2026-2027 | Course Bulletin

ST JOHNSBURY ACADEMY

THE SJA EXPERIENCE

Our Mission

The mission and proud tradition of St. Johnsbury Academy is to challenge our rising generation to become deep thinkers, bold creators, and responsible, compassionate members of society—always learning, and believing in their readiness and capacity to face the world and make it better.

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Course Selection Guide

St. Johnsbury Academy is a comprehensive, co-educational secondary school serving students in grades 9 through 12 and a post-graduate year. In describing itself as comprehensive, the Academy intends that its curriculum will meet the needs of all of our students. We offer a wide range of subjects and sequences at different levels of difficulty. A careful reading of this curriculum guide will help ensure that parents and students make the best choices from the extensive options available.

Grade Progression

St. Johnsbury Academy is a four-year institution. Students normally progress from the ninth through the twelfth grades and graduate by accumulating credits through successfully passing courses of study. As long as a student has acquired sufficient credits so that they can make up missed credits and graduate with their current class, even if they have fallen behind in their required courses, they will advance from grade to grade with their class.

Graduation Requirements

In order to be granted a diploma by St. Johnsbury Academy, a student must complete four years of study at the secondary level and accumulate 26 credits. (See the chart "Graduation Requirements")

The decisions that students and parents make in their choice of courses and in the sequence of courses are extremely important. The choices made for the freshman and sophomore years will strongly affect the options available for the junior and senior years. To help visualize several options, we have included model paths that typical students might follow at the Academy. They can be found starting on page 31.

Please refer to the individual departmental sections for further explanation of graduation requirements.

St. Johnsbury Academy will not accelerate graduation. Students must achieve four calendar years of study at the secondary level in order to qualify for graduation from the Academy.

GRADUATION REQUIREMENTS

COURSE	CREDITS
Senior Capstone	1 credit
English	4 credits
Science	3 credits
Mathematics	3 credits
Social Studies	3 credits
Physical Education	2 credits
Health	1 credit
Electives	9 credits
Total Needed	**26 credits**

Levels of Instruction

As a comprehensive school, we admit students with a wide range of skills, interests and backgrounds. We believe that students learn best when the material that they experience is presented in a form and at a degree of difficulty matched to their previous achievement. In nearly all of our academic departments, students are homogeneously grouped; that is, they are placed in instructional sections with students of similar previous achievement and academic preparation.

All of our academic departments offer courses at five levels of instruction: individualized services, basic, standard, accelerated, and Advanced Placement™ (AP).

- Students who are placed in individualized services level are those students who require intensive daily support and remediation based on education, behavioral, and/or emotional needs.
- Students who are placed at the basic level have demonstrated a need for instruction in the foundational skills required to learn the material of the course. They benefit from a more gradual introduction to the subject material that allows them to master the content of the course with the supports that will help them achieve success.
- Students who are placed at the standard level of a course have demonstrated levels of achievement and background typical of most high school students. They possess the skills and the requisite information that enable them to be successful in this college preparatory curriculum.
- Students who are placed in the accelerated level of a course have demonstrated high levels of achievement and demonstrate deep background knowledge in the subject. They possess skills and information that enable them to master material at an accelerated pace.

Students new to the Academy are placed in various levels of instruction after review of transcripts from previous schools, recommendations of teachers and guidance personnel, parental and student wishes, and consultations with the appropriate department chair. When clarity is needed, students may be asked to take math and language placement tests. Students are not placed automatically at a given level of instruction in any department simply because they are in that level of instruction in another department. It is quite common for students at the Academy to be placed at different levels of instruction in different departments. Furthermore, if students experience success at a specific level, we encourage students to move to a higher level. In particular, it is the aim of the basic courses at the Academy to equip students to move to the standard levels of instruction as soon as possible. In each department, personnel meet regularly to make sure that students are appropriately placed.

Many of our non-academic and some of our academic courses are heterogeneously grouped; that is, a student will be placed in them without reference to already acquired skills and knowledge. Some of these courses are Senior Capstone, Physical Education, Health, and some technical and fine arts courses.

After courses have been assigned, level changes are made only by the relevant Department Chair or the Assistant Headmaster for Academics and Student Life.

Advanced Placement Program

The Advanced Placement program of the College Board is offered to students who have demonstrated a superior understanding of the subject matter and have signified their desire to challenge themselves in a college level course while still in high school (9th graders may only participate with approval from the Academic Office). Successful completion of an AP exam is recognized by many major colleges and universities for advanced placement or credit, at the institution's discretion. The Academy offers 30 Advanced Placement courses including: English Language and Composition, English Literature and Composition, United States History, European History, World History, United States Government and Politics, Microeconomics, African American Studies, Psychology, Pre-Calculus, Calculus AB, Calculus BC, Statistics, Computer Science A, Computer Science Principles, Biology, Chemistry, Physics I, Physics C: Mechanics, Physics C: Electricity and Magnetism, Environmental Science, Studio Art: Drawing and Painting, Studio Art: 2D, Studio Art: 3D, Music Theory, French Language and Culture, Spanish Language and Culture, Latin, and the AP Capstone Program (AP Seminar and AP Research). Students who take Advanced Placement courses are required to take the nationally administered Advanced Placement exam at the end of each course. Payment for the Advanced Placement exam is due prior to the exam.

Advanced Placement Capstone Diploma™ and Certificate™ Program

The AP Capstone Program is a two-course sequence consisting of AP Seminar and AP Research that allows students to explore real-world issues while developing the analytic, research, problem solving, and communication skills that colleges look for in an applicant.

Students typically take AP Seminar in the 10th or 11th grade, followed by AP Research in 12th grade. Students who earn scores of 3 or higher in the AP Seminar and AP Research courses and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. This signifies their outstanding academic achievement and attainment of college-level academic and research skills.

Alternatively, students who earn scores of 3 or higher on the AP Seminar and Research Exams only will receive the AP Seminar and Research Certificate.

SNHU in the High School Dual Enrollment Program

Southern New Hampshire University in the High School's dual enrollment program with St. Johnsbury Academy allows qualified high school students (sophomores, juniors or seniors) the opportunity to earn college credits while in high school. At St. Johnsbury Academy, designated courses have been aligned to meet the same content, rigor, and learning outcomes as that of the University. The high school teachers instructing these courses meet the University's adjunct faculty requirements and have been approved by the University. Students will have the opportunity to take advantage of the dual credit opportunities at the beginning of the courses by completing an application and submitting the course registration fee for each class. Once the registration period closes, students will not be allowed to register for college credit. Since these courses are college courses, credit will be awarded by St. Johnsbury Academy and Southern New Hampshire University. SNHU credit portability and transferability rests solely with individual colleges and universities as they have varying policies on accepting transfer credits; thus, it is the student's responsibility to obtain a transcript from SNHU and to consult with higher educational institutions to determine whether the SNHU course(s) can be transferred. Additional information regarding the program can be directed to the Director of Guidance. In order for a dual enrollment course to run, a minimum of six students must enrolled.

Current St. Johnsbury Academy courses eligible for dual credit include:

St. Johnsbury Academy Course	SNHU Course
Rhetoric and Composition ACC	College Composition I
Literature and Composition ACC	Introduction to Literature
Creative Writing ACC	Introduction to Creative Writing
Advanced Creative Writing	Introduction to Creative Writing
United States History ACC	U.S. History II: 1865-Present
World Civilization Post 1500 ACC	World Civilizations: 1500-Present
AP European History	Western Civilization Since 1500
AP Microeconomics	Microeconomics 201
AP Biology	General Biology I
AP Biology Prep	General Biology II
AP Physics C: E & M	Physics I with Lab
Chemistry ACC	Fundamentals of Chemistry with Lab
French I ACC	Beginning French I
French II ACC	*Beginning French II
French III ACC	*Intermediate French I
French IV ACC	*Intermediate French II
Spanish I ACC	Beginning Spanish I
Spanish II ACC	*Beginning Spanish II
Spanish III ACC	*Intermediate Spanish I
Spanish IV ACC	*Intermediate Spanish II

*SNHU dual enrollment in French and Spanish language courses, requires beginning with Beginning French I/Beginning Spanish I.

**Please note, not all teachers are certified to teach SNHU courses. Please check with the appropriate Department Chair for clarification.

The Academic Support and Enrichment Services Center

The Academic Support and Enrichment Center (also known as the Learning Center) is professionally staffed with faculty representing core disciplines. The Center offers a resource for students to seek support or enrichment in their studies as they pursue their academic interests and realize their potential. Students can access the Center during their unscheduled blocks or study halls.

Grade Reporting

Grades are reported to students and parents four times per semester: interim, mid-semester, second interim, and at the end of each academic term. Report cards consist of a list of courses taken, the teacher of each course, and the grades for the period being reported. After the name of each course there is a parenthetical abbreviation which signifies the level of instruction at which the course is offered.

There are five abbreviations: IS (Individualized Services), BA (Basic), ST (Standard), ACC (Accelerated), and AP (Advanced Placement). Students will earn credit in all courses that they have successfully completed after each semester of work.

The Academy acknowledges superior student achievement with two published lists, the high honor roll and the honor roll. Honor rolls are determined by mid-semester and semester grades. (Refer to Student Handbook).

Courses of Study

HUMANITIES

All freshmen are required to take this course which satisfies 1 English and 1 Social Studies credit.

Humanities (Basic)
2 CREDITS/FULL YEAR (1911/1912)

Humanities (Standard)
2 CREDITS/FULL YEAR (1913/1914)

Humanities (Accelerated)
2 CREDITS/FULL YEAR (1915/1916)

This cross-disciplinary, writing-intensive course will introduce students to the skills necessary for their future success at the Academy. Students will apply the skills they learn in the areas of composition, critical thinking, and problem solving to the study of the human condition. Students will examine a variety of texts, both historical and contemporary, as a means of building connections to the course's guiding themes.

SENIOR CAPSTONE

1 credit required for graduation.

All seniors are required to complete a Senior Capstone investigation. The Academy sees the Capstone course as a culmination of all previous learning; it serves as an opportunity for students to demonstrate their mastery of our standards as they head to college, careers, and carry their overall Academy experience into their personal and professional lives. On Senior Capstone Day, in early December and early May, seniors present their Capstone projects to their peers, faculty members, trustees, and members of the community.

Senior Capstone (Accelerated)
1 CREDIT (7701)

This required, one-semester, heterogeneously grouped, interdisciplinary course will serve as an opportunity for seniors to demonstrate their ability to meet Academy standards as a culmination of all of their previous course work and a springboard into their post-secondary careers. The domain of the course will include three main components:

1. Problem-solving: Discipline-specific research methods, field research, and critical inquiry

2. Communication: Discipline-specific writing formats, editing, revision, and public speaking

3. Citizenship: Defining the characteristics of a professional and acting and producing to that definition.

While the vast majority of seniors satisfy their capstone requirement in the 7701 course, other courses that satisfy the Capstone graduation requirement are:

1061 – AP Research (English Department)

7705 – Visual Arts Capstone (Fine Arts Department)

7703 – ESL Capstone (ESL Department)

4853 – Engineering Design and Development Capstone (Science Department)

7707 – CTE Capstone (Career and Technical Education Department)

For more information on these offerings, see the entry for these courses in the appropriate department sections of the course bulletin.

ENGLISH

4 credits are required for graduation. For those students who have taken Humanities, 3 additional core credits are required for graduation. All students are required to complete one core English course each academic year.

The English Department recognizes a double responsibility to its students. On the one hand, students need to master specific skills essential to the proper use of language. On the other hand, students growing quickly into adulthood need to know how to write, how to read, how to create, and how to be critical thinkers in a world that demands increasingly complex choices. These are talents whose developments are interconnected, often simultaneous, and never completed in a lifetime. The English curriculum is designed to help students continue to improve their language skills and further expand their developing talents.

Core Courses

Literary Perspectives (Basic)
1 CREDIT (1031)

Prerequisite: Humanities or equivalent
Open to Sophomores

Literary Perspectives (Standard)
1 CREDIT (1033)

Prerequisite: Humanities or equivalent
Open to Sophomores

Literary Perspectives (Accelerated)
1 CREDIT (1035)

Prerequisite: Humanities or equivalent
Open to Sophomores; with departmental approval

This Sophomore course emphasizes the importance of inquiry while supporting skills in reading, analysis, and research. Students will identify main ideas and arguments in texts; identify ways in which writers develop these ideas through characterization, plot, structure, and other literary devices and strategies; reflect on the effectiveness of literary arguments; and consider how context and occasion influence authorial decisions and literary works.

