. Readings such as Travis Roy's *Eleven Seconds*, August Wilson's *Fences*, and John Grisham's *Bleachers* are a few class selections. Students will also conduct an in-depth research project through the multigenre perspective; various reading, writing, and oral assignments will also be required.

#### **Monsters & Misfits**

1 credit

Prerequisite: Placement by instructor and school counselor Monsters and misfits are pervasive in our culture as they represent both individual and societal fears and anxieties. In this course, students will concentrate on examining the nature of our fears, and how monsters and misfits come to symbolize cultural anxieties through the study of the horror genre. Through research, writing, and critical cultural analysis of horror film and literature, students will apply critical theories to examine and identify classical literary misfits and monsters and their manifestations in the 21st century. Major literary works studied will include Frankenstein, Salem's Lot, and The Haunting of Hill House.

# LANGUAGES

In the Languages Department, students will develop the four basic skills of a language—listening, speaking, reading, and writing—and expand their knowledge and awareness of related culture, history, and literature.



# Courses in the order that they appear in this section:

(there is no graduation requirement for Language, # NCAA approved)

Honors Arabic I #
Honors Arabic II #
Honors Arabic III
Honors Chinese I #
Honors Chinese II #
Honors Chinese III #
Honors Chinese IV #
Honors Chinese V #

AP Chinese # Latin I# Latin II # Honors Latin III # Latin III/IV # AP Latin # Honors Homeric Greek I # Honors Homeric Greek II # Honors Homeric Greek III # Honors French I # French I# Honors French II # French II # Honors French III # French III # Honors French IV #

Honors French V # AP French # Honors German I # German I# Honors German II # German II # Honors German III/IV # Honors Spanish I # Spanish I# Honors Spanish II # Spanish II # Honors Spanish III # Spanish III # Honors Spanish IV # Honors Spanish V # AP Spanish #

## **ARABIC**

#### **Honors Arabic I**

1 credit

In this beginning course, students will gain the basic skills needed to communicate in classic Arabic/Fusha. Although the main goal will be to develop listening and speaking skills, students will also learn the Arabic alphabet. Through activities and practical conversations, students will understand basic language patterns as well as pronunciation and vocabulary. The course will cover essential grammar, vocabulary, and expressions that are used in daily conversation and travel. Middle Eastern culture, with an emphasis on Lebanon, will be integrated with direct language instruction.

#### **Honors Arabic II**

1 credit

Prerequisite: Arabic I and placement by instructor
Students will continue to expand their grammar,
vocabulary, and writing skills, along with their
knowledge of Middle Eastern cultures. More reading and
writing will be included in the class schedule. Students
will become more comfortable conversing and
expressing themselves.

#### **Honors Arabic III**

1 credit

Prerequisite: Arabic II and placement by instructor
In this course, students will continue to develop
listening, speaking, reading, and writing skills. The
objective is to equip students with the basic skills to
enable them to engage in a conversation. Students
will be required to read short stories and watch Arabic
movies to learn a broader range of vocabulary. They
will be exposed to authentic reading and listening
materials, as well as discussions of political, social, and
cultural topics. In addition, students will read, write,
and translate both long and simple texts. Assessments
will include written and oral evaluation. This class is
fast-paced, and a significant portion of each class
session will be conducted in Arabic.

# **CHINESE**

#### **Honors Chinese I**

1 credit

Prerequisite: Recommended for students enrolled in a concurrent honors level English course

This beginner-level Chinese course offers an introduction to Chinese language and culture. It focuses on listening and speaking basic Mandarin Chinese, as well as reading and writing simplified Chinese characters, and understanding the pronunciation system, Pinyin. Both traditional and current Chinese customs and culture in China and Taiwan will be discussed in class. Regular quizzes in listening, reading, and writing will be included in the class schedule.

#### **Honors Chinese II**

1 credit

Prerequisite: Honors Chinese I and placement by instructor

This course builds upon the foundation established in Chinese I. It expands and develops the number of characters, vocabulary, and sentence structures on topics of food, weather, season, clothing, and shopping. Regular quizzes in listening, speaking, reading, and writing will be included in the class schedule, as will regular Chinese reading and writing assignments. Part of the class is conducted in Mandarin Chinese.

#### **Honors Chinese III**

1 credit

Prerequisite: Honors Chinese II and placement by instructor This course meets with Honors Chinese IV (see description below) to build upon the foundation established in Chinese I and II. Students will increase their numbers of characters and vocabulary, as well as complexity of grammar, while further studying Chinese culture. This course is partially conducted in Mandarin Chinese.

#### **Honors Chinese IV**

1 credit

Prerequisite: Honors Chinese III and placement by instructor This intermediate-level Chinese course meets with Honors Chinese III (see description above). Students continue to develop and improve their language skills through reading, discussion, and writing in Chinese. Topics include half of the following: health, daily life, giving and taking directions, cooking, and planning; the other half is covered in Honors Chinese III. This course is partially conducted in Mandarin Chinese.

#### **Honors Chinese V**

1 credit

Prerequisite: Honors Chinese IV and placement by instructor This course builds upon prior years of Chinese language and cultural foundation. Students continue to develop and improve their language skills through reading, discussion, and different formats of writing in Chinese. Topics include house chores, the college application and careers, travel, Chinese and American literature, environmental protection, and modern China. This course is mostly conducted in Mandarin Chinese.

#### **AP Chinese**

1 credit

Prerequisite: Honors Chinese IV or Honors Chinese V, and teacher recommendation and interview with the instructor Students will become even more familiar with Chinese culture and further develop and master listening, speaking, reading, and writing in Chinese through various topics. This is a demanding course designed to prepare students for the required AP Chinese Language and Culture Exam in May. Students should expect to spend sufficient time preparing for and practicing speaking, listening, reading, and writing assignments outside of class.

## **CLASSICS**

#### Latin I

#### 1 credit

Students will begin to acquire the skills required for reading, understanding, and appreciating Latin literature; develop communicative skills in English based on an understanding of the influence of Latin; and develop an awareness of the heritage of the cultures of ancient civilizations, especially those of Greece and Rome. In using the Cambridge Latin Course, students will bridge the gap between modern technology and the ancient world.

#### Latin II

#### 1 credit

Prerequisite: Latin I and placement by instructor
In Latin II, students will continue to acquire the skills required for reading, understanding, and appreciating Latin literature; develop communicative skills in English based on an understanding of the influence of Latin; and develop an awareness of the heritage of the cultures of ancient civilizations, especially those of Greece and Rome. In using the Cambridge Latin Course, students will bridge the gap between modern technology and the ancient world.

#### **Honors Latin III**

#### 1 credit

Prerequisite: Latin II and placement by instructor Students will work to acquire a deeper and broader knowledge of Latin grammar, syntax, and vocabulary by reading longer and more complex stories in the Cambridge Latin Course. Students will then begin to read Latin literature, especially passages from Caesar and Vergil included on the AP Latin syllabus.

#### Latin III/IV

#### 1 credit

Prerequisite: Latin II

Students will review and develop grammar and vocabulary, and focus on Latin literature and its ancient context. In addition to the course work, two papers will be required for submission to The Classical Association of New England Writing Contest (fall) and the Bernice L. Fox Classics Writing Contest (spring). Since this course may be taken twice, a survey of Latin poetry will alternate yearly with a survey of Latin prose.

#### **AP Latin**

#### 1 credit

Prerequisite: Honors Latin III, teacher recommendation and interview with the instructor

The student will prepare for the AP Latin Exam on Virgil and Caesar. Students will develop the ability to read, translate, understand, analyze, and interpret the Latin texts that appear on the AP course syllabus. This is a demanding course; students should expect to spend a considerable amount of time preparing for each day's lesson. All students are required to take the AP Exam.