Students will also be required to develop their own perspectives and communicate via written, oral, and visual mediums, both independently and collaboratively, and synthesize a variety of genres and texts.

Upon completion of this course, students will be able to analyze and evaluate a variety of texts and have the ability to communicate ideas, using a variety of methods, supported by evidence.

AP Seminar
1 ½ CREDITS (1060/1064)

Open to Sophomores and Juniors; with departmental approval

In the first year of the two-year AP Capstone Program sequence, students will develop and strengthen their analytic and inquiry skills, exploring in detail three to five relevant issues selected by the instructor. They will learn to consider an issue from multiple perspectives, evaluate the strength of an argument, and make logical, fact-based decisions.

During the course, students will complete a team project and presentation, an individual reflection, and an individual paper and presentation. Students are required to take the AP Seminar written exam.

Technical Communications I (Standard)

1 CREDIT (1063)

Prerequisite: Literary Perspectives or equivalent
Open to Juniors

This standard-level course is open to juniors who are enrolled in a career and technical education course and who anticipate continuing their education at a technical college or institute. Students will be introduced to the principles of effective communication in the workplace. Special attention will be given to workplace ethics. Students will research topics of personal and vocational interest, explore career plans and opportunities, and present information and opinions to various audiences. In class projects, students will solve realistic problems using critical thinking and decision-making skills.

Rhetoric and Composition (Standard)

1 CREDIT (1053)

Prerequisite: Literary Perspectives or equivalent
Open to Juniors

Rhetoric and Composition (Accelerated)

1 CREDIT (1055)

College credit may be available through Southern New Hampshire University's dual enrollment course College Composition I.

Prerequisite: Literary Perspectives or equivalent
Open to Juniors

Through this Junior course, students immerse themselves in argumentative and persuasive writing. They will then refine academic writing and research skills through the Research Based Inquiry project. Thematic units provide a platform for critical thinking about American ideals and individual self-understanding.

AP English Language and Composition

1 ½ CREDITS (1058/1059)

Prerequisite: AP Seminar or Literary Perspectives
Open to Juniors; with departmental approval

This two-semester course leads directly to the taking of the Advanced Placement examination in English Language and Composition in the spring. The course prepares students for the AP examination, including critical reading, rhetorical and stylistic analysis, and argumentation. Students will refine their academic writing and research skills through the Research Based Inquiry project. The class process will feature seminar discussions of the assigned readings. Although primarily a study of nonfiction texts, the course will supplement its core readings with poetry and fiction drawn from the major periods of American literature.

Technical Communications II (Standard)

1 CREDIT (1083)

Prerequisite: Technical Communications I or with departmental approval

This course is open to seniors who are enrolled in career and technical education and who anticipate continuing their education at a technical college or institute. Students will research topics of personal and vocational interest, explore career plans and opportunities, and present information and opinions to various audiences. In class projects, students will solve realistic problems using critical thinking and decision-making skills.

Literature and Composition (Accelerated)

1 CREDIT

Prerequisite: Rhetoric and Composition or equivalent

Open to Seniors

"Literature is as old as speech. It grew out of human need for it, and it has not changed except to become more needed." – John Steinbeck

Each of the areas of concentration and levels teaches college-preparatory logic and analysis through reading, writing, speaking, and listening. The course – regardless of its focus —examines significant works of literature that reveal the diversity of the human experience and the depths to which literature explores our flaws for the purpose of improvement.

Students can choose one of the following:

The Human and the Other (1073)
Emphasis will be on works that explore human nature through our encounters with the other – mythical monsters, aliens from distant planets, or our own technological inventions. These works will span genres and engage with key ethical questions relevant to our current world.

Graphic Novels (1077)
Emphasis will be on comics, with a focus on the graphic novel, and how images, text, style, and sequencing combine to tell stories about society, culture, and identity. These novels explore themes of family, loss, memory, and ultimately challenge us to rethink how we interact with and portray history, and what that might mean for our future.

Marginalized Voices (1080)
Emphasis will be on works by voices often overlooked in traditional studies: people of color, women, immigrants. Spanning genres, these texts explore and trouble ideas of freedom, identity, and the politics of desire both on and off the page.

Dual-Enrollment (1075)
College credit may be available through Southern New Hampshire University's dual enrollment course Introduction to Literature.

The thematic focus of this class varies by instructor, but it covers all the elements of the other Lit/Comp classes at a more rigorous, writing-intensive level and makes you eligible for college credit. Students will read multiple full-length novels and write a variety of essays to prepare for college-level work and build on the modes learned in Rhetoric and Composition.

AP English Literature and Composition

1 CREDIT (1079)

Prerequisites: concurrent enrollment in AP Research
Open to Seniors; with departmental approval

This course leads directly to the taking of the Advanced Placement examination in English Literature and Composition in the spring. The course introduces and reinforces skills that will allow students to do well on the AP exam. It engages students in a wealth of literature and a range of genres, reading both widely and deeply; students also write critical analysis, including expository, analytical, and argumentative essays. Students will refine college-level critical thinking skills through the interpretation of prose, poetry, and drama, with a focus on British literature.

AP Research

1 CREDIT (1061)

Prerequisite: Concurrent enrollment AP English Literature and Composition
Open to Seniors; with departmental approval

Students will work on an independent research project on a topic of interest. At the end of the research project, they will submit an academic paper of about 5,000 words and defend their research through a presentation. Additionally, students will present the application of their research at our Spring Capstone Day.

Elective Courses

Creative Writing (Accelerated)

1 CREDIT (1007)

College credit may be available through Southern New Hampshire University's dual enrollment course Introduction to Creative Writing.

Students will create portfolios of their own work in the genres of short fiction, poetry, and playwriting; the portfolio will contain selections from their daily writing journal as well as finished and revised pieces. Students will read widely in these genres from selections of both older and contemporary works chosen by the class, and achieve a sophisticated understanding of the fundamental elements of those genres. The course will include field trips to attend writing festivals and poetry slams as well as trips to local colleges for readings.

Advanced Creative Writing (Accelerated)

1 CREDIT (1008)

Prerequisite: Creative Writing (Accelerated)

Students who wish to pursue intensive study of creative writing may take Advanced Creative Writing. In consultation with the instructor, the students in this course will embark on a demanding course of study in two genres of their choice, one per quarter. These may include poetry, short fiction, script writing, the novella, and children's literature. Students taking Advanced Creative Writing will have class with Creative Writing students. Admission will be reserved for those students who have demonstrated a sincere, significant interest in pursuing creative excellence and whose post-secondary plans include creative writing study.

Public Speaking (Accelerated)

1 CREDIT (1001)

Open to Sophomores, Juniors, and Seniors

This course enables students to speak and write effectively for a wide variety of purposes and audiences. Through the study of form and communication, students learn to use storytelling, personal statements, persuasion and vocal techniques to express their ideas at formal, informal and social events. Students will leave this class able to speak confidently and comfortably in front of almost any audience.

College Writing (Standard)

1 CREDIT (1003)

Open to Seniors

College Writing (Accelerated)

1 CREDIT (1004)

Open to Seniors.

This course is designed to enhance the language and writing of skilled college-bound students. It will examine strategies for writing effective college admissions essays and will study the SAT with a particular emphasis on vocabulary, timed-writing, and reading comprehension.

SOCIAL STUDIES

3 credits are required for graduation. For those students who have taken Humanities, 2 additional core credits are required for graduation. All Students are required to complete Humanities or the equivalent; World Civilization, Post-1500, AP European History, or AP World History; and United States History.

One of the stated objectives of education is to produce good citizens. In a democracy, this means informed, involved citizens—persons who are willing and able to understand and act upon the critical issues of their times. The Social Studies are replete with controversy: questions of power, decision-making, leadership, duties of citizens, goals for the nation, freedoms for individuals, equity of opportunity, distribution of wealth, war and peace; these are issues that must be studied in their historical context, re-examined, and acted upon by each new generation of Americans. Divisions of opinion are inevitable but an informed, involved, critical thinker is better able to pursue their task of citizenship.

All Academy students are required to successfully complete Humanities, World Civilization, Post-1500, and United States History. These courses must be taken sequentially and elective courses may also be inserted into a student's curriculum. AP European History or AP World History may be substituted for World Civilization, Post-1500 and AP United States History or AP African American Studies may be substituted for United States History.

Acceptance into AP courses requires the recommendation of the department.

Core Courses

World Civilization, Post-1500 (Basic)

1 CREDIT (2911)

Prerequisite: Humanities

World Civilization, Post-1500 (Standard)

1 CREDIT (2913)

Prerequisite: Humanities

World Civilization, Post-1500 (Accelerated)

1 CREDIT (2915)

College credit may be available through Southern New Hampshire University's dual enrollment course World Civilizations: 1500-Present.

Prerequisite: Humanities

This course will explore the major themes of historical change in the world from 1500 to 1800. Citizenship, government, and revolution are key strands of the course. It will also enable students to work on those Social Studies department standards that have not yet been mastered.

AP World History

1 ½ CREDIT (2916/2917)

Prerequisite: Humanities or with departmental approval

This college-level course prepares students for the Advanced Placement examination. This course focuses on developing students' understanding of world history from approximately 1200 CE to the present. Students will investigate the content of world history for significant events, individuals, developments, and processes in six historical periods while they develop essential historical thinking skills. The course focuses on five interconnected themes, encouraging students to make connections between different eras in regions, including Africa, the Americas, Asia, Europe, and Oceania. This course fulfills the World Civilization, Post-1500 requirement. This class will be held every other day in the first semester and will meet every day in the second semester.

AP European History

1 ½ CREDITS (2918/2919)

College credit may be available through Southern New Hampshire University's dual enrollment course Western Civilization Since 1500.

Prerequisite: Humanities or with departmental approval

This college-level course prepares students for the Advanced Placement examination

in European History. The course includes a profound study of European history beginning with the late Middle Ages and continuing through the Cold War, including a demanding reading schedule and the practice of AP testing elements. AP European History meets for the entire year. The class will be held every other day in the first semester and will meet every day in the second semester. It fulfills the World Civilization, Post-1500 requirement.

United States History (Basic)

1 CREDIT (2151)

Prerequisites: Humanities and World Civilization, Post-1500
Open to Juniors

United States History (Standard)

1 CREDIT (2153)

Prerequisites: Humanities and World Civilization, Post-1500
Open to Juniors

United States History (Accelerated)

1 CREDIT (2155)

College credit may be available through Southern New Hampshire University's dual enrollment course
U.S. History II: 1865-Present.

Prerequisites: Humanities and World Civilization, Post-1500
Open to Juniors

This survey course will expose students to the history of the United States in a chronological approach from the founding of the United States to the present. The course will focus on active citizenship and will highlight the study of United States history through political and economic lenses.

AP United States History

1 ½ CREDITS (2158/2159)

Prerequisites: Humanities and World Civilization, Post-1500, AP World History, or AP European History; with departmental approval
Open to Juniors

This Junior college-level course is taught to prepare students to take the Advanced Placement United States History exam and requires a level of critical thinking and writing commensurate with college work. This course meets for the entire year. The class will be held every other day in the first semester and will meet every day in the second semester.

AP African American Studies

1 ½ CREDIT (2160/2161)

Prerequisites: Successful completion of Humanities and World Civilizations Since 1500 (or the equivalent). This class is open to juniors and seniors.

AP African American Studies is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with varied sources. Students explore topics from early African kingdoms to the ongoing challenges and achievements of the contemporary moment. Students in the course will develop skills across multiple fields, with an emphasis on developing historical, literary, visual, and data analysis skills. This course foregrounds a study of the diversity of Black communities in the United States within the broader context of Africa and the African diaspora. It fulfills the United States History requirement.

Elective Courses

Comparative Religions (Accelerated)

1 CREDIT (2960)

Prerequisites: Successful completion of Humanities and World Civilizations since 1500 or Department Chair recommendation

Religion is one of the primary ways humans engage with questions of life and death, of love and hate, of good and evil—questions at the core of the human condition. The aims of this course are to develop critical analytical and comparative skills through an introduction to the teachings, practices, and cultural impact of the religions of the world and to gain appreciation for the place of religion in human experience. Further, the study of personal beliefs and values is key to the development of empathy and respect.

The course will explore seven major religious traditions as well as several that have remained peripheral throughout history. This course is designed to give students a broad view of the world's religious landscape and to encourage them to probe more deeply into an area they find particularly interesting or meaningful. And because the study of religion touches all facets of human experience, it is able to shed light on fields of study such as history, philosophy, politics, sociology, and anthropology.

Sociology and Criminology (Standard)

1 CREDIT (2949)

Prerequisite: Humanities

Sociology and Criminology (Accelerated)

1 CREDIT (2950)

Prerequisite: Humanities

This semester-long course is designed as a compliment to both our Psychology and Career Explorations Curriculum. It provides students with a general overview of Sociology while looking specifically at Criminology with a concentration on deviance and social control. Along with the topics such as, social structure/socialization, sex and gender, race and ethnicity, the family, crime, punishment, theories of deviance, recidivism and rehabilitation, this course will allow for an individual concentration relative to a social group of the student's choice. Each student will be responsible for content knowledge and individual research on this social group throughout the semester.

AP United States Government and Politics

1 ½ CREDITS (2178/2179)

Prerequisites: Humanities and United States History
Open to Seniors or with departmental approval

This college-level course prepares students to take the AP United States Government and Politics examination. It further prepares students for roles as community leaders and responsible, active citizens using the competitive "We the People..." program, in order to strengthen their critical thinking and extemporaneous speaking skills. The "We the People..." program culminates in a State congressional hearing competition in January. Additionally, students investigate core concepts of political science: consuming and producing polls, analyzing charts and graphs, predicting voting behavior, analyzing demographic data, and understanding the essential ideas about political parties, campaigns, and elections.

Furthermore, by the end of the course, students will understand influences on the policy agenda and the process of policy making and enactment. The course will close with a study of economic naturalism. The class will meet every-other day in the first semester, and every day in the second semester.

AP Microeconomics

1 ½ CREDITS (2218/2219)

College credit may be available through Southern New Hampshire University's dual enrollment course Microeconomics 200 level.

Prerequisites: Humanities and United States History
Open to Seniors or with departmental approval

This college-level course prepares students for the Advanced Placement examination in Microeconomics. Students will investigate the core concepts of microeconomics. Students taking AP Microeconomics may also elect to sit for the Advanced Placement exam in Macroeconomics with approval from the Social Studies Department Chair. Additional out of class work will be required to prepare for the Macroeconomic Exam. This class will meet every-other day in the first semester, and every day during the second semester.

Psychology (Standard)

1 CREDIT (2923)

Prerequisites: Humanities; open to Sophomore, Juniors, and Seniors

Psychology (Accelerated)

1 CREDIT (2925)

Prerequisite: Humanities
Open to Sophomores, Juniors, and Seniors

Students will gain a knowledge of the basic theories of human behavior and interaction through readings, discussion, multimedia, and field research.

AP Psychology

1½ CREDIT (2928/2929)

Open to Juniors and Seniors; with departmental approval

This college-level course prepares students for the Advanced Placement examination in Psychology and includes an in-depth study of the biological, cognitive, developmental, social, and clinical aspects of psychology. This class will meet every day in the first semester and every other day in the second semester.

Contemporary Issues (Accelerated)

½ CREDIT (2946)

Prerequisite: Humanities

Using current events, this elective course focuses on national, global, and local issues that affect students' everyday lives, such as economics, government, and conflict. This course uses newspapers, online media, cartoons, and newscasts to support class discussion. Additionally, students participate in group projects, presentations and work with primary source materials and opinion pieces in order to better understand the world around them.

Philosophy (Accelerated)

1 CREDIT (2935)

Prerequisite: Humanities

This course will introduce students to the study and uses of philosophy, as well as the history of ideas. Students take a multi-cultural approach by reading original works of thinkers of all regions and periods, from Plato to Rumi, Axial-Age China to modern day England, and beyond. Students will examine issues such as free will, justice, religion, individual responsibility, and the quest to find meaning and fulfillment in the living of one's own life.

MATHEMATICS

3 credits required for graduation

The sequence of courses will permit students to have the following experiences in math:

- View math as a blend of patterns instead of a set of isolated topics.
- Make connections; construct models and theories that order their understanding of their environment.
- Relate mathematical ideas to everyday experiences and real-world situations.
- Discover how to adjust procedures to solve new problems.
- Spend more time on each topic, enabling invention and practice.
- Create "real" connections and study those connections from concrete to abstraction.
- Develop communication, reasoning, and problem-solving skills.

Three mathematics courses are required for graduation. The mathematics program includes course offerings designed to provide opportunities for all students to learn meaningful mathematics. At several points during their academic career, student placements are reviewed to ensure that they are working at a level consistent with their goals and achievement.

Students who take standard level courses acquire a sound preparation to pursue four-year college programs, two-year technical programs, on-the-job training, or armed forces experience. Themes that are emphasized throughout include problem-solving, applications of the ideas presented, use of the graphing calculator, writing process, and collaboration.

Students who enroll in accelerated math courses will be prepared to pursue competitive four-year college programs. These are highly motivated students with strong mathematical achievement. Themes emphasized through this sequence include problem solving, applications of the ideas presented, theory, and an appreciation of mathematics as a language. Graphing calculators are used to facilitate the teaching of these courses. One goal of the courses in this sequence is to prepare students for AP mathematics courses and beyond. Courses in this sequence differ from the equivalent standard-level course by the pace of the course, the amount of required homework, and the level of abstraction and formal proof.

Permission to take an accelerated-level course is normally predicated by maintaining a grade of at least 80 in the previous accelerated-level course or at least 90 in the previous standard-level course.

All courses use graphing calculators and/ or computers to enhance the learning of mathematics. In addition, all students are expected to write about their mathematical processes.

Biology-Math Fundamentals

2 CREDITS

Students are recommended to enroll in this course if they are leveled for Biology: Living and Chemical Systems (BA) and Pre-Algebra, and are not planning to take a second math course in their 9th grade year.

This year-long course is equivalent to the combination of one semester of Biology and one semester of Pre-Algebra, and is currently offered at the Basic level. Team taught by one science teacher and one math teacher, this course will help students build arithmetic and algebra-readiness skills such as simplifying and evaluating algebraic expressions, evaluating expressions that include fractions, decimals, percents, and exponents, and graphing linear equations. Students will apply these mathematical concepts to real-world measurements and data analysis in the life sciences. Topics include the structure and function of living organisms, cycles of energy and matter, and heredity and change and will incorporate significant laboratory and fieldwork experiences. Students will improve their abilities to ask meaningful questions and pursue solutions, represent mathematical ideas in multiple ways, and communicate their results.

Pre-Algebra (Basic)

1 CREDIT (3208)

THIS COURSE DOES NOT COUNT TOWARDS GRADUATION REQUIREMENTS.

Pre-Algebra (Standard)

1 CREDIT (3209)

THIS COURSE DOES NOT COUNT TOWARDS GRADUATION REQUIREMENTS.

In this course, students will review how to work with fundamental mathematical operations with integers, fractions, and decimals; use the order of operations to evaluate variable expressions; solve variable equations using transformations; translate word sentences into mathematical equations; and solve word problems. The course will guide you through the world of integers, one-step, two-step and multi-step linear equations and inequalities, using properties of exponents, calculating slope, and graphing basic linear functions. This course is designed to prepare students for the study of Algebra.

Algebra I (Basic)

1 CREDIT (3211)

Prerequisite: Recommendation based on prior achievement

This course focuses on the rules of algebra with an emphasis on solving linear equations. In addition, students in this course will evaluate, analyze, and graph equations and relations. Applications of systems of equations will be studied using both algebra and analytic geometry. Data analysis and linear regression will be explored using Desmos. Students will extend the properties of exponents to rational exponents.

Algebra I (Standard)

1 CREDIT (3213)

Prerequisite: Recommendation based on prior achievement; with departmental approval

Algebra I (Accelerated)

1 CREDIT (3215)

Prerequisite: Recommendation based on prior achievement; with departmental approval

This course focuses on the rules of algebra with an emphasis on linear functions and quadratic equations. Students will learn to solve linear and quadratic equations. In addition, students in this course will evaluate, analyze, and graph functions and relations. Applications of systems of equations will be studied using both algebra and analytic geometry. Data analysis and linear regression will be explored using Desmos. Students will extend the properties of exponents to rational exponents and perform arithmetic operations with complex numbers.

Geometry (Basic)

1 CREDIT (3252)

Prerequisite: Algebra I; with departmental approval

This course consists of the principles of Euclidean geometry supplemented by logic. Areas of study will include basic geometric figures and relationships among them, properties of polygons with emphasis on triangles and quadrilaterals, properties of circles and related concepts, congruence and similarity, and applications of measure and area problems.

Geometry (Standard)

1 CREDIT (3253)

Prerequisite: Algebra I

Geometry (Accelerated)

1 CREDIT (3255)

Prerequisite: Algebra I

This course focuses on the principles of Euclidean geometry supplemented by logic. Areas of study will include basic geometric figures and relationships among them, properties of polygons with emphasis on triangles and quadrilaterals, properties of circles and related concepts, congruence and similarity, and applications of measure and area problems. The student will learn the fundamentals of right triangle trigonometry.

Algebra II (Basic)

1 CREDIT (3231)

Prerequisite: Geometry

This course focuses on the rules of algebra with an emphasis on linear and quadratic equations. The students will be introduced to styles of proving, evaluating, and simplifying algebraic expressions. There will be emphasis on solving real world or unfamiliar problems using appropriate analysis techniques and reasonable estimation. The students will learn to generalize results from specific applications through the use of modeling. Students will extend the properties.

Algebra II (Standard)

1 CREDIT (3233)

Prerequisite: Geometry

Algebra II (Accelerated)

1 CREDIT (3235)

Prerequisite: Geometry Accelerated; with departmental approval, new students may start their math sequence with this course if a satisfactory score has been earned on the department placement test.

This course focuses on the rules of algebra with an emphasis on quadratic functions and families of functions. Areas of study will include manipulating functions with transformations, composition of functions, and modeling situations with functions. The students will be introduced to styles of proving, evaluating, and simplifying algebraic expressions. There will be emphasis on solving complex or unfamiliar problems.

Trigonometry (Standard)

1 CREDIT (3273)

Prerequisite: Algebra II or with departmental approval

Trigonometry (Accelerated)

1 CREDIT (3275)

Prerequisites: Algebra II or with departmental approval

This course allows the student to study many different areas within trigonometry. Topics will include angles and rotations, the unit circle and right triangle trigonometry, trigonometric functions, and circular functions and their graphs; trigonometric identities; and proofs of identities. Concepts will be applied in a variety of areas such as civil engineering and science. Students will make extensive use of graphing calculators. Arc length and polar coordinates are also included.

Precalculus (Standard)

1 CREDIT (3283)

Prerequisite: Trigonometry or with departmental approval

Precalculus (Accelerated)

1 CREDIT (3285)

Prerequisite: Trigonometry or with departmental approval

This course develops the analytic skills necessary to describe the behavior of mathematical functions. Topics include algebraic expressions, u-substitution, higher degree polynomials, rational, logarithmic, and exponential functions, function composition, inverses of functions, transformations of functions, and polynomial and synthetic division. A review of trigonometric functions and the unit circle is also included.

In this course students will explore broad applications of mathematical ideas as they pertain to the field of business, the social sciences, computer science, and number theory. The goal of this course is to prepare students to interpret data, to construct algorithms, and to build mathematical models to analyze and solve problems. Topics include probability, data analysis, sequences and series, and logic.

Applied Calculus (Standard)

1 CREDIT (3280)

Prerequisites: Trigonometry and Precalculus; with departmental approval

Applied Calculus (Accelerated)

1 CREDIT (3286)

College credit at the accelerated level, may be available through Southern New Hampshire University's dual enrollment course Calculus I: Single Variable.

Prerequisites: Trigonometry and Precalculus; with departmental approval

This course will serve as an introduction or survey of the fundamentals of differential and integral calculus. Students will be encouraged to study these concepts in practical tangible applications through hands on projects, classic lectures, and direct research. While each student will learn the fundamentals of differentiation and integration, this course is not intended to be an alternative to the AP Calculus course.

Applied Statistics (Standard)

1 CREDIT (3287)

Prerequisite: Algebra II; with departmental approval

Applied Statistics (Accelerated)

1 CREDIT (3282)

College credit at the accelerated level, may be available through Southern New Hampshire University's dual enrollment course Applied Statistics.