#### **Honors Homeric Greek I**

#### 1 credit

Prerequisite: Successful experience in another language, preferably Latin, and permission of the instructor In this challenging and fast-paced course, students will begin to read Homer's Iliad in the original, unabridged Greek. Students will acquire the basics of ancient Greek grammar and syntax, and build their knowledge of vocabulary. In addition, they will learn much about the culture of the Homeric world, the nature of epic poetry, and the rhythms and sounds of Homer's classic.

NB: This is not modern Greek, but the literary language of the ancient Greeks.

#### **Honors Homeric Greek II**

#### 1 credit

Prerequisite: Homeric Greek I and placement by instructor In Homeric Greek II, students will continue to expand their knowledge of ancient Greek grammar, syntax, and vocabulary; increase their skills in translating and reading the poetry of Homer aloud; and further explore the Homeric epics. The focus of the course will continue to be Homer's *Iliad*, and students will finish reading the first book of that epic in the unabridged original. The course concludes with an introduction to Attic Greek.

#### **Honors Homeric Greek III**

#### 1 credit

Prerequisite: Homeric Greek II and placement by instructor Students will review ancient Greek grammar and vocabulary. They will read further in Homer's *Iliad* and *Odyssey*, as well as read some Attic Greek. Students will also learn more about classical scholarship and the myths and culture of the Homeric world.

## **FRENCH**

#### **Honors French I**

1 credit

In this beginning course, students will develop listening, reading, writing, and speaking skills, while building both vocabulary and knowledge of Francophone cultures. A significant portion of each class session will be conducted in French. Assessments will include written and oral evaluation. Honors students will be expected to demonstrate a high level of comprehension, retention, and self-directed learning.

#### French I

1 credit

In this beginning course, students will develop listening, reading, writing, and speaking skills, while building both vocabulary and knowledge of Francophone cultures. A portion of each class session will be conducted in French. Assessments will include written and oral evaluation.

#### **Honors French II**

1 credit

Prerequisite: French I and placement by instructor Using the target language, students will explore a variety of interpersonal and cultural topics, with a focus on improving understanding and production of spoken and written French. Assessments will include written and oral evaluation. Honors students are expected to demonstrate a high level of comprehension, retention, and self-directed learning.



#### French II

1 credit

Prerequisite: French I and placement by instructor Using the target language, students will explore a variety of interpersonal and cultural topics, with a focus on improving understanding and production of spoken and written French. Assessments will include written and oral evaluation.

#### **Honors French III**

1 credi

Prerequisite: French II and placement by instructor Students will further develop listening, speaking, reading, and writing skills. Using culturally based materials, students will expand vocabulary and understanding of grammatical structures. In addition to new material, students will review and build on previously studied topics. Honors students will be expected to demonstrate a high level of comprehension, retention, and self-directed learning. This course is conducted in French.

#### French III

1 credit

Prerequisite: French II and placement by instructor Students will further develop listening, speaking, reading, and writing skills. Using culturally based materials, students will expand vocabulary and understanding of grammatical structures. In addition to new material, students will review and build on previously studied topics. Much of this course is conducted in French.

#### **Honors French IV/V**

1 credit

Prerequisite: French III and placement by instructor
In this course students will be exposed to French
literature, film, culture and current events, and review
grammar and language skills previously introduced. The
primary emphasis is on oral proficiency. This course is
conducted exclusively in French. Since this course may
be taken twice, alternating curricula are offered on odd
and even years.

#### **AP French**

1 credit

Prerequisite: Honors French III and teacher recommendation Students will develop strong communications skills in French, including reading, writing, speaking, and listening, as well as a familiarity with Francophone cultures. In addition to being well prepared for the course, students must have a high level of motivation and interest, and sufficient time to prepare assigned reading and writing. All students are required to take the AP Exam.

### **GERMAN**

#### **Honors German I**

1 credit

In this honors-level introductory course, students will begin developing skills in the understanding and production of spoken and written German. Honors I students are expected to demonstrate a high level of comprehension, retention, and self-directed learning. Students will explore a variety of interpersonal and cultural topics using the target language. Upon successful completion of this course, students will have a firm foundation of German grammar and vocabulary and will demonstrate communicative competence at the novice-high level.

#### German I

1 credit

In this introductory course, students will begin developing skills in the understanding and production of spoken and written German. Students will explore a variety of interpersonal and cultural topics using the target language. Upon successful completion of this course, students will have a firm foundation of German grammar and vocabulary, and will demonstrate communicative competence at the novice-mid level.

#### **Honors German II**

1 credit

Prerequisite: German I and placement by instructor
In this fast-paced, advanced-intermediate course,
students will build upon the foundation established
in German I. Students will explore a variety of
interpersonal and cultural topics using the target
language. Honors II students are expected to
demonstrate a high level of comprehension, retention,
and self-directed learning. This course requires an
increased attention to detail in both the understanding
and production of spoken and written German.
Upon successful completion of this course, students
will demonstrate intermediate-level communicative
competence.

#### **German II**

1 credit

Prerequisite: German I and placement by instructor
In this intermediate-level course, students will build
upon the foundation established in German I. Students
will explore a variety of interpersonal and cultural topics
using the target language, with a focus on improving
understanding and production of spoken and written
German. Upon successful completion of this course,
students will demonstrate communicative competence at
the intermediate-low level.

#### **Honors German III/IV**

1 credit

Prerequisite: Honors German II and placement by instructor Students in this advanced-level course will continue to expand their vocabulary, grammar knowledge, and communicative competence while learning about a variety of topics in German literature and history. Students will read literature and historical documents in the original German, and view German films and analyze these works in German, both orally in class discussions and in written compositions. Upon successful completion of this course, students will demonstrate intermediate-level communicative competence. Topics in this course vary in alternate years. This course may be taken for two consecutive years.

# **SPANISH**

#### **Honors Spanish I**

1 credit

In this beginning course, students will develop listening, reading, writing, and speaking skills, while building both vocabulary and knowledge of Hispanic cultures. A significant portion of each class session will be conducted in Spanish. Assessments will include written and oral evaluation. Honors students will be expected to demonstrate a high level of comprehension, retention, and self-directed learning.

#### Spanish I

1 credit

In this beginning course, students will develop listening, reading, writing, and speaking skills, while building both vocabulary and knowledge of Hispanic cultures. A portion of each class session will be conducted in Spanish. Assessments will include written and oral evaluation.

#### **Honors Spanish II**

1 credit

Prerequisite: Spanish I and placement by instructor
Students will explore a variety of interpersonal and
cultural topics using the target language, with a focus
on improving understanding and production of spoken
and written Spanish. Assessments will include written
and oral evaluation. Honors students are expected to
demonstrate a high level of comprehension, retention,
and self-directed learning.

#### Spanish II

1 credit

Prerequisite: Spanish I and placement by instructor Students will explore a variety of interpersonal and cultural topics using the target language, with a focus on improving understanding and production of spoken and written Spanish. Assessments will include written and oral evaluation.

#### **Honors Spanish III**

1 credit

Prerequisite: Spanish II and placement by instructor Students will further develop listening, speaking, reading, and writing skills. Using culturally based materials, students will expand vocabulary and understanding of grammatical structures. In addition to new material, students will review and build on previously studied topics. Honors students will be expected to demonstrate a high level of comprehension, retention, and self-directed learning. This course is conducted in Spanish.

#### **Spanish III**

1 credit

Prerequisite: Spanish II and placement by instructor Students will further develop listening, speaking, reading, and writing skills. Using culturally based materials, students will expand vocabulary and understanding of grammatical structures. In addition to new material, students will review and build on previously studied topics. Much of this course is conducted in Spanish.

#### **Honors Spanish IV**

1 credit

Prerequisite: Spanish III and placement by instructor Spanish IV reinforces all the skills the student has developed in the first three years, and includes the study of Latin American and Spanish history, literature, and culture. A number of literary works of varying lengths will be read in the original Spanish. Compositions will be assigned regularly. This course is conducted in Spanish.