Prerequisite: Algebra II; with departmental approval

This course will give students an opportunity to design and conduct surveys and experiments using statistical methods. Results of sampling and data collection will be displayed using statistical representations. Journal articles and published research will be analyzed and interpreted from a statistical perspective. The basic rules of simple probability, the fundamental counting theorem, conditional probability, and probability distributions will also be explored.

Advanced Placement

AP Pre-Calculus

2 CREDITS (3291/3292)

Prerequisite: High performing students in Algebra II Accelerated who are looking to prepare directly for AP Calculus AB or with departmental approval.

AP Precalculus is a course in the mathematics curriculum map designed to prepare students for calculus. It is an introduction to mathematical analysis. Algebraic and trigonometric topics are explored in great depth and breadth, and topics in parametric equations, vectors, conic sections, and the polar field are introduced. This course prepares students for other higher-level mathematics and science courses. Students study each function type through their graphical, numerical, verbal, and analytical representations and their applications in a variety of contexts. Additionally, students apply their understanding of functions by constructing and validating appropriate function models for scenarios, sets of conditions, and data sets, thereby gaining a deeper understanding of the nature and behavior of each function type.

In AP Precalculus, students explore everyday situations using mathematical tools and lenses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. They will learn how to observe, explore, and build mathematical meaning from dynamic systems, an important practice for thriving in an ever-changing world.

AP Calculus AB

1 CREDIT (3298)

Prerequisite: Pre-Calculus (Accelerated) grade ≥ 85; with departmental approval; AP Calculus AB Prep is required for students who will not continue to AP Calculus BC

This course is equivalent to the first semester of college calculus. The topics include limits, derivatives, integrals and the Fundamental Theorem of Calculus. Emphasis will be placed on conceptual understanding: reasoning with definitions and theorems, connecting concepts, implementing algebraic/computational processes, connecting multiple representations, building notational fluency, and communicating. This course follows the AP curriculum and leads directly to the Advanced Placement Calculus AB exam.

AP Calculus AB Prep

½ CREDIT (3297)

Prerequisite: AP Calculus AB; with departmental approval

This course is a continuation of AP Calculus AB and will strengthen skills and knowledge in preparation for the Advanced Placement Calculus AB exam in the spring. AP Calculus Prep meets every-other day during second semester.

AP Calculus BC

1 CREDIT (3299)

Prerequisite: Calculus AB grade > 90; with departmental approval

This course is a continuation of Calculus AB and is equivalent to second semester college calculus. In addition to further study of techniques of differentiation and integration, topics include sequences and series, vector and polar functions, and some basic differential equations. This course follows the AP curriculum and leads directly to the Advanced Placement Calculus BC exam.

AP Statistics

1½ CREDIT (3289/3290)

Prerequisite: Algebra II; with departmental approval

This two-semester course leads directly to the taking of the Advanced Placement examination in Statistics in the spring. The topics discussed in this course include frequency, distributions and graphs, measures of central tendency, measures of variability, confidence intervals, and hypothesis tests. In the first semester, the course meets daily; in the second semester the course meets every-other day.

Post Calculus

Multivariable Calculus

1 CREDIT (3300)

Prerequisite: Calculus AB; with departmental approval

This upper-level calculus course is intended for students with a strong interest in mathematics and a solid foundation in single variable calculus. The topics of this course will include partial derivatives, gradients, constrained optimization using Lagrange multipliers, double and triple integrals with applications, as well as cylindrical and spherical coordinates, and using Jacobian matrices to change coordinate systems. Vector calculus will also be studied including line and surface integrals, divergence and curl, and the theorems of Green and Stokes. The use of computer algebra systems will be an essential part of the course.

Linear Algebra

1 CREDIT (3301)

Prerequisites: AP Calculus AB or Applied Calculus

This course builds on the concepts of three-dimensional space developed in Multivariable Calculus and extends discussions of mathematical spaces to include arbitrary dimensions. Topics covered in the course will include systems of linear equations and how to solve them, the method of Gaussian elimination, matrices and linear mappings, determinants and their properties, eigenvectors and eigenvalues, and the diagonalization of matrices. The course will incorporate computer algebra systems and will seek to strike a balance between linear algebra's abstract structures and justifications and the rich collection of applications to science and engineering problems that the subject affords.

SCIENCE

3 credits required for graduation, following the sequence of Biology: Living and Chemical Systems; Physics: Systems of Matter, Motion, and Energy; and Research Methods and Environmental Science.

In science courses, students participate in a course of study that will enable them to:

- Master the processes of scientific investigation, and to design, and safely conduct, evaluate, and communicate about such investigations.
- Acquire essential knowledge about the content of science in the fields of Physical Science, Life Science, and Earth and Space Science.
- Be scientifically literate, able to read and analyze scientific information.
- Engage in the authentic practice of science. They will know and understand relationships among science, technology, and human activity and how they affect the world, and understand that science involves a particular way of knowing, and understand common connections among scientific disciplines.
- Understand the history of science.

Basic courses emphasize practical applications to everyday life. Standard and accelerated courses are designed to prepare students for college-level science courses, including Advanced Placement courses. Accelerated courses emphasize the use of mathematical analysis and explore the topics at a more rapid pace, in a more rigorous manner. Permission to take an accelerated course is normally predicated on maintaining a grade of at least 85 in the previous accelerated course, or at least 90 in the previous standard course.

Core Courses

Three core science courses are required for graduation following the sequence of Biology: Living and Chemical Systems; Physics: Systems of Matter, Motion, and Energy; and Research Methods and Environmental Science. With written departmental permission, a student may replace one of these courses with a corresponding Advanced Placement course, though it is normally recommended that students take AP courses as their second course in the subject of interest. All students should plan to complete their three core courses before the end of their junior year. Because there are certain math prerequisites for some of these core courses, students should carefully plan their math sequence as well.

Biology-Math Fundamentals

2 CREDITS

Students are recommended to enroll in this course if they are leveled for Biology: Living and Chemical Systems (BA) and Pre-Algebra, and are not planning to take a second math course in their 9th grade year.

This year-long course is equivalent to the combination of one semester of Biology and one semester of Pre-Algebra, and is currently offered at the Basic level. Team taught by one science teacher and one math teacher, this course will help students build arithmetic and algebra-readiness skills such as simplifying and evaluating algebraic expressions, evaluating expressions that include fractions, decimals, percents, and exponents, and graphing linear equations. Students will apply these mathematical concepts to real-world measurements and data analysis in the life sciences. Topics include the structure and function of living organisms, cycles of energy and matter, and heredity and change and will incorporate significant laboratory and fieldwork experiences. Students will improve their abilities to ask meaningful questions and pursue solutions, represent mathematical ideas in multiple ways, and communicate their results.

Biology: Living and Chemical Systems (Basic)

1 CREDIT (4321)

Prerequisite: At least concurrent enrollment in Pre-Algebra or Algebra I.

Biology: Living and Chemical Systems (Standard)

1 CREDIT (4322)

Prerequisite: At least concurrent enrollment in Pre-Algebra or Algebra I

Biology: Living and Chemical Systems (Accelerated)

1 CREDIT (4323)

Prerequisite: At least concurrent enrollment in Algebra I

This laboratory course investigates living organisms and their relationships with the non-living world. Topics include the anatomy and physiology of organisms, evolution, genetics, and cellular function. Students learn to explain the interactions of life by drawing on fundamental concepts in chemistry. Emphasis is placed on developing strong science inquiry skills. The accelerated level of this course is intended for those students who have a strong background and interest in mathematics and will use abstract reasoning extensively.

Physics: Systems of Matter, Motion, and Energy. (Basic)

1 CREDIT (4328)

Prerequisites: Biology: Living and Chemical Systems, and Algebra I.

Physics: Systems of Matter, Motion, and Energy. (Standard)

1 CREDIT (4329)

Prerequisites: Biology: Living and Chemical Systems, and Algebra I.

Physics: Systems of Matter, Motion, and Energy. (Accelerated)

1 CREDIT (4330)

Prerequisite: Biology: Living and Chemical Systems (Accelerated) grade 80> or Standard >90 and Algebra II (Standard) or at least concurrent enrollment in Algebra II (Accelerated).

This laboratory course draws on the disciplines of chemistry and physics to build scientific models of the interactions between matter, motion, and energy. Topics include motion in one dimension, Newton's Laws, conservation laws, chemical equations, the periodic table, and electric circuits and electrochemistry. Emphasis is placed on developing strong science inquiry skills. The accelerated level of this course is intended for students who have a strong background and interest in mathematics and will use abstract reasoning extensively.

Research Methods and Environmental Science (Basic)

1 CREDIT (4358)

Prerequisites: Physics: Systems of Matter, Motion, and Energy and at least concurrent enrollment in Geometry.

Research Methods and Environmental Science (Standard)

1 CREDIT (4359)

Prerequisites: Physics: Systems of Matter, Motion, and Energy and at least concurrent enrollment in Algebra I Standard.

Research Methods and Environmental Science (Accelerated)

1 CREDIT (4360)

Prerequisites: Physics: Systems of Matter, Motion, and Energy Accelerated and at least concurrent enrollment in Algebra II.

This laboratory course focuses on developing scientific questions and methods for answering them. The study of the environment as an interdependent system serves as a foundation

for connecting this final core science course to prior knowledge within the traditional areas of biology, chemistry, and physics, as well as introducing students to other scientific disciplines. Topics include ecological cycles, climate, biodiversity, geology, and sustainable human use. Students will be expected to participate in field-based research and may have opportunities to contribute to ongoing local data collection efforts. The accelerated level of this course is intended for students who have a strong background and interest in mathematics, and will use abstract reasoning extensively.

Elective Courses

The following courses are intended for students who wish to explore particular scientific topics in more depth than the core courses. Elective courses—with the exception of Advanced Placement courses—cannot be used as a substitute for the core courses as a graduation requirement. An AP course can replace a core course in the same area of study (for example, AP Environmental Science for Research Methods & Environmental Science) with written departmental permission, though normally this is not recommended.

AP Biology

1 ½ CREDITS (4378/4379)

College credit may be available through Southern New Hampshire University's dual enrollment course General Biology I and General Biology II.

Prerequisites: Biology: Living & Chemical Systems (Accelerated) and Physics: Systems of Matter, Motion, and Energy (Accelerated) grade >85 or (Standard) grade >90; with departmental approval

This college-level biology course investigates living organisms and their relationship with the non-living world at a level appropriate for successfully taking the Advanced Placement Biology examination. Students must take this course both semesters, with the class meeting every other day in the second semester.

AP Chemistry

1 ½ CREDITS (4388/4389)

Prerequisites: Biology (Accelerated) and Physics (Accelerated) grade >85 or (Standard) grade >90; with departmental approval

This college-level chemistry course involves students in the study of matter and its changes at a level appropriate for successfully taking the AP Chemistry examination. Topics include the structure of matter, chemical bonding and reactions, kinetics, thermodynamics, and chemical equilibrium. Students must take this course both semesters, with the class meeting every other day in the second semester.

AP Physics 1 (4348)

1 CREDIT

Prerequisites : Physics: Systems of Matter, Motion, and Energy Accelerated, grade 85> or standard grade 90> with departmental approval and Trigonometry. Students may take AP Physics 1 as a first Physics course with department approval.

This college-level, trigonometry-based physics course builds on the core physics courses at a level appropriate for successfully take the AP Physics 1 exam. It is equivalent to the first of college physics taken by students majoring in the life sciences and pre-medicine. Topics studied include kinematics, Newtonian dynamics for linear and rotational systems, oscillations, and fluids. Significant laboratory practical work is included.

AP Physics C: Mechanics (4399)

AP Physics C: Electricity and Magnetism (4397)

2 CREDITS

College credit may be available for AP Physics C: Electricity and Magnetism through Southern New Hampshire University's dual enrollment course Physics I with Lab.

Prerequisites:Physics: Physics: Systems of Matter, Motion, and Energy (Accelerated) grade >85 or (Standard) grade >90 and at least concurrent enrollment in Applied Calculus (Accelerated) or AP Calculus; with departmental approval
Students may take this sequence as a first physics course with department approval.

These college level, calculus-based physics courses build on the core physics at a level appropriate for successfully taking the AP Physics C: Mechanics and AP Physics C: Electricity and Magnetism exams. They are equivalent to the first year of college physics taken by students majoring in physics and the engineering disciplines. Topics include Newtonian mechanics, rotational dynamics, oscillations, electrostatics, electromagnetism, and circuits. Significant laboratory practical work is included. Students must take both semesters of the course.