#### **Honors Spanish V**

1 credit

Prerequisite: Spanish IV and placement by instructor This class meets with Honors Spanish IV (see description). To avoid repetition, different literary works will be read in alternate years. Students should see their Spanish instructor or the department chair for more information on this offering, including eligibility standards.

#### **AP Spanish**

1 credit

Prerequisite: Honors Spanish III and teacher recommendation Students will develop strong communication skills in Spanish, including reading, writing, speaking, and listening, as well as a familiarity with Hispanic cultures. In addition to being well prepared for the course, students must have a high level of motivation and interest, and sufficient time to prepare assigned reading and writing. All students are required to take the AP Exam.



# -HISTORY & SOCIAL SCIENCES

In preparing students for a changing world, the history department—through diverse course offerings—fosters critical thinking and effective communication to develop engaged citizens.



# Courses in the order that they appear in this section:

(\* fulfills requirement, 3 credits are needed for graduation, 1 of the 3 credits must be in US History, # NCAA approved)

Peoples and World Cultures \*#
Foundations of Peoples and World Cultures \*
America's Response to a Changing World \*#
Foundations of America's Response to a Changing World \*
Blind Eye of History \*#
Foundations of Blind Eye of History \*
Constitutional Studies \*#
Modern US History \*#
Foundations of Modern US History \*

# **FRESHMEN**

#### **Peoples and World Cultures**

1 credit

In our rapidly changing world, people around the planet are being brought into closer contact with one another. More than ever before, decisions made across the globe have increasing impact on our lives. Students in this course will work toward a greater understanding of the people with whom they share this planet. Students will strive to become more familiar with the world around them through a study of governments, religions, and economies; and the physical, personal, and cultural characteristics of regions around the globe.

# Foundations of Peoples and World Cultures 1 credit

This course includes all Peoples and World Cultures topics (see above) with readings adjusted to meet the abilities of enrolled students.

Honors Modern US History \*# AP US History \*# Economics \*# AP European History \*# Government \*# AP Government and Politics: United States \*# AP Human Geography # Honors Human Geography # AP Macroeconomics # (offered in '20-'21) AP Microeconomics # (next offered in '21-'22) Modern China \*# Personal Finance \* Psychology \*# AP Psychology # Sociology \*# Introduction to Marketing

# **SOPHOMORES**

Sophomores must choose one of the following history options.

#### America's Response to a Changing World (or) Foundations of America's Response to a Changing World

1 credit

By addressing critical questions related to domestic and international policy, students will investigate the dilemmas facing our increasingly interdependent global society. This course will examine America's role in events that are important not only to millions of Americans, but also to billions of people around the world. School counselor and teacher referral is required for enrollment in this class.

# Blind Eye of History (or) Foundations of Blind Eye of History

1 credit

The idiom "turning a blind eye" describes the custom of ignoring undesirable information. This course will examine the American story through the eyes of groups that have been ignored, mistreated, and abused. This class will focus on the experiences of three major groups: African Americans, women, and Native Americans. Students will explore the roots of race hatred in America, learn about the long journey and sacrifices of women to gain equal rights, and come to understand how some present-day native reservations are identified as the poorest places in the country. This course will allow students to delve into specific and impactful events as they reverberate through time. School counselor and teacher referral is required for enrollment in this class.

#### **Constitutional Studies**

1 credit

Few historic moments impact us as significantly as the signing of the US constitution. This 225-year-old document affects so many aspects of our lives, from who can be President to what we are allowed to say. This course offers a journey into the US Constitution, and the opportunity to explore the Constitution as a living document. Students will examine the original motivations of the founders, analyze America's unique form of democracy, and investigate how the Constitution influences one's rights today.

## **JUNIORS**

United States History is an important component for any American student's education. During junior year, students will be able to choose between four levels of modern United States History.

#### **Modern US History**

1 credit

This course will explore the history of the United States chronologically, from the 20th Century to the present. Students will refine the process of historical inquiry through the development of both written and verbal expression, and examine primary and secondary sources for validity, point of view, and historical context. In addition, students will be expected to build competent and appropriate connections to issues in the contemporary world.

#### Foundations of Modern US History

1 credit

Through a study of twentieth century United States history, students will gain a better understanding of this country's role in the world today. An area of focus will be using a variety of primary and secondary sources to create a clear image of the events of this era. Students will be asked to think critically and analytically to develop conclusions about the importance of historical events. They will use evidence from the assigned course work to support their thinking. School counselor and teacher referral is required for enrollment in this class.

#### **Honors Modern US History**

1 credit

Prerequisite: Placement by instructor
This class will spotlight significant eras, moments, events, and people in the 20th century and contemporary America. Students will be asked to understand major ideas, eras, themes, developments, turning points, chronology, and cause-and-effect relationships throughout United States history.
Emphasis will be placed on honing the ability to analyze both primary and secondary sources for accuracy, nuance, and perspective. Extensive reading and research outside of class will be required.

#### **AP US History**

1 credit

Grades 11 & 12

Prerequisite: Placement by instructor
Students will confront the dominant themes of
American history and develop an understanding of why
America has become the nation it is today. Students in
this challenging college-level course will prepare for
the required College Board AP US History Exam by
learning the critical reading, writing, and analytical skills
necessary to develop an advanced understanding of US
history, while becoming great historians themselves.

## **ELECTIVES**

Students may choose between a number of courses representing a wider array of the social sciences. Note that there are both full-year and single-semester courses available.

#### **Economics**

0.5 credit

Grades 11 & 12

Students will study how individuals and groups make decisions with limited resources in order to best satisfy their wants, needs, and desires. This course will give students a greater understanding of economics, ranging from the viewpoint of the individual consumer or small business owner to the global economy. They will study the law of supply and demand, forms of business, labor unions, government finances and their influence on the economy, money and prices, and inflation and deflation cycles. The course will relate history and psychology to the study of economics.

#### **AP European History**

1 credit

Grade 12

Prerequisite: Placement by instructor

Napoleon, Bismarck, and Churchill are but three figures that have left their mark on the course of modern history, yet are rarely addressed in other history classes. Through an exploration of the events that have shaped the path of Europe's existence, a greater understanding of global, national, and local topics is possible. Students should expect to be challenged not just with voluminous readings, but also in the organization and analysis of new data, through their writing and verbal skills, and in myriad other ways which will challenge their understanding of the world. Reaching back as far as 1450 and spanning to the current age, this course will prepare students for the required College Board AP European History Exam.

#### Government

0.5 credit

Grades 11 & 12

In this course, students will investigate the basic principles and purposes of government, methods of government participation, local and state government, and the three branches of federal government. Current government policies and political issues, the delicate relationship between individual rights and society, and democratic traditions are all investigated and discussed. Students will be expected to refine text reading and analysis skills in preparation for college. By the end of the semester, students will not only understand how our government operates, but also how they can participate in government to address our collective problems and improve society.

#### **AP Government & Politics: United States**

1 credit

Grade 12

Prerequisite: Placement by instructor

AP United States Government and Politics is an intensive study of the formal and informal structures of government and the processes of the American political system, with an emphasis on policy making and implementation. This course explores political theory and everyday practices that direct the daily operation of

our government and shape our public policies. Students will develop a critical understanding of the strengths and weaknesses of the American political system, as well as their rights and responsibilities as citizens. They will be expected to refine text reading and analysis skills, as well as critical inquiry of relevant scholarly articles in preparation for college. They will be responsible for accessing a range of news media sources in order to keep up with daily events in the nation and the world. All students are required to take the AP Exam.

#### **AP Human Geography**

1 credit

Grades 10, 11, & 12

Prerequisite: Placement by instructor

In this course, students will develop critical thinking skills through the understanding, application, and analysis of the fundamental concepts of geography. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences, and learn about the methods and tools geographers use in their science and practice. Students will integrate many different content area subjects, such as culture, demographics, land use, and economics. They will also utilize state-of-the-art technology and participate in class discussions and debates. All students are required to take the AP Exam.