AP Environmental Science

1 ½ CREDITS (4367/4369)

Prerequisites: Research Methods (Accelerated) grade >85 or (Standard) grade >90 and Algebra II (Accelerated)
This course may be taken instead of Research Methods with departmental recommendation.

AP Environmental Science is an interdisciplinary, rigorous college-level science course that provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students must take this course both semesters, with the class meeting every other day in the second semester.

Chemistry (Accelerated)

1 CREDIT (4335)

College credit may be available through Southern New Hampshire University's dual enrollment course Fundamentals of Chemistry with Lab.

Prerequisites: Biology (Accelerated) and Physics grade >85 or (Standard) grade >90 and at least concurrent enrollment in Algebra II (Accelerated); with departmental approval

This course is aimed at students who want more lab-based chemistry after Physics: Systemso of Matter, Motion, and Energy who cannot or do not want to take AP Chemistry. This laboratory course involves students in the study of matter and its changes. Topics include the relationships between matter and energy, atomic structure, chemical bonding and reaction types, stoichiometry, the gas laws, solutions, and chemical equilibrium.

Anatomy and Physiology (Standard)

1 CREDIT (4373)

Prerequisites: Biology (Accelerated) and Physics (Standard)

Anatomy and Physiology (Accelerated)

1 CREDIT (4375)

College credit may be available through Southern New Hampshire University's dual enrollment course Introduction to Anatomy and Physiology with Lab.

Prerequisites: Biology (Accelerated) and Physics (Accelerated)

Students interested in studying human biology in greater depth should consider this course. It is appropriate for students considering advanced study in fields such as medicine, medical technology, dental technology, and nursing, exercise sciences, and physical therapy.

Forensics (Standard)

1 CREDIT (4930)

Prerequisite: Biology (Standard); with departmental approval

Forensics (Accelerated)

1 CREDIT (4935)

Prerequisite: Biology (Standard); with departmental approval

This introductory course will expose students to "real life" applications of the life and physical sciences to criminal investigation. Students will use techniques of biological and

chemical tools to analyze evidence found at crime scenes, including DNA, trace evidence, toxicology, and decomposition. Students will practice the skills of evidence collection and classification, deductive reasoning, and arguing from evidence.

Wildlife Biology (Accelerated)

1 CREDIT (4950)

Prerequisite: At least concurrent enrollment in Research Methods (Accelerated or Standard)

Students in the Wildlife Biology course will engage in an in-depth and hands-on exploration of animal-habitat relationships, illustrated through basic field zoology and natural history, evolutionary biology, and established natural resource management techniques. The course will examine the dynamics of various habitats in New England, North America, and elsewhere through field visits and use of primary literature. Topics explored include plant, tree and animal identification, principles of animal behavior, and habitat relationships, especially in wild and forested lands. Students will also discuss policy issues related to conservation and techniques to protect endangered species and threatened natural communities. Students will have multiple opportunities to interact with professionals who work to utilize and protect such resources and gain insight into careers and continuing study in this field.

Sustainability and Global Citizenship (Accelerated)

1 CREDIT (4951)

This course will immerse students in the principles of sustainability through environmental, social, and economic lenses. It begins with an exploration of sustainability concepts, systems thinking, and the United Nations Sustainable Development Goals (SDGs). Through interactive projects, students assess their personal sustainability practices, evaluate global and local progress on the SDGs, and participate in community-based environmental audits and social equity initiatives. Students develop business plans centered around ethical consumerism, create advocacy campaigns, and engage in hands-on activities that build their capacity for civic engagement, culminating in a global solutions lab where students collaborate on SDG-related challenges.

Independent Science Research (Accelerated)

½ CREDIT (4960)

Pre/Corequisites: Research Methods (ACC) or (ST) and Department Chair Approval

Independent Science Research is available to juniors who would like to develop advanced skills in laboratory techniques. Students will learn equipment, processes, and methods for conducting experiments in the biological, chemical, and geophysical sciences, including but not limited to: sterile lab procedures, maintenance of organisms, chemical glass work, thermal manipulation, and electromagnetic sensing. Students will use their own authentic measurements to practice data processing and visualization and to further develop their experimental design and communication skills. This course is available to a limited number of students and requires department approval as well as evidence of commitment to rigorous scientific research. Students following up on summer research experiences, preparing for science fair submissions, or intending to pursue a science research-based capstone in their senior year are encouraged to enroll.

Environmental Studies Field Semester

1 SCIENCE AND 1 ELECTIVE CREDIT (4999)

College credit may be available through the Community College of Vermont dual enrollment for Intro to Environmental Science.

Prerequisites: Two core science courses and Geometry. Offered Fall Semester only. Students enrolling at the AP or Accelerated level can earn college credit through the Community College of Vermont. Students enrolled at the AP level will continue a one block course in the second semester to complete AP Environmental Science. Students enrolling at all levels will complete their third core science requirement as part of the experience and will earn an additional elective credit for Natural and Cultural History of Vermont.

Field Semester is an opportunity to study science, history, and culture out of doors. The course consists of two courses: Introduction to Environmental Science and The Natural and Cultural History of Vermont, taught by faculty from both the natural sciences and the humanities. Two blocks every day, students will receive complementary instruction across both courses. Additionally, students will witness course concepts in practice with an extensive series of field trips geared toward getting students outside and into the local community. Topics covered by the course include: Vermont's geology, indigenous history and early settlement; local agriculture, its history and associated environmental impacts; recreation and tourism; and Vermont's forest health and economy.

Engineering Design and Development Program

The Engineering Design and Development Program is an elective, multi- faceted system of guidance, coursework, work experience, mentoring, and training that provides students with a pre-university experience in engineering and design. The Academy's program is focused on providing a solid foundation in the design process, spatial reasoning, and the connections between theory and application in order to provide students with a strong basis for pursuing advanced study. The Academy is committed to increasing access to the engineering disciplines, particularly for those students traditionally under-represented in the STeM disciplines.

Introduction to Robotics (Standard)

1 CREDIT (4849)

Open to Freshmen and Sophomores

Introduction to Robotics (Accelerated)

1 CREDIT (4848)

Open to Freshmen and Sophomores

Introduction to Robotics gives students a cross-disciplinary introduction to robotics, which will involve them in developing a wide variety of scientific research, design engineering, programming, mathematical, presentation, and teamwork skills. As the students work in teams on weekly projects, they will develop the course's core skills to solve a variety of challenges. Students will use Lego and VEX robotics kits to design, fabricate, and program robots that meet project requirements. The accelerated level of this course is intended for those students who have a strong background and interest in mathematics, and will use algebraic reasoning extensively.

Introduction to Engineering Design and Development (Accelerated)

1 CREDIT (4850)

Prerequisite: At least concurrent enrollment in Algebra II

In this projects-based course, students use an iterative design cycle to explore a variety of engineering problems. The first half of the course is focused on developing the tools of design: understanding usability, identifying needs and analyzing solutions,

working collaboratively, and communicating ideas with sketches and industry-standard modeling software (CAD). During the second half of the course, students pursue a series of independent and team projects that expose them to several different types of engineering.

Digital Electronics (Accelerated)

1 CREDIT (4851)

Prerequisite: Algebra II (Accelerated)

This course in applied logic encompasses the application of electronic circuits and devices. Students use computer simulation software to design and test digital circuitry prior to the actual construction of circuits and devices. Programming and use of microcontrollers will be included, making this course appropriate for students who wish to expand their understanding of robotics. Offered in alternate years from Game Design.

Civil Engineering and Architecture (Accelerated)

1 CREDIT (4852)

Prerequisites: At least concurrent enrollment in Research Methods

This overview of the fields of civil engineering and architecture emphasizes the inter-relationship and mutual dependence of both fields. Students use state-of-the-art software to solve real world problems and apply knowledge to hands-on projects and activities. By developing and implementing plans for a playground, park, or vacation home for example, students experience first hand the job responsibilities of architects and civil engineers.

Biotechnical Engineering (Accelerated)

1 CREDIT (4854)

Prerequisites: Biology and Chemistry or Physics (Accelerated) grade >85 or (Standard) grade >90 and Algebra II (Accelerated)

The major focus of the Biotechnical Engineering course is to expose students to the diverse fields of biotechnology including biomedical engineering, biomolecular genetics, bioprocess engineering, and agricultural and environmental engineering. Lessons engage students in engineering-design problems that can be accomplished in a high-school setting related to biomechanics, cardiovascular engineering, genetic engineering, agricultural biotechnology, tissue engineering, biomedical devices, human interface, bioprocesses, forensics, and bioethics.

Game Design (Accelerated)

1 CREDIT (4855)

Prerequisite: Geometry

Students will work through the process of game design from developing a concept to testing a product. The course will begin by teaching principles of design via table top games, and then progress to the use of industry-standard game design software. Throughout the course, students will complete a variety of projects that lead to a final, original video game design. Outside experts from industry and academia will give their perspectives on careers in game design, and serve as evaluators for student projects. No prior programming experience is required. Offered in alternate years from Digital Electronics.

Engineering Design and Development Capstone (Accelerated)

1 CREDIT (4853)

This course is intended for Seniors wishing to complete an engineering design Capstone.

In this course students will expand their understanding of engineering design and combine that with principles of engineering that will enable them to develop, brainstorm, and fabricate a product that is functional, aesthetically pleasing, and meets weight, strength of materials, and other applicable product specifications. The students will investigate possibilities, research current patents and regulations, construct a working prototype, test the prototype in real life situations (or simulation), document their designs, and present and defend the design to a panel of experts. This course will satisfy the Senior Capstone requirement.

Computer Science

The courses in Computer Science focus on the idea that students should not simply be consumers of technology, but that students should be able to create technology. Although programming is a major component of computer science, computer science study also includes computational thinking, logic, problem-solving, working with algorithms, collaboration, and creativity. Our course sequence begins with introductory courses that work toward demystifying the inner workings of computers and the Internet and the applications that are integral to the daily lives of our students. Advanced coursework could include programming in multiple languages and for multiple platforms, as well as introductions to emerging technologies. Understanding computing technology is critical to contemporary citizenship and to many careers, and all students are strongly encouraged to take a computer science class before graduation.

Introduction to Computer Science (Standard)

1 CREDIT (3698)

Prerequisite: With departmental approval.

This course is designed for students who have little to no experience in programming computers. Students will learn the basics of algorithmic thinking, and design programs to solve simple problems. A number of different programming environments will be used including both highly-structured languages and high-level programming languages. Students will learn the basics of variables, loops, conditional statements and standard data structures such as arrays, lists, and dictionaries. Students will gain familiarity with how computers work and their architecture. Students will use their computers to create and manipulate data sets and to automate tasks.

Programming JAVA (Accelerated)

1 CREDIT (3697)

Prerequisite: Geometry; with departmental approval

This course is an introduction to the structures and methods of higher-level computer programming languages. Problem solving using modular design will be an integral part of the course. Students will become familiar with conditional logic, repetition, and program input and output. Commonly used algorithms will be studied. Structured data types will include multi-dimensional arrays. Object-oriented programming will also be introduced.

AP Computer Science Principles

1 CREDIT (3700)

Prerequisites: Introduction to Computer Science or Programming JAVA; with departmental approval

This course builds on the skills and understanding from the Introduction to Computer Science course. Students follow the AP curriculum to explore the themes of creativity, abstraction, data and information, algorithms, programming, the Internet, and global impact through problem solving and real-world applications. The AP Computer Science Principles Assessment consists of two parts: a through-course assessment and the end-of-course AP Exam.

AP Computer Science A

1 CREDIT (3699)

Prerequisites: Programming in JAVA (Accelerated) grade ≥ 85; with departmental approval; AP Computer Science Principles

This course reinforces concepts in JAVA Programming and leads directly to the Advanced Placement Computer Science A examination. Students follow the AP curriculum to become familiar with application design, classes and hierarchy, and complex algorithms. Additional topics include software history as well as current trends in software development. This course is appropriate for students with a strong interest in mathematics and engineering.

Advanced Topics in Computer Science — Cybersecurity (Accelerated)

½ CREDIT (3701)

Prerequisite: AP Computer Science

This course is intended for advanced students who have successfully completed AP Computer Science. This course will introduce students to the fundamental concepts of cybersecurity through hands-on problem-solving and challenges offered by a national cybersecurity competition. Among other topics, students will explore cryptography, web exploitation, cyber-forensics, binary exploitation, and more. Students will gain exposure to tools and techniques used in cybersecurity, ultimately gaining a foundational understanding of cybersecurity concepts, practical skills in solving cybersecurity challenges, and a solid basis for further exploration or pursuit of cybersecurity-related fields in higher education or career pathways. Meets every other day.

LANGUAGES

Communication is necessary to establish social ties, to knit people together in relationships, to enhance cooperation, and to develop a global community. Communicative approaches for teaching languages are emphasized. The goal is to provide language learners the skills to use the target language outside of the classroom in authentic settings. Language learning is a life-long process, and our goal is to provide a foundation upon which students can build in college and elsewhere.

French

French I (Standard)

1 CREDIT (5433)

French I (Accelerated)

1 CREDIT (5435)

College credit may be available through Southern New Hampshire University's dual enrollment course Beginning French I.

This beginning French course is offered at both the Standard and Accelerated levels. No prior experience is needed to enroll at either level. Through a variety of learning tasks students recognize, react to, and use the basic structures, grammar, and vocabulary of the French language. Students also begin to develop an awareness of the cultures of the Francophone world. Students are encouraged to be creative with the language, independently expand their vocabulary, and take an active role in mastering language skills. The course focuses on all four strands of language learning: reading, writing, speaking, and listening with an emphasis on speaking and listening.

French II (Standard)

1 CREDIT (5437)

Prerequisite: One year of high school French

French II (Accelerated)

1 CREDIT (5439)

College credit may be available through Southern New Hampshire University's dual enrollment course Beginning French II. Prerequisite: SNHU Beginning French I.

Prerequisite: French I (Accelerated) or with departmental approval

This course is a continuation of the work of French I. Students continue to work toward a proficiency in French which allows them to: ask and answer questions in areas of immediate need and on very familiar topics; pronounce the language well enough to be understood; read and understand information in a simple paragraph; and write short paragraphs on familiar topics. Students continue to explore the Francophone world, with a focus on the more local areas of French influence.

French III (Standard)

1 CREDIT (5442)

Prerequisite: French II (Standard) or departmental approval

This course is designed for students interested in a third year of language study but who are not ready for an accelerated French course. Students work to increase their proficiency in all four strands of language learning: reading, writing, speaking, and listening. Tools used include short stories, music, movies, as well as a number of different applications online.

French III (Accelerated)

1 CREDIT (5445)

College credit may be available through Southern New Hampshire University's dual enrollment course Intermediate French III. Prerequisite: SNHU Beginning French II.

Prerequisite: French II (Accelerated) or with departmental approval

The aim of this course is to continue the student's linguistic development. Students at this level work toward proficiency in French that allows them to engage in conversation about familiar topics; understand the essential points of the spoken language; read and comprehend such materials as journal articles, short stories, and Le Petit Prince; and write summaries, descriptions, and social correspondence. They also continue to develop their cultural awareness and their understanding of the Francophone world.

French IV (Accelerated)

1 CREDIT (5447)

College credit may be available through Southern New Hampshire University's dual enrollment course Intermediate French IV. Prerequisite: SNHU Intermediate French III.

Prerequisite: French III (Accelerated) or with departmental approval

This class is conducted entirely in French. Students review grammar structures contextually through their study of contemporary as well as classic works of French literature, journals, films, and music. Class activities include participating actively in discussion, often expressing a reaction or a point of view on a theme, as well as composition, usually done in class. This class is designed to help students prepare for AP French, although they are not required to move on to the course. Many of the activities and topics covered mirror activities and themes from the AP French curriculum.

AP French Language and Culture

1 CREDIT (5449)

Prerequisite: French IV (Accelerated) with a grade ≥ 85 or with departmental approval

This course, conducted entirely in French, includes individual speaking practice and analysis of more advanced grammatical concepts and structures. Students at this level work toward a proficiency in French that will prepare them for the AP Language

and Culture exam. Students at this level are able to: support opinions, explain in detail, and hypothesize; sustain understanding over longer stretches of time; read and comprehend more abstract and linguistically complex texts; and write about a variety of topics with significant precision and detail. Discussions, presentations, projects, readings, and research are vehicles through which students explore the literature, history, and culture of the Francophone world.

France and the Arts (Accelerated)

1 CREDIT (5450)

Prerequisite: Successful completion of AP French or department recommendation.

This course is designed for students who have completed our high level French courses and wish to continue working on their language skills. Units studied will have components from four key strands of language learning: reading, writing, speaking, and listening. Students will do research, prepare presentations, and welcome guest lecturers. Students will use available resources and media as they journey through the history of France through its arts. The course will be taught completely in French.

Latin

Knowledge of Latin gives students the opportunity to understand the roots of English, the Romance languages, and the influence of classical Roman culture on today's world.

Latin I (Accelerated)

1 CREDIT (5471)

Latin I introduces students to the basic elements of Latin grammar through reading and writing. Vocabulary is presented with the aim of showing the direct and indirect indebtedness of English to Latin and the reliance of the Romance languages upon Latin.

Latin II (Accelerated)

1 CREDIT (5473)

Prerequisite: Latin I or with departmental approval

This course involves both review and continuation of the study of Latin grammar, with emphasis on more complex expression in both reading and writing. The goal of the course is for students to prepare for reading Latin authors through intermediate readings that include topics such as mythology and the history of Rome.

Latin Prose (Accelerated)

1 CREDIT (5475)

Prerequisite: Successful completion of Latin II at St. Johnsbury Academy or upon departmental approval.

This course involves intensive study of a key Latin Prose author, Caesar. This course meets at the same time as Latin Poetry and can involve some collaborative comparative literature projects with all students, both Prose and Poetry.

Latin Poetry (Accelerated)

1 CREDIT (5477)

Prerequisite: Successful completion of Latin II at St. Johnsbury Academy or upon departmental approval.

This course continues with an intensive study of a key Latin Poet, Vergil. This course meets at the same time as Latin Prose and can involve some collaborative comparative literature projects with all students, both Prose and Poetry.

AP Latin

1 CREDIT (5479)

Prerequisites: Highly successful completion of Latin II at St. Johnsbury Academy or upon departmental approval.

Students in this course will attend the combined Prose & Poetry class but are expected to complete the reading lists for both classes, as well as additional readings to meet College Board expectations, which is a rigorous requirement. Exceptional students of Latin may enroll in AP Latin immediately upon meeting the prerequisite; however, students may choose to enroll in AP Latin after completing one or both literature courses first. The AP Latin course is designed to help students achieve success on the AP Latin exam. Therefore, it centers on the prose of Caesar (Commentarii De Bello Gallico) and the poetry of Vergil (The Aeneid), while developing the students' abilities to translate Latin prose and poetry in English literally; understand the passage read within their historical, cultural, and literary contexts; engage in effective analysis of passages, including elements of language, style, and purpose; better read works of Latin aloud; and learn the dactylic hexameter of Vergil's poetry.

Spanish

Spanish I (Standard)

1 CREDIT (5413)

Spanish I (Accelerated)

1 CREDIT (5415)

College credit may be available. Check with the Language Department Chair for options.

This beginning Spanish course is offered at both the Standard and Accelerated levels. In this Spanish course students build a foundation of vocabulary and language structures to be able to communicate in simple sentences about basic topics in the present tense. Understanding the language in context is emphasized through a focus on reading and listening to stories. The teacher and students use Spanish for the majority of class time as students participate in a variety of learning tasks to build their skills in the language and develop an awareness of the Spanish-speaking world.

Spanish II (Standard)

1 CREDIT (5417)

Prerequisite: One year of high school Spanish

Spanish II (Accelerated)

1 CREDIT (5419)

College credit may be available. Check with the Language Department Chair for options.

Prerequisite: Successful completion of Spanish I (Accelerated) or with department approval

This course is a continuation of the work of Spanish I. Students work toward a proficiency level that allows them to ask and answer questions about familiar topics, read and understand information in a simple article or story, and write a short paragraph about a familiar topic, in both the present and past tenses. Stories, short books, music, and videos are all used to practice the language in context and build students' understanding of Hispanic countries and culture.

Spanish III (Standard)

1 CREDIT (5422)

Prerequisite: Spanish II (Standard) or with department approval

Students in their third semester of Spanish will work to improve their proficiency in using basic structures, grammar, and vocabulary through reading a short novel, writing paragraphs, and participating in conversations and discussions in Spanish. Videos and articles also provide practice with the language as well as exploration of Hispanic culture.

Spanish III (Accelerated)

1 CREDIT (5425)

College credit may be available. Check with the Language Department Chair for options.

Prerequisite: Spanish II (Accelerated) or Spanish III (Standard) or with department approval

Students at this level advance to a more complex use of the language. They work toward proficiency in Spanish that allows them to: engage in conversation about familiar topics; understand the essential points of intermediate-level spoken language; read and comprehend such materials as newspaper articles and short stories; and write summaries, descriptions, and social correspondence using a variety of tenses. Students continue to develop their cultural awareness and understanding of the Spanish-speaking world.

Spanish IV (Standard)

1 CREDIT (5428)

Prerequisite: Spanish III (Standard)

This course is designed for students who are not ready for an accelerated course, but want to continue their study of Spanish. Students will read articles from around the Spanish-speaking world and engage in debates and discussions. Videos with a variety of voices from different regions provide more language practice and culture. Students should be committed to speaking only Spanish in the classroom.

Spanish IV (Accelerated)

1 CREDIT (5427)

College credit may be available. Check with the Language Department chair for options.

Prerequisite: Spanish III (Accelerated) or with department approval

This advanced course, conducted entirely in Spanish, includes a review of basic grammar and structures, as well as intensive work on more complex grammatical concepts. Students at this level work toward proficiency in Spanish that allows them to: participate in a wide variety of conversations, including unfamiliar situations; sustain understanding over longer stretches of time; read and comprehend longer prose; and describe and narrate in paragraphs. Readings, podcasts, videos, discussions, and presentations are vehicles by which students explore the literature, history, and culture of the Spanish-speaking world.

AP Spanish Language and Culture

1 CREDIT (5430)

Prerequisite: Spanish IV (Accelerated) or with department approval

This course, conducted entirely in Spanish, includes individual speaking practice and analysis of more advanced grammatical concepts and structures. Students at this level work toward a proficiency in Spanish that will prepare them for the AP Spanish Language and Culture exam. Students at this level are able to: support opinions, explain in detail and hypothesize; sustain understanding over longer stretches of time; read and comprehend more abstract and linguistically complex texts; and write about a variety of topics with significant precision and detail. Exploration of the literature, history, and culture of Spanish-speaking countries continues through engagement with readings, podcasts, videos, discussions, and presentations.

Spanish V (Accelerated)

1 CREDIT (5429)

Prerequisite: AP Spanish or with department approval

This course is designed as an option for students who have successfully completed the AP Spanish course and would like to continue to develop their language skills and understanding of the many facets of Hispanic culture. Topics of study will vary from year to year. Units may be designed to study the literary masters of the Hispanic world, Hispanic artists and their influence, or the diaspora of the Spanish peoples from Spain to the Americas.

ENGLISH AS A SECOND LANGUAGE

ESL courses are designed for a full academic learning environment in English. They provide direct instruction in the English language in order to enhance the proficiency level of each English language learner. Students are encouraged to use authentic English in a supportive atmosphere so that each student can achieve fluency, accuracy, and confidence. English language learners focus on the integration of all language skills, including listening comprehension, speaking, reading, writing, grammar, and vocabulary development. English language learners are asked to apply their newly acquired or improved language skills to real life situations. English language learners that proceed through the program are prepared for college admission, as well as for college level work.

Beginning English as a Second Language (Standard)

1 CREDIT (5501)

ESL level placement is determined by the department placement test score or equivalent IBT TOEFL score and departmental approval.

This course is for students who have studied basic English but are not proficient enough to receive most of their academic instruction in English. Using conversations, reading selections, grammar exercises, and writing opportunities which provide practice in grammatical structures, this course enables students to develop their listening, speaking, reading, and writing skills. Vocabulary and oral expression are emphasized, and students receive personal attention in this small class.

Developing English as a Second Language (Standard)

1 CREDIT (5502)

ESL level placement is determined by the department placement test score or equivalent IBT TOEFL score and departmental approval.