#### **Honors Human Geography**

1 credit

Grades 10, 11, & 12

In this course, students will develop critical thinking skills through the understanding, application, and analysis of the fundamental concepts of geography. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences, and learn about the methods and tools geographers use in their science and practice. Students will integrate many different content area subjects, such as culture, demographics, land use, and economics. They will also utilize state-of-the-art technology and participate in class discussions and debates.

#### AP Macroeconomics (offered in '20-'21)

1 credit

Grades 11 & 12

Students will become familiar with the economic principles that guide an economic system. Students will study basic economic concepts, measurements of a nation's economic performance, price-level determination, the financial sector, fiscal and monetary policy, and the implications of international trade and globalization. This course will prepare students for the required College Board AP Macroeconomics Exam.

#### AP Microeconomics (next offered in '21-'22)

1 credit

Grades 11 & 12

Students will study how individuals and groups make decisions with limited resources in order to best satisfy their wants, needs, and desires. They will also gain a greater understanding of economics, ranging from the viewpoint of the individual consumer or small business owner to the global economy. The course will cover the basic economic concepts of scarcity, choice and opportunity cost, the production possibilities curve, comparative advantage and trade, economic systems, property rights and the role of incentives, and marginal analysis. After mastering basic concepts, topics will include the nature and functions of product markets, factor markets, and market failure and the role of government. This course will prepare students for the required College Board AP Microeconomics Exam.

#### **Modern China**

0.5 credit

Grades 11 & 12

Despite the fact that one out of every five people in the world are citizens of China, the level of understanding of China by Westerners continues to deserve attention. In an effort to gain an understanding of this incredible country, students will examine its culture and history with special emphasis placed on the events of the last 150 years. This course will examine the physical and human geography of China, as well as the relationships that China has with the global community. Students will examine the causes and implications of the stunning growth of China's economic, diplomatic, and military power, and the challenges that face China's continued success.

#### **Personal Finance**

0.5 credit

Grades 11 & 12

This course will prepare students to become fiscally responsible citizens. Students will gain an understanding of the banking and credit system; retirement plans; the power of investing in stocks, mutual funds, CDs, and bonds; and real estate. Course experiences include researching investment plans and learning about local and federal governmental process and its application to everyday life.

#### **Psychology**

0.5 credit

Grades 11 & 12

In this overview course, students will be introduced to major themes in psychology, such as research methodologies, biological basis of behavior, sensation and perception, altered states of awareness, sleep and dreams, learning and memory, feelings and emotions, personality, and abnormal behavior. Students will consult a variety of materials and sources to explore the many dimensions of human behavior. They will work independently and collaboratively in an effort to understand key concepts and vocabulary of psychology. By exploring the different perspectives used in the study of psychology, students will learn to analyze and evaluate new ideas.

#### **AP Psychology**

1 credit

Grade 12

AP Psychology is designed to introduce students to the scientific study of the behavior and mental processes of human beings. To accomplish this, the course provides instruction in several major content areas; these include history and approaches, research methods, biological bases of behavior, sensation and perception, states of consciousness, learning and cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders, and social psychology. Students are required to take the AP Psychology Exam.

#### Sociology

0.5 credit

Grades 11 & 12

In this course, students will explore how human behavior is shaped, considering groups to which individuals belong and the society in which they live. Students will examine personal experiences and gain insights into society and the larger world order. They will be challenged to develop a new understanding of human behavior and American society through topics such as the sociological imagination, socialization, race, gender, class, crime, and deviance.

#### **Introduction to Marketing**

0.5 credit

Grades 10, 11 & 12

In this course, students will gain understanding and skills in the functional areas of marketing, including channel management, marketing-information management, market planning, pricing, product/service management, and promotion and sales. Students will acquire an understanding and appreciation of each of the marketing functions and their ethical and legal issues.



Course sequences in mathematics vary and should be selected based on students' post-secondary plans. Although there is some flexibility, college-bound students in particular should carefully consider which sequence would best serve their intentions following graduation.



# Courses in the order that they appear in this section:

(\* fulfills requirement, 3 credits are needed for graduation, # NCAA approved)

Foundations of Math I \*

Foundations of Math II \*

Foundations of Math III \*

Foundations of Math IV \*

Algebra I \*#

Algebra with Discrete Mathematics \*#

Geometry \*#

Algebra II \*#

Pre-Calculus with Trigonometry \*#

Pre-Calculus with Functions \*#

Probability and Statistics \*#

Honors Algebra I \*#

Honors Geometry \*#

Honors Algebra II \*#

Honors Pre-Calculus \*#

Honors Statistics \*#

AP Statistics \*#

Honors Calculus A \*#

AP Calculus AB \*#

AP Calculus BC \*#

Introduction to Logic

Introduction to Accounting

**Honors Accounting** 

The following course sequence is designed to provide the necessary mathematical knowledge and skills for students who plan military enlistment or direct entry to the workforce following graduation from Thornton Academy.

#### Foundations of Math I

1 credit

Foundations of Math I is a non-college preparatory course in the principles of pre-algebra. Students will practice the following foundational math skills: adding, subtracting, multiplication, division, and fractions (using both positive and negative integers). While learning foundations of Math, students will be introduced to the concepts of variables, constants, solving one variable equations, and graphing those linear equations using slope-intercept.

#### **Foundations of Math III**

1 credit

Prerequisite: Foundations of Math I

Foundations of Math II is a non-college preparatory course in the principles of geometry. Emphasis is placed on patterns and inductive reasoning, coordinate geometry, angles, parallel lines, triangles, congruence, similarity, quadrilaterals, polygons, circles, surface area, and volume.

#### **Foundations of Math III**

1 credit

Prerequisite: Foundations of Math II

Foundations of Math III is a non-college preparatory course in the principles of Algebra I. The course will include a review of basic algebra concepts learned in Foundations of Math I, such as variables and order of operations. Students will learn to solve linear equations (including multi-step equations), equations with multiple variables, and equations with decimals. They will also learn to write a linear equation based on a graph of a line. A study of exponents will introduce students to concepts beyond linear functions.

#### Foundations of Math IV

1 credit

Prerequisite: Foundations of Math III

Foundations of Math IV prepares seniors who plan to enter the workforce directly after high school. In addition to continuing their study of algebraic skills, students will be introduced to critical life-long skills in financial mathematics, including situations such as purchasing a car, budgeting money, and paying taxes.

The following course sequence is designed to provide the necessary mathematical knowledge and skills for students who plan to enroll in a two- or four-year college program following graduation from Thornton Academy.

#### Algebra I

1 credit

Algebra I will enable students to extend and strengthen their understanding of the basic operations related to whole numbers, fractions, decimals, ratios, and percentages. Topics studied will include a review of integer properties, operations with signed numbers, solving linear equations, calculating, and inequalities. Students will gain skills for graphing linear equations, calculating and identifying slope, and working with systems of linear equations. In addition, students will be introduced to topics in functions, exponents, and polynomials.

#### **Algebra with Discrete Mathematics**

1 credit

Prerequisite: Algebra I

This course builds on the skills learned in Algebra I and extends learning into new algebraic concepts, including factoring, solving equations by factoring, and an introduction to quadratic equations. Discrete mathematics, topics of probability, and statistics will be studied as well.

#### Geometry

1 credit

Prerequisite: Algebra with Discrete Mathematics, or Algebra 1 and placement by instructor

In this class, geometric concepts will be studied from an algebraic perspective. Students will study about triangles, quadrilaterals, circles, parallel lines, similarity, and congruence.

#### Algebra II

1 credit

Prerequisite: Geometry and either Algebra with Discrete Mathematics or Algebra I with an A average, or placement by instructor

This course is a continuation of the Algebra I and Algebra with Discrete Mathematics sequence. Algebra II will include a study of operations with real numbers, linear equations and inequality applications, graphs and functions, polynomials, quadratic equations, and systems of equations.

#### **Pre-Calculus with Trigonometry**

0.5 credit

Prerequisite: Algebra II and Geometry
This semester course is designed for students who intend to further their education in a technical field.
The six trigonometric functions, which are defined in terms of ratios, are used routinely in this class. Triangle solution problems, trigonometric identities, and solving trigonometric equations will require students to apply previously learned algebraic skills.

#### **Pre-Calculus with Functions**

0.5 credit

Prerequisite: Algebra II and Geometry
Students will explore mathematical models which
include exponential, logarithmic, rational, and piecewise
functions. Additional topics will include probability,
sequences, and series.



#### **Probability & Statistics**

0.5 credit

Prerequisite: Algebra II and Geometry

This course is an introduction to the study of probability, interpretation of data, and fundamental statistical problem solving. Students will explore and analyze data by observing patterns or the absence of patterns, interpret information from graphical and tabular displays, and learn to use technology in solving statistical problems. They will also apply appropriate statistical models, including centrality and spread, to infer information from data.

The following course sequence is designed to provide the necessary mathematical knowledge and skills for students who, following graduation from Thornton Academy, plan to attend a four-year college program and may major in a math or science field, or who may apply to a selective four-year college, regardless of major.

#### Honors Algebra I

1 credit

Students will gain a thorough and extensive study of linear functions and graphing on the xy-coordinate system. Students will learn to graph linear equations, calculate and identify slope, solve and graph inequalities, and work with systems of linear equations. Students will use equations to model and solve authentic problems, interpret graphs, make predictions based on data, and create graphs from a table of values. The course will also include the study of quadratic functions.

#### **Honors Geometry**

1 credit

Prerequisite: Honors Algebra 1

Students will develop spatial concepts and insight into the relationships between plane figures, such as points, lines, polygons, and circles. Students will apply algebraic principles, including the use of coordinates, to geometric problems, and explore the measurement of two- and three-dimensional figures. The concept of proof is a focus of this course, fostering an appreciation of the power of logic as a tool for understanding the world.

#### Honors Algebra II

1 credit

Prerequisite: Honors Algebra I and Honors Geometry, or placement by instructor

This course will focus on the study of functions, including linear, quadratic, polynomial, and rational functions. In addition, students will study exponential and logarithmic functions, as well as study a unit on conic sections.

#### **Honors Pre-Calculus**

1 credit

Prerequisite: Honors Algebra II and Honors Geometry
Students will study the unifying nature of functions
with an emphasis on trigonometric, exponential,
and logarithmic functions. Visualization and analysis
of graphs will help students develop insight into
mathematical ideas. A study of sequences, series, and
probability will be incorporated.

#### **Honors Statistics**

1 credit

Prerequisite: Honors Pre-Calculus

Honors Statistics is a year-long course that will focus on collecting, organizing, analyzing, and interpreting data. Topics will include exploratory data analysis, study planning, probability, and statistical inference.

#### **AP Statistics**

1 credit

Prerequisite: Honors Pre-Calculus

AP Statistics will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inference. All students are required to take the AP Exam.

#### **Honors Calculus A**

1 credit

Prerequisite: Honors Pre-Calculus

Many college majors, particularly technical fields, require the study of calculus. This course is the equivalent of one semester of college calculus curriculum. Studies will include topics of limits, continuity, differential, and integral calculus

#### **AP Calculus AB**

2 credits/meets daily

Prerequisite: Honors Pre-Calculus

In this course, students will study the cornerstones of calculus: the derivative, the definite and indefinite integral, continuity and limits, and the differential and advanced techniques of integration. This course is the equivalent of 1.5 semesters of college calculus.

#### **AP Calculus BC**

1 credit

Prerequisite: AP Calculus AB

This course continues the study of calculus of functions of a single variable. Students' understanding of functions will expand to polar and parametric functions. Derivatives and definite integrals will be studied in greater depth to solve a variety of application problems. In addition, other advanced topics in mathematics may be introduced (e.g., differential equations and linear algebra). All students are required to take the AP Exam.

# **MATHEMATICS ELECTIVES**

#### **Introduction to Logic**

0.5 credit

Grades 11 and 12 Prerequisite: Geometry

This course will provide an introduction to the concepts and symbols used in logical arguments, with a focus on propositional logic. Students will discuss how to translate arguments into the language of formal logic, and test the validity of the arguments. Logical thinking is the basis behind mathematics, computer programming, and rational thinking. College-bound students who plan to study mathematics or computer programming will find this course most valuable.

#### **Introduction to Accounting**

0.5 credit

Grades 11 and 12

In this course, students will become familiar with the language of business through the accounting cycle, including determining assets, liability, and capital. Students will also learn to prepare balance sheets, journals, ledgers, worksheets and financial statements, and will study the accounting cycle for service and merchandising business ownership models.

#### **Honors Accounting**

0.5 credit

Grades 11 and 12

Prerequisite: Introduction to Accounting

This course is designed for students interested in pursuing a degree in accounting, finance, marketing, or economics. Students will develop a solid foundation in individual accounting, small business recordkeeping, departmentalized accounting, control systems, general accounting adjustments, corporate accounting, management accounting, and cost accounting.



# SCIENCE & ENGINEERING

Three science credits are required for graduation; qualifying courses are designated in the following course list.

Students may be teacher-recommended for honors science courses; those who successfully complete the yearlong honors course may be teacher-recommended for the AP course in that specific discipline in subsequent years (other prerequisites may apply.)



# Courses in the order that they appear in this section:

(\* fulfills requirement, 3 credits are needed for graduation, # NCAA approved)

Physical Science \* # Foundations of Physical Science \* Honors Physical Science \* # Biology \* # Foundations of Biology\* Honors Biology \* AP Biology \* # Chemistry \* Honors Chemistry \* # AP Chemistry \* Honors Forensics in Chemistry # Physics \* # Foundations of Physics \* Honors Physics \* # AP Physics I & II \* AP Physics C \* # Honors Introduction to Engineering \* # AP Environmental Science \* # Anatomy & Physiology # Honors Anatomy & Physiology Environmental Studies # Everyday Engineering **Engineering Principles** Maine Fish & Wildlife Marine Biology # Honors Marine Biology # Trees & the Maine Forest

## **FRESHMEN**

# Physical Science (or) Foundations of Physical Science

1 credit

Grade 9

This introductory course will expose students to a wide variety of disciplines within the physical sciences. Topics covered will include matter and energy, chemistry, astronomy, earth science, and climate change. School counselor and teacher referral is required for enrollment in Foundations of Physical Science.

#### **Honors Physical Science**

1 credit

Grade 9

Prerequisite: Placement by instructor, enrollment in honors math This course acts as an introduction to high school science at the honors level and covers similar course content to the college preparatory physical science course with greater breadth and depth. Topics include an introduction to scientific thinking and quantitative analysis, matter and energy, chemistry, cosmology, astronomy, bedrock geology and the history of the earth, earth surface processes, and climate change. In addition, honors physical science incorporates a high degree of mathematics, writing, and field and lab techniques to prepare students for future honors and AP-level science courses.

# SOPHOMORES, JUNIORS, & SENIORS

## **Biology (or) Foundations of Biology** 1 credit

Grades 10, 11, & 12

The topics covered in this introductory biology class begin with microbiology: the molecules necessary for life; cells and how they work, use energy, communicate, reproduce, and develop into the great diversity we see in the world. The course then delves into broader topics of genetics, evolution, and ecology—the driving forces that shape what we see around us. There is significant vocabulary in this course. School counselor and teacher referral is required for enrollment in Foundations of Biology.