This course is for those intermediate level students who understand and use English but need considerable growth in pronunciation and fluency, grammar, reading comprehension, and writing. This is a communication-based course which requires the students to become more fluent in both speaking and writing. It unifies both receptive and productive skills with meaningful communication and is grounded in the presentation and practice of English grammar through meaningful content.

Expanding English as a Second Language (Standard)

1 CREDIT (5503)

ESL level placement is determined by the department placement test score or equivalent IBT TOEFL score and departmental approval.

For more advanced language students who may be able to get by in English but who still need to think and work more easily in English in order to succeed in their academic courses, this course provides practice in more complex grammatical structures. The students work to develop confidence and skills in expressing their ideas and feelings correctly, both orally and in writing.

Bridging English as a Second Language (Standard)

1 CREDIT (5504)

ESL level placement is determined by the department placement test score or equivalent IBT TOEFL score and departmental approval.

This course is for non-native speakers who are able to function well in high school classes where all instruction is in English, but who must still refine and practice their English pronunciation, fluency, grammar, idioms, and writing. This course is designed to more fully prepare students for the threshold college admissions standard of 80 or above IBT TOEFL. Admission and release from this course depend not only upon language proficiency but also upon academic ability and goals and will be determined by the department chair.

ESL World Civilizations, Pre-1500 (Standard)

1 CREDIT (5515)

This social studies course is intended to provide English language learners a curriculum based on the history of early world civilizations while also developing English language skills and vocabulary. This course satisfies a required social studies credit.

ESL United States History

1 CREDIT (5517)

English language learners develop an understanding of the culture and history of the United States by critically examining major historical themes and political philosophy. This course satisfies a required social studies credit.

United States History (International)

1 CREDIT (5518)

Prerequisite: Humanities
Open to Juniors

International students will develop an understanding of the culture and history of the United States by critically examining major historical themes with emphasis on improving English in class discussion and writing. This course satisfies a required social studies credit.

ESL Contemporary Issues

1 CREDIT (5519)

Departmental approval required

This course introduces upper-level ESL students to major contemporary issues facing the U.S. and the world as it helps students develop fundamental research, reading, writing, and public speaking skills. This course utilizes a range of materials and provides historical context and a variety of perspectives on each issue. This course satisfies a required social studies credit.

ESL Capstone

1 CREDIT (7703)

Departmental approval required

This course satisfies the same requirements as the regular Senior Capstone course (7701), but in a way that reflects the growing English language skills of the participants.

HEALTH AND WELLNESS

2 physical education credits are required for graduation.

1 health credit is required for graduation.

Physical Education

Normally students start to satisfy the physical education requirement by taking Introduction to Physical Education in their freshman year, which is 1 credit. In certain situations, students may satisfy this requirement by taking a dance course. However, these students must then take at least one, 1-credit course from the Physical Education offerings to satisfy the Physical Education requirement.

For those students who take Introduction to Physical Education as Freshmen, another, 1-credit course from the Physical Education offerings is required for graduation, or by doing one of the alternatives listed:

- Taking one semester of Introduction to Dance, Advanced Dance, or Exercise Science I and II.
- Playing two different Junior Varsity or Varsity sports.
- Playing the same sport for two years at the Junior Varsity or Varsity level.

Introduction to Physical Education

1 CREDIT (7554)

Open to Freshmen; meets every day

The objective of this course is to educate students in the areas of fitness and health, to encourage them to engage in active lifestyles, and to improve their physical fitness. Areas of focus will include body weight exercises, weight training, agility/speed training, swimming, static/dynamic stretches, yoga, utilization of multi-apparatus equipment, which includes: weight training, kettle bells, bands, plyometric stations, exercise balls, and jump ropes.

Occasionally, a specific sport such as racquet games and basketball will be integrated, with the expectation that students will learn the motor skills and rules required to compete respectfully and effectively.

To this end students will foster a positive attitude and understanding of fitness in general, with the overall recognition that a life regulated by obtainable fitness goals can benefit one for a lifetime.

Exercise Science I (Standard)

1 CREDIT (7552)

This elective class will integrate nutrition and personal fitness as a cohesive unit in the development and maintenance of a healthy lifestyle. Students will gain an understanding of and be able to recognize the need for balance in one's life, emphasizing the importance of good nutrition and physical fitness. The class will consist of two days of classroom instruction and three days of physical training. Completion of this course fulfills one credit of Physical Education but may not be substituted for Introduction to Physical Education.

Exercise Science II (Accelerated)

1 CREDIT (7553)

Prerequisite: Exercise Science I grade >85 or with departmental approval

The purpose of this course is to cultivate an extensive knowledge of physical fitness training and develop the ability to implement a plan into a personal fitness program to foster intrinsic motivation towards a healthy and active lifestyle now and in the future.

The class will utilize a broad spectrum of activities in order to allow the student to assemble a comprehensive plan to improve functional fitness and athleticism. The activities in the class will include body weight activities, and aerobic and anaerobic conditioning activities to strengthen the core, improve balance, coordination, and flexibility.

Sports Medicine I (Standard)

1 CREDIT (7561)
DOES NOT COUNT TOWARD PE CREDIT REQUIREMENT

This course will consist of basic anatomy, introduction to sports related injuries, and basic treatment protocol. Students will also complete hands-on labs involving taping and wrapping of various injuries.

Sports Medicine II (Accelerated)

1 CREDIT (7563)

DOES NOT COUNT TOWARD PE CREDIT REQUIREMENT

Prerequisite: Sports Medicine I with ≥ 85 or with departmental approval

Students will gain certification in American Red Cross First Aid, adult CPR, and child/infant CPR. This course will review basic anatomy but focus on advanced rehabilitation programs and taping as well as hands-on diagnostic techniques.

Health

Along with St. Johnsbury Academy's dedication to academics, we strongly believe in the importance of one's physical, social, mental, and emotional well-being. Students gain the knowledge and decision-making skills that they will use throughout their years at SJA.

The programs we offer provide our students with a base from which to build a lifetime of healthy living.

Health (Standard)

1 CREDIT (7591)

Open to Freshmen

This course readies freshmen academically and socially for the demands of life during high school and beyond. The course orients students to Academy traditions and prepares students for learning in the 21st century. Students are exposed to systems that develop independent learners and communicators.

The course has two components which revolve around personal choices and social obligations by including topics such as personal development, productive thinking, Choice Theory, communication skills, interpersonal awareness, substance education and stress control, mature decision-making regarding transitioning from childhood to adulthood, and community health issues. Also presented are learning styles and success strategies for today's classroom. Students will gain adult CPR certification.

Life Choices (Accelerated)

1 CREDIT (7594)

Open to Juniors or Seniors

In this Junior/Senior elective course, students will have the opportunity to explore common health and wellness topics as they prepare to transition to college, military or employment. Students will use knowledge gained to help them analyze and continue to improve their physical, social and emotional health. Emotional Intelligence and the importance of Positive Psychology in reaching one's full potential and maneuvering through life's challenges will be central themes in this course. Strengthening resilience, dealing with common social and emotional issues such as depression, anxiety, and substance use disorders will help empower students to lead a healthy and successful life. The course will also investigate effective communication, healthy relationships, goal setting, decision-making, understanding of sexual health/sexuality, nutritious meal planning, fitness, and basic financial management. This course fulfills the health graduation requirement.

FINE ARTS

The mission of the Fine Arts Department is to offer instruction, resources, and a culture that inspires students to develop artistic awareness and proficiency by providing a professional environment and a comprehensive curriculum in the visual and performing arts. We believe that the exploratory creative process encourages cognitive growth and builds problem solving skills that promote resilience and flexible thinking.

Performing Arts

Music

The core offerings of the music program at St. Johnsbury Academy are the large ensemble Band and Chorus. In addition, several small ensemble groups, both curricular and extracurricular, are available.

Band (Standard)

1 CREDIT/ALL YEAR (8801)

Prerequisite: A year's experience in band or private instruction, or with departmental approval.
Band may be taken multiple times for credit.

Students will rehearse and perform music ranging widely in style and difficulty, with an emphasis on broadening their knowledge of repertoire and developing technical ability. The band performs at home football games and pep rallies, marches in selected parades, and performs in four concerts throughout the year. Students are expected to reserve all performance dates. Students who have achieved a higher level of proficiency are encouraged to audition for a number of festivals. Smaller ensembles of students with similar ability will be allowed to pursue more challenging literature. Meets every other day all year.

Chorus (Standard)

1 CREDIT/ALL YEAR (8814)

Chorus may be taken multiple times for credit.

Chorus provides students with an introduction to many styles of choral literature. Students will work to develop their reading and singing skills in an ensemble environment. The Chorus will perform four concerts per year and participate in other special performances in the community. Students are expected to reserve these times for performances. Meets every other day all year.

Jazz Band (Accelerated)

½ CREDIT (8803)

By audition only
Jazz Band may be taken multiple times for credit.

Students in the Jazz Band will explore the classical and modern jazz repertoire in this select ensemble. Development of musicianship and improvisational skills will be encouraged. The Jazz Band will perform many concerts throughout the year. It is expected that those in the Jazz Band will keep current in the concert band's repertoire and participate in the large ensemble as needed. The Jazz Band participates in many concerts throughout the year – students are expected to reserve these times for performances. Meets every other day all year.

String Ensemble (Accelerated)

1 CREDIT (8806)

By audition only
String ensemble may be taken multiple times for credit.

The String Ensemble will provide students with the opportunity to develop their skills in playing violin-family instruments as they prepare music in a small ensemble environment. Students will be involved in extracurricular performances and rehearsals.

Guitar I (Standard)

1 CREDIT (8805)

In this introductory course students will learn or refine skills such as chord identification and facility, strumming patterns, and finger-picking styles. The class emphasis is on developing the students' reading of melodic and rhythmic notation to a level that would prepare them for Guitar II.

Guitar II (Accelerated)

1 CREDIT (8807)

Prerequisite: Guitar I

Students will strengthen their skills in playing guitar-family instruments as they prepare music in a small ensemble environment. Students will be involved in extracurricular performances and rehearsals.

Music Appreciation and Theory (Standard)

1 CREDIT (8815)

Departmental approval required

The class will expand on students' understanding of music theory and harmony through improving their skills in notation, interval and chord recognition, scale construction, form, harmonic structure and analysis along with rhythmic and melodic dictation. Students will apply their understanding by composing, with the opportunity to participate in the Vermont Midi project. In addition, students will explore music literature from the Renaissance, Baroque, Classical, and Modern periods and its contribution to the development of Western music. Students should have some familiarity with notation, and some experience with keyboard instruments prior to signing up for the course.

AP Music Theory

1 CREDIT (8819)

Prerequisite: Music Appreciation and Theory (Standard); with departmental approval

Motivated music students who wish to sign up for AP Music Theory will explore the ideas in the Music Appreciation and Theory course at the college level.

Theatre

St. Johnsbury Academy offers three classes in Theatre, all of which include training in Acting and Musical Theatre. These classes will assist students in attaining crucial skills not only for the theatrical stage but for the stage of life.

Theatre I (Standard)

1 CREDIT (8824)

This introductory course will give students a general overview of Theatre. Topics include acting technique, stage movement, vocal production, improvisation, script analysis, monologue, and playwriting. A daily physical and vocal warm up will work on stretching, articulation, diction, and projection as well as theatre games and exercises. This course will also introduce the songs of Broadway musicals with a concentration on proper singing technique and basic choreography and movement. This class includes a final project and/or a public performance. This course will support work with Academy Theatre and students are encouraged to audition for Academy Theatre productions.

Theatre II (Standard)

1 CREDIT (8825)

Prerequisite: Theatre I; with departmental approval

This course builds upon the foundational skills, topics, and concepts introduced in Theatre I. In addition, we will explore the songs of Broadway musicals, acting technique, and theatre history at a deeper and more concentrated level. Classes will consist of a vocal and physical warm up concentrating on proper technique and form. Students will learn the repertoire of Broadway show tunes from a genre of musical theatre including staging, choreography, and scene work culminating in a semester showcase. This course will support work with Academy Theatre and students are encouraged to audition for Academy Theatre productions.

Theatre III (Accelerated)

1 CREDIT (8826)

Prerequisite: Theatre II

This course is for the advanced theatre student who is interested in an accelerated level of training and honing of acting and musical theatre skills including vocal technique, dance, and choreography. There will be a focus on correct theatre terminology/vocabulary, audition technique, and resume writing as well as musical theatre history and repertoire. This class will participate in a semester showcase including solo material, monologues, scene work, and musical numbers from Broadway's biggest hits. This course will support work with Academy Theatre and students are encouraged to audition for Academy Theatre productions.