#### **Honors Biology**

1 credit

Grades 9, 10, 11, & 12

Prerequisite: Honors Physical Science or placement by instructor Students will thoroughly explore life on a cellular and molecular level, both conceptually and experimentally. Students will further develop their strong skills in critical reading, writing, and scientific thinking. They will ask their own research questions, design their own experiments, collect and analyze data, and read and write formal laboratory research papers. Considerable reading and writing will accompany the study of biochemistry, cell biology, photosynthesis, cellular respiration, genetics, evolution, and ecosystem relationships.

#### **AP Biology**

2 credits/meets daily

Grades 11 & 12

Prerequisite: Honors Biology, Honors Chemistry, and Algebra II This course is equivalent to a two-semester college introductory biology course for biology majors. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions.

#### **Chemistry**

1 credit

Grade 10 & 11

This course is designed to give students a solid foundation in the fundamentals of chemistry through classroom lectures, laboratory work, and problemsolving activities. There is a strong emphasis on the development of critical thinking and the scientific process. Students will gain an appreciation for the relevance of chemistry to the world outside of the classroom.

#### **Honors Chemistry**

1 credit

Grades 10, 11, and 12

Prerequisite: Placement by instructor (completion of Algebra II is recommended, but not required)

Students will gain a strong foundation in the fundamentals of chemistry through laboratory work and problem-solving activities, with an emphasis on developing critical thinking skills. Properties of matter, electronic structure, periodic properties, ionic and molecular compounds, nomenclature, chemical reactions, stoichiometry, and molecular structure are studied in this class. This course requires very strong algebra skills and is a prerequisite for AP Chemistry.

#### **AP Chemistry**

2 credits/meets daily

Grades 11 & 12

Prerequisite: Honors Chemistry and Algebra II
This course is designed to give students the experience of a college-level chemistry course, including proper laboratory techniques, problem solving skills, study skills, and finally to prepare students to successfully complete the College Board AP Examination. All students who register for the course are expected to take the AP Examination.

#### **Honors Forensics in Chemistry**

0.5 credi

Grades 11 & 12

Prerequisite: Honors Chemistry

Explore advanced concepts in chemistry through the use of forensics in this advanced chemistry course. Over the course of the semester, students will solve a murder by solving one piece of the forensics case at a time. This inquiry-based laboratory class builds upon concepts learned in Honors Chemistry, and introduces students to nuclear chemistry, electrochemistry, and organic chemistry.

#### **Physics (or) Foundations of Physics**

1 credit

Grade 11 & 12

This year-long class covers the most fundamental physics principles through exploration and application. Units of focus include motion and accelerated motion, forces, energy, waves, light and optics, circuits, and hydraulics. Students will get their hands dirty by creating, dissecting, and manipulating, and will leave having connected physics to the working world around them. School counselor and teacher referral is required for enrollment in this class.

#### **Honors Physics**

1 credit

Grades 10, 11, & 12

Prerequisite: Placement by instructor, Algebra II (may be taken concurrently)

This course seeks to expand students' introduction to and understanding of the first principles of physics. Students will apply gained understanding in complex, practical, and relevant physical problem solving. The areas of focus for this yearlong course include kinematics, dynamics, work, energy, power, impulse and momentum, circular and rotational motion, oscillation and periodic motion, gravitation, thermodynamics, fluids, vibrations and waves, electricity and magnetism, and optics. This course requires strong algebra and trigonometry skills and serves as a prerequisite for AP Physics.

#### **AP Physics I & II**

2 credits/meets daily

Grades 10, 11, & 12

Prerequisite: Honors Physics, or placement by instructor and precalculus (may be taken concurrently)

The purpose of Advanced Placement Physics is to provide a college-level course in physics, and to prepare the student to seek credit and/or appropriate placement in college physics courses. In this "flipped" class, students are engaged in hands-on, inquiry-driven laboratory work. They will apply problem solving strategies for much of their time in class, while also taking notes from lecture material for homework. Emphasis is placed on depth of understanding of a topic rather than breadth of topics; very little time is spent on performing mathematical "plug-and-chug" routines. Topics from both AP Physics 1 and AP Physics 2 will be covered, and students will take both AP Exams in May.

#### **AP Physics C**

2 credits/meets daily

Grades 11 & 12

Prerequisite: Calculus and Physics (Honors or AP1)
This course will include the same physics topics, including labs, required of college physics and engineering majors across the country. Students will derive and implement a great variety of calculus-based mechanics, and electricity and magnetism applications. A talent for abstract, multidimensional reasoning and competency in solving multivariable calculus problems are required. Only the most serious and capable physics students should undertake this course. All students are required to take the AP Exam.

#### **Honors Introduction to Engineering**

1 credit

Grades 11 & 12

Prerequisite: Honors Physics, Pre-Calculus (may be taken concurrently), Honors Chemistry (may be taken concurrently)

This rigorous introduction to the field of engineering satisfies one requirement for the University of Maine School of Engineering Articulation Agreement. The course will expose students to the basic engineering principles of four major fields of engineering: mechanical, chemical/biomedical, electrical/computer, and civil/environmental. Students will solve complex, college-level engineering problems using experimental, analytical, and/or numerical procedures. A teamwork approach will be emphasized. Strong math and physics skills are required.

#### **AP Environmental Science**

1 credit

Grades 11 & 12

Prerequisite: Honors Biology, one year of physical science, and Algebra II

This interdisciplinary course embraces a wide variety of topics from different areas of scientific study. Unifying themes will include concepts such as science as a process, human impact on natural systems, the cultural and social context inherent in environmental challenges, and the dependence of human survival on the development of sustainable systems.

### **SCIENCE ELECTIVES**

Science electives are one-semester classes designed for students who wish to add to their science experience. Electives may not replace core graduation requirements. Preference is given to seniors. Students may take elective classes in addition to their required science class(es).

#### **Anatomy & Physiology**

0.5 credit

Grades 11 & 12

Prerequisite: Two science credits

This course will introduce anatomical position and directional terms, maintenance of homeostasis, medical terminology, the integumentary system, the skeletal system, eyes and vision, and the respiratory and digestive systems. Systems will be explored from the microscopic to organ-systems level. Topics include comparative anatomy and physiology, pathology, and biomechanics. The culminating activity is dissection of fetal pigs and laboratory practical. The course is applicable for students interested in health-related careers.

#### **Honors Anatomy & Physiology**

0.5 credit

Grades 11 & 12

Prerequisite: Placement by instructor, completion of Biology This challenging course investigates many of the body systems not studied in the CP-level anatomy & physiology course, including the cardiovascular, digestive, endocrine, and urinary systems. Laboratory activities include microscopic examination of tissues, and dissection of the kidney and heart. Reading, study skills, and critical thinking are key to success in this honors-level course.

#### **Environmental Studies**

0.5 credit

Grades 11 & 12

Prerequisite: Two science credits

Students will study ecological principles and various environmental issues. They will become familiar with species interactions, population dynamics, and environmental issues threatening ecosystems today. The goal of this class is to increase students' awareness and level of appreciation for the world around them.

#### **Everyday Engineering**

0.5 credit

Grades 10, 11, & 12

Our modern lifestyle is built on many mechanical devices that we rely on for everyday living. Students will learn basic mechanical concepts and simple machines, and then apply what they learn to make more complex machines that model real-world engineering projects. Students will engage in engineering labs, prescribed projects, and independent creative projects. Upon completing the course, students will have an understanding of basic mechanical concepts and how to apply those concepts to solve complex mechanical problems. Students will use hand-held power tools, hand tools, and hot glue guns.

#### **Engineering Principles**

1 credit

Grades 10, 11, & 12

Prerequisite: Everyday Engineering or placement by instructor Students will design and build complex machines that integrate a variety of engineering concepts. The course will revolve around a hands-on approach to systems thinking. The course will also introduce VEX Robotics to students and offer the opportunity to compete in robotics competitions.

#### Maine Fish & Wildlife

0.5 credit

Grades 10, 11, & 12

Prerequisite: Biology or Honors Biology (may be taken concurrently) This course focuses on the fish, mammals, amphibians, and reptiles found in Maine, along with the management systems in place to ensure the future of these species. Students enrolled in the fall semester will take part in the T.A. squirrel project, an annual mark and recapture study of gray squirrels on our campus.

#### **Marine Biology**

0.5 credit

Grades 11 & 12

Prerequisite: Two credits of science

This course covers basic physical, chemical, and geological oceanography; marine flora and fauna; taxonomy, evolution, ecology, and human impacts. Students will build skills in data collection, synthesis, quantitative reasoning, and problem solving through lab and field work.

#### **Honors Marine Biology**

0.5 credit

Grades 11 & 12

Prerequisite: Two credits of science

Eligible students will receive four credits in science at Southern Maine Community College (SMCC). The course covers basic physical, chemical, and geological oceanography; marine flora and fauna; taxonomy, evolution, ecology, and human impacts. Students will build skills in data collection, synthesis, quantitative reasoning, and problem solving through lab and field work.

#### **Trees & the Maine Forest**

0.5 credit

Grades 10, 11, & 12

This course focuses on the native tree species found in Maine, along with their ecological and commercial importance to our state. Students will develop skills in tree identification and measurement. During the spring semester, students take part in the tapping of maple trees on campus and the production of maple syrup.



# TECHNOLOGY & NEW MEDIA

The Technology and New Media Department offers students immersive experiences with industry standard tools for coding, robotics, web design, and digital media creation and editing.



# Courses in the order that they appear in this section:

(Selected courses designated with an \* meet the fine arts graduation requirement)

Introduction to Computer Programming AP Computer Science A
AP Computer Science Principles
Robotics I
Robotics II
3D Art & Animation \*
Digital Design \*
Digital Imaging I \*
Digital Imaging II \*
Moviemaking I
Moviemaking II
Web Design \*
Sports Journalism (next offered '21-'22)
Yearbook Publication



## PROGRAMMING/ROBOTICS

#### **Introduction to Computer Programming**

0.5 credit

Grades 9, 10, 11 & 12

Prerequisite: Algebra 1 (or concurrently enrolled in Algebra 1) Students will use an integrated development environment to begin learning about software development using the JAVA programming language. They will acquire the skills required to create basic data structures.

#### **AP Computer Science A**

1 credit

Grades 11 & 12

Prerequisite: Introduction to Computer Programming or placement by instructor

This challenging class will stress logically structured, well-documented computer programs, while working with the JAVA programming language. Students who sign up for this class should enjoy problem solving both independently and on a team, and be willing to spend 1-2 hours per week working in the computer lab at school or on their home computer. All students are required to take the AP Exam.

## **AP Computer Science Principles**

1 credit

Grades 11 & 12

Prerequisite: Honors Algebra I or placement by instructor In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data, and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based

on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems. They will discuss and write about the impacts these solutions could have on their community, society, and the world.

#### Robotics I

0.5 credit

Grades 10, 11, & 12 (or 9 by permission of instructor) In this course, students will research and explore the fundamental engineering principles of robot design. They will then work collaboratively in small groups of 2-3 to construct their own robot using the VEX v5 platform. Students will also explore the programming component of robotics using vex software, as well as an introduction to RobotC.

#### Robotics II

0.5 credit

Grades 10, 11, & 12 (or 9 by permission of instructor) *Prerequisite: Robotics I or equivalent* 

In this course, students will build on their experiences from Robotics I. In small groups, students will research more complex robot designs to complete more advanced tasks. Students will dig deeper into the RobotC programming language in an attempt to write code to operate a more sophisticated machine.

## **NEW MEDIA AND DESIGN**

#### **3D Art & Animation**

0.5 credit

Grades 9, 10, 11, & 12

This one-semester course is an introduction to the world of computer graphics and animation. It will cover the basic foundation of skills and knowledge needed to design computer games and short, animated movies.

#### **Digital Design**

1 credit

Grades 9, 10, 11 & 12 (Students may take this course more than once)

Students will be introduced to the basic principles of graphic design and layout while learning how to create using color, shape, line, photography, and typography. They will have the opportunity to use industry-standard software and technology, and will produce professional quality layouts and designs for TA and the broader community, allowing them to build a portfolio for college or the world of work if so desired.

#### **Digital Imaging I**

0.5 credit

Grades 9, 10, 11 & 12

This course will address artistic composition and editing techniques of digital photography. Topics will include the proper framing of objects and scenes, determining aperture adjustment, focus, lighting, and other key skills. Students will learn industry-standard language, equipment, software, and techniques.

#### **Digital Imaging II**

0.5 credit

Grades 9, 10, 11, & 12 (with priority given to uppergrade level students)

Prerequisite: Digital Imaging I

This course builds upon techniques covered in Digital Imaging I, while allowing students access to a greater variety of cameras and lenses. Students will also consider historical components of photography, exploring its influence on their own composition. In addition, emphasis will be placed on advanced, detailed post-production software techniques and skills.



#### Movie Making I

0.5 credit

Grades 9,10,11, & 12

Screenwriting, acting, cinematography, sound design, editing, and the ability to collaborate with a team drive the success of any movie project. Students will become independent filmmakers for a semester, telling their stories on the screen. They will write, act, and create original movies in this workshop-style course.

#### Movie Making II

0.5 credit

Grade 10,11, & 12

Prerequisite: Movie Making I

This course will provide students the opportunity to develop amateur productions into professional work. Lessons will focus on dramatic lighting, sound engineering, and color correction; they will also touch on motion graphic special effects as well. Group work and on-the-fly problem solving will prepare students for a future in filmmaking or other artistic work. Students interested in acting, directing, editing, or a combination of all will find a creative outlet in this course, while creating high quality productions. A personal camera is encouraged, but not required.

#### Web Design

0.5 credit

Grades 9, 10, 11, & 12

This course is designed to introduce students to web design and scripting. Students will learn the basics of HTML5 (hypertext markup language) and CSS (cascading style sheets). Participants will create their own non-published website by the end of the semester.

# TO STORY AND THE CONTROL OF THE CONT

#### **Sports Journalism** (offered '21-'22)

0.5 credit

Grades 10, 11, & 12

In this course, students will learn the fundamentals of sports writing, blogging, photography, and broadcasting. As journalists, students will report on Thornton Academy's rich tradition of sports success, cover games, and tell the stories behind the games. Students will learn about writing, photography, and broadcasting sports by getting hands-on lessons in each field. During the semester, the class will be visited by several professionals in the sports journalism world to learn firsthand about this dynamic industry.

#### **Yearbook Publication**

1 credit

Grades 11 & 12

Prerequisite: Previous course in computer publication or imaging, and a letter of application showing attention to detail, responsibility, and potential for leadership Students will use a variety of publication skills, including page design, computer layout, thoughtful collaboration with peers, written and photojournalism, editing, and handling the business aspects of publishing a yearbook.



# WELLNESS

The goal of the Wellness Department is to support the health of all students by providing the knowledge and skills necessary to make good decisions about lifelong health and fitness. Students must complete two one-half credit core classes and an activity half-credit.



# Courses in the order that they appear in this section:

(\*\* required for graduation, \* fulfills one-half credit activity requirement)

Principles of Personal Fitness \*\* Current Issues in Wellness \*\*

Activity Class: Recreational Fitness \* Activity Class: Fitness for Life \*

Activity Class: Introduction to Strength Training \* Activity Class: Advanced Weight & Power Training \*

Sport Psychology

Nutrition & Healthy Cooking

Applied Exercise Science & Sport Studies

## **REQUIRED COURSES**

#### **Principles of Personal Fitness**

0.5 credit

Grade 9

This required course will introduce students to personal fitness in a classroom setting. Topics include physical activity and personal fitness, nutrition, personal fitness program design, and healthy body systems (e.g. digestive, musculoskeletal, cardiovascular, and nervous).

#### **Current Issues in Wellness**

0.5 credit

Grades 10 & 11

Prerequisite: Principles of Personal Fitness

This required course emphasizes decision making related to topics of stress, sexuality, drugs, alcohol, and tobacco. Students will expand their understanding and appreciation of information learned in Principles of Personal Fitness, as well as explore current trends and issues in wellness in our society.

## **ACTIVITY CREDIT**

Activity credits may be completed through any of the following three options. Students should consider each option carefully and select the one that best matches their personal interests and activities.

**Option 1:** Complete two interscholastic athletic seasons in good standing. The required activity credit will be awarded following verification of two completed seasons of interscholastic athletic participation. *Note: Students should note that this option must be completed by the end of junior year.* 

Option 2: Successfully complete Dance I.

**Option 3:** Successfully complete one of the four activity classes listed in this section.

#### **Activity Class: Recreational Fitness**

0.5 credit

Grades 9, 10, 11, & 12

Students will participate in a variety of recreational activities. Activities may include soccer, flag football, baseball/softball, kickball, table tennis, pickleball, volleyball, badminton, and other recreational games.

#### **Activity Class: Fitness for Life**

0.5 credit

Grades 9, 10, 11, & 12

In this fitness class, students will be exposed to a variety of fitness programs in three areas: cardiovascular fitness, strength training, and flexibility. Students will also participate in some cooperative-type games that are geared toward problem solving and teamwork. The goal at the end of each unit is for students to use these three areas to develop their own fitness program to continue and enjoy throughout their lifetime.

#### **Activity Class: Introduction to Strength Training**

0.5 credit

Grades 9, 10, 11, & 12

In this activity class, designed for the beginner to weight training, students will learn a variety of different ways to improve strength through bodyweight exercises, bands, free weights, and basic lifts. The goal is to teach students the basic principles of strength training for lifelong learning. Students will develop a personalized strength training program for lifetime use.

#### **Activity Class: Advanced Weight & Power Training**

0.5 credit

Grades 9, 10, 11 & 12

This activity class is for the student who is familiar with basic strength training principles and would like to continue working on their strength training programs. Students will continue to refine their strength training programs with the help of the instructor. Students will create goals at the beginning of the semester and will be evaluated on how they reach their goals throughout the course of the semester.

## **WELLNESS ELECTIVES**

# **Sport Psychology** 0.5 credit

Grades 10, 11, & 12

Prerequisite: Principles of Personal Fitness

This course will address concepts related to sport and exercise psychology. Representative topics include confidence, focus, controlling distractions, the power of routines, motivation, goal setting, intensity, imagery, leadership, sportsmanship, anxiety, and arousal. Students will be able to connect these topics based on their own personal experiences as well as identify these topics in the sporting world.

#### **Nutrition & Healthy Cooking**

0.5 credit

Grades 11 & 12

Prerequisite: Principles of Personal Fitness

Students will learn to make healthy food selections using basic knowledge of the principles of nutrition. Students will participate in food preparation and learn to plan and serve meals using the latest dietary guidelines and recommendations.

#### **Applied Exercise Science & Sport Studies** 0.5 credit

Grades 10, 11, & 12

Prerequisite: Principles of Personal Fitness

This course is designed for students who are interested in a career in exercise science and sport studies. Students will explore many topics related to exercise science and sport. This course will provide a better overall knowledge of the field to find the area of exercise science that interests them the most for further studies.



# SCHOOL TO WORK

The goal of the Wellness Department is to support the health of all students by providing the knowledge and skills necessary to make good decisions about lifelong health and fitness. Students must complete two one-half credit core classes and an activity half-credit.



# Courses in the order that they appear in this section:

(there is no graduation requirement for school-to-work courses)

Career Exploration Jobs for Maine Graduates BRCOT Program Options

#### **Career Exploration**

0.5 credit

Grade 9, 10, 11, and 12

This course will help students identify strengths and areas of interest, and match those to appropriate careers. A range of careers will be explored through readings, guest speakers, visual media, and online research. Students will prepare a résumé, access on-line career and interest inventories, and develop a budget that addresses income and how it impacts lifestyle.

#### **Jobs for Maine Graduates (JMG)**

1 credit

Prerequisite: Recommendation from a faculty member or current JMG student, application completion, interview, and final approval of the JMG specialist

Students are encouraged and advised in areas of achieving better grades, improving personal outlook and self-esteem, experiencing strong 'connectedness' to school, and gaining valuable understanding of multiple pathways to future success. They will explore a range of career options, while developing the 'employability' skills demanded by the 21st century labor market. Students will learn how to attain a job, be successful, and manage personal finances. In addition, students will develop an understanding of non-profit organizations, philanthropy, and the grant process. JMG students become part of a larger statewide/national organization and will benefit from a personal graduation coach.



# Biddeford Regional Center of Technology (BRCOT)

The Center of Technology provides career and technical education that supports and guides students on their career paths, whether they are entering the workforce or continuing their education following graduation. Students learn occupational skills under industry recognized standards; in some programs they may even gain industry certifications that lead to employment opportunities. They may also earn college credits—many of the BRCOT programs have agreements with Maine colleges whereby students earn free college credits by successfully completing these programs. An up-to-date list of courses with detailed course descriptions may be found on the BRCOT website, in the BRCOT brochure, or by meeting with your school counselor.

The application process starts in mid-to-late February, and credit varies by program. Grading is subject to Center of Technology policies and procedures. School counselors may be consulted for more information regarding specific programs and the application procedure. A program of studies is available online at http://biddeford.mainecte.org.

The following programs are offered:

- Auto Body
- Auto Technology
- Business Academy: Business and Financial Management
- Business Academy: Business Information Tech
- Business Academy: Legal Studies
- Business Academy: Medical Assisting
- Career Pathways
- Early Childhood Education
- Electrical Technology
- Engineering and Architectural Design
- Health Assistant CNA
- Introduction to Medical Sciences
- Manufacturing Technology
- Emergency Medical Services
- Plumbing and Heating Technology
- Project Lead the Way Engineering
- Residential Construction and Remodeling
- Technical Reading and Writing
- Welding and Metal Fabrication





## **COLLEGE PARTNERSHIPS**

#### EARLY COLLEGE ENROLLMENT

The Aspirations Program enables juniors and seniors to enroll in college-level courses to earn college and high school credit simultaneously. Courses through the University of Maine system are offered at no cost. More information is available from school counselors.

#### **ARTICULATION AGREEMENTS**

#### UNIVERSITY OF MAINE

Thornton Academy is honored that our course offerings have met the high standard of the College of Engineering at the University of Maine. This agreement, established in 2012, is designed for motivated engineering-bound students who strive to challenge themselves in high school, while working to earn advanced placement in college.

Students who successfully complete this rigorous STEM sequence may gain admission to the University of Maine Orono's renowned engineering program with sophomore standing.

Students must earn a score of 3 or higher on each of seven required AP Exams, and complete our Honors Intro to Engineering course or successfully complete comparable early college courses.

School counselors have additional information for interested students.

#### UNIVERSITY OF NEW ENGLAND

The articulation agreement between Thornton Academy and the University of New England was established in 2014. The humanities-focused plan requires a student to take eight AP classes, of which five are specified: AP Biology, AP Calculus, AP English, AP Environmental Science, and AP Studio Art. Students who successfully complete this demanding list of courses with the required AP Exam scores may gain admission to the College of Arts and Sciences at UNE with sophomore standing.

Students interested in pursuing either articulation agreement or the early college enrollment opportunity should consult with their school counselor as early as possible in their high school career. School counselors have detailed information about programs of interest and can help students make proper course selections to ensure that prerequisites are met.



Be who you are, become who you want to be!