Dance

The curricular dance offerings at the Academy include a focus on the modern dance technique of Martha Graham, as well as classical ballet. The program can provide students with a background in the technique appropriate for those who wish to pursue the serious study of dance in any genre. Extracurricular clubs allow students to explore other dance styles, including jazz, Middle Eastern, and African dance.

Popular Dance (Standard)

1 CREDIT (8830)

Popular Dance is a survey course on dance trends that reflect styles and popular moves of different cultures and times. Students will be introduced to various dance idioms that have evolved over the centuries: including Tango, Waltz, Square Dancing, Salsa, Jazz, Hip Hop, etc. Students will examine the roots of these styles in popular, ritual, and social evolutionary patterns. Students will gain insights into the physicality and mechanics of movement, moving through space, and partnering. Completion of one credit of Popular Dance results in the waiver of one credit of physical education, but may not be substituted for Introduction to Physical Education.

Modern Dance I (Standard)

1 CREDIT (8831)

Dance I may be taken multiple times for credit.

The modern dance technique of Martha Graham is the basis of this class, which progresses carefully from a basic and thorough introduction to an energetic, challenging, and healthful movement experience. Classes are exciting, intense, rigorous, and challenging as they focus on correct technique as well as proper body conditioning and toning. The course is appropriate for novice dancers, as well as experienced dancers who are unfamiliar with Graham technique. Athletes in any sport can benefit dramatically from this course. Some evening and afternoon attendance at dance performances and rehearsals will be required. Completion of one credit of Modern Dance results in the waiver of one credit of physical education, but may not be substituted for Introduction to Physical Education.

Modern Dance II (Accelerated)

1 CREDIT (8833)

Departmental approval required
Dance II may be taken multiple times for credit.

Modern Dance II builds on the ideas presented in Modern Dance I and is appropriate for dancers familiar with the ideas of Martha Graham and who have mastered introductory skills. An emphasis is placed on the recognition of familiar body patterns and executing them with the precision the professional dancer or athlete. Some evening and afternoon attendance at dance performances and rehearsals will be required. Completion of one credit of Modern Dance II results in the waiver of one credit of physical education but may not be substituted for Introduction to Physical Education.

Training for the Athlete (Standard)

1 CREDIT (8835)

This course is designed to enhance athletes' agility, physical control, coordination, flexibility, and sense of timing. The course focuses on proper and safe body alignment while it develops core strength. Classes are designed to include sport-specific features for in-season training. The class also provides hardy and essential training for athletes in the off-season. This is not a dance class; it is a class for athletes making use of dance training for complementary cross-training purposes. The course allows students to gain valuable skills to improve their flexibility, range of motion, balance control, speed and agility. Completion of one credit of Training for the Athlete results in the waiver of one credit of physical education, but may not be substituted for Introduction to Physical Education.

Ballet I (Standard)

1 CREDIT (8837)

Ballet I provides training in the fundamentals of classical ballet. It focuses on acquiring basic ballet technique and terminology through the examination and assimilation of proper body alignment, turn-out, and muscle awareness. Students will learn ballet positions, terminology, proper use of the arms-legs-feet-back. Instruction will concentrate on imparting correct ballet training while students gain musicality, flexibility, coordination, agility, improved balance, and a sense of space. Completion of one credit of Ballet I results in the waiver of one credit of physical education, but may not be substituted for Introduction to Physical Education.

Ballet II (Accelerated)

1 CREDIT (8838)

Ballet II is a continuation of Ballet I on a more demanding level. Exercises are more complicated and demanding, involving changes of direction, feet, sides, front and back. The barre work and center floor are more intricate and incorporate more use of arm and upper body movement in concert with leg work. Exercises coming across the floor and grande allegro are more varied, incorporating jumps, turns, jetes, tour jetes, multiple pirouettes, and beats in longer movement phrases and phrases with rhythmic changes. Use of the upper body and port de bras are incorporated with a focus on creating fluid and well-coordinated movement. Ballet II is a continuation of Ballet I and a preparation for further study of ballet. Completion of one credit of Ballet II results in the waiver of one credit of physical education, but may not be substituted for Introduction to Physical Education.

Visual Arts

The extensive visual art courses described below are supplemented with extracurricular activities such as the Art Club, Intaglio Society, and Fashion Club.

Foundations of Drawing (Standard)

1 CREDIT (8851)

Drawing utilizes simple material to explore both our visual perception, and the structural relationships of the world. It is a fundamental tool for effective visual communication. Drawing builds a repertoire of problem-solving strategies that can be utilized in all aspects of life and learning. This course introduces a foundation of technical and language skills, upon which further visual art studies will be built. Weekly homework assignments are designed to reinforce the principles learned in class. Students should expect to pay a small materials fee.

Anatomy and Figure Drawing I (Standard)

1 CREDIT (8883)

Prerequisite: Foundations of Drawing

Knowledge of the structure, balance, and movement of the human figure is an essential skill in many fields of visual art, such as fashion design and animation, and an excellent training in observation and visual problem-solving for any artist. This course builds on observational drawing skills introduced and practiced in Foundations of Drawing.

Anatomy and Figure Drawing II (Accelerated)

1 CREDIT (8885)

Prerequisite: Anatomy and Figure Drawing I

This course will build upon the basics of human anatomy introduced and practiced in Anatomy and Figure Drawing I. Students will explore more deeply the bone and muscular structures, and use these ideas in the creation of large drawing compositions.

Printmaking I (Standard)

1 CREDIT (8856)

Prerequisite: Foundations of Drawing

This course is an introduction to fine art printmaking and an exploration of creative process through intaglio and relief printing. Students will create original compositions, develop and revise images on copper plates, wood blocks, and silk screens, then print the images by hand or on an etching press. Presentation of prints for group critique and public exhibition are an important part of this course. Students will maintain a body of working proofs and artist proofs that will add breadth and depth to their art portfolios.

Printmaking II (Accelerated)

1 CREDIT (8857)

Prerequisite: Printmaking I

This course is an intermediate level fine art intaglio printmaking experience. The full range of intaglio techniques will be explored including hard and soft ground etching, aquatint, and open and spit bite, as well as all the major engraving techniques. Students will explore the creative process as they deepen their knowledge and comfort level with revising images from proof to proof in pursuit of personal voice, and continue to build their art portfolios. As in Printmaking I, group critique and the presentation of public exhibitions are an important part of this course. Students registered in this class are eligible to join Intaglio Society, and may apply for our annual workshop in Florence, Italy.

Water-Based Painting I (Standard)

1 CREDIT (8852)

Prerequisite: Foundations of Drawing

Students will learn various techniques and effects using water-based paints. They will explore watercolor, gouache, and egg tempera. Watercolor is transparent and allows light to reflect from the surface of the paper. Gouache is a type of paint consisting of a pigment suspended in water which is more opaque than watercolor and provides greater light reflection. The course will finish with a study in egg tempera which is a permanent and fast drying painting medium using a pigment mixed with a binder (such as egg yolk). Its use dates back to the 1st century A.D. and was an easel painting method used until oil painting was invented in 1500. The course will cover design, composition, value and color in landscape, still life, and portrait painting.

Water-Based Painting II (Accelerated)

1 CREDIT (8853)

Prerequisite: Water-Based Painting I

This class is a continuation of the skills and principles introduced in Water-Based Painting I, with added emphasis on individual painting technique and expression. Students will have the opportunity to explore a medium of their choice, polish their skills in painting, and create pigments, binders,

and painting substrates. Demonstrations of water-based mediums will be balanced with lectures and individual projects.

Oil Painting I (Standard)

1 CREDIT (8893)

Prerequisite: Foundations of Drawing
Materials fee required

Using the medium of oil paint, students will build upon their observational drawing skills to create compositions exploring luminosity, color, transparency, and opacity; as well as form, atmosphere, and other concepts introduced in Foundations of Drawing. Gaining knowledge about the materials and craft of oil painting will be central to the course. Students will grind pigment into oil to make their own paints, prepare their own surfaces to paint upon and learn to handle an oil/varnish medium.
A $50 studio fee will be collected.

Oil Painting II (Accelerated)

1 CREDIT (8895)

Prerequisite: Oil Painting I
Materials fee required

Students continue the explorations begun in Oil Painting I, deepening the knowledge of the medium and techniques.

Photography I (Standard)

1 CREDIT (8841)

Prerequisite: Sophomores, Juniors and Seniors;
Materials fee required

Students will learn the foundation principles of photography and the skills and techniques of traditional film processing and printmaking through a fine-art framework. Composition, elements of design, aesthetics, visual literacy, and communication will be emphasized. Students will need a 35mm SLR camera with manual focus and exposure controls. A supplies fee is necessary to cover a portion of materials.

Photography II (Accelerated)

1 CREDIT (8842)

Prerequisite: Photography I
Materials fee required

Students will engage in a guided discovery of their visual voice while learning advanced principles of photography. Building upon the foundation acquired in Photography I, topics will include the zone system, on camera filters, toning, hand-coloring, and advanced printing techniques. Students will build a portfolio through exploration of different genres.

Filmmaking I (Standard)

1 CREDIT (8871)

Open to Sophomores, Juniors, and Seniors

Students will explore the fundamental principles of filmmaking. Focusing on storyboarding, cinematography, and editing, students will demonstrate that the primary means of storytelling in film is through visual composition. Students work in a collaborative environment to finish a product, and will have the opportunity to focus on specific areas of the process. Computer literacy is a helpful skill for those wishing to deepen their knowledge of editing.

Filmmaking II (Accelerated)

1 CREDIT (8873)

Prerequisite: Filmmaking I

Students will explore advanced principles of filmmaking. While furthering cinematography and editing skills, students will also study directing and script writing. Typically, the whole class collaborates on a single, long-form project. Each student focuses on one or two areas of film production to achieve expertise in those roles and explore their own aesthetic. Because of the needs of actors and locations for the films produced by this class, filming outside of the school is often required.

Digital Graphics and Design I (Standard)

1 CREDIT (8874)

Prerequisite: Foundations of Drawing
Materials fee required

This course will expose students to the process of graphic design using computer technology as a tool. Techniques of digital enhancement of photographs and scanned images, and the creation of digital images will be used to explore the principles of graphic design. Learning the use of Adobe Illustrator and Adobe Photoshop will be major components of this course. Students will work toward the production of a portfolio.

Digital Graphics and Design II (Accelerated)

1 CREDIT (8875)

Prerequisite: Digital Graphics and Design I
Materials fee required

Students will explore beyond the basics and discover the power and versatility of vector artwork in this intermediate level of Adobe Illustrator. Students will also learn the many capabilities available in Adobe Photoshop and will continue to work toward the production of their portfolio.

Fashion Design I (Standard)

1 CREDIT (8863)

Prerequisite: Foundations of Drawing
Materials fee required

Students learn the basics of sewing, design and color, and how to create a pattern through draping techniques. Figure drawing skills will be developed through creating illustrations. Students will also learn the basics of jewelry design, beading, and textile printmaking. Students will keep abreast of the current and contemporary trends in the fashion industry and will work toward the production of a portfolio.

Fashion Design II (Accelerated)

1 CREDIT (8864)

Prerequisites: Foundations of Drawing, Fashion Design I
Materials fee required

Students build upon the skills and techniques attained in Fashion Design I and create a garment from design concept to completion. Learning how to fit a mannequin and a live model will be part of the process. The semester will culminate with students participating in a professional fashion show and the production of a portfolio.

Fashion Studies (Standard)

½ CREDIT (8865)

The course will begin a focused study in the late 19th, early 20th century and progress through the current period. Students will look at how fashion has changed through the decades, post-2000s and then compare and contrast with the fashion industry as it currently stands. Modern dress will be studied in depth, focusing on specific facets of the modern fashion industry. We will look at hallmark facets and how they have changed; trends, production, labor, socioeconomic standing, status through clothing, and emotional and psychological factors. Fashion studies will look mostly at Western fashion, specifically in Europe and North America. Meets every other day.

Clay I (Standard)

1 CREDIT (8867)

A materials fee may be required.
Open to Sophomores, Juniors, and Seniors

Students will be exposed to a wide variety of hand-building techniques and extensive work on the potter's wheel with a strong emphasis on both design and functionality. Students will learn to make serving bowls, pouring vessels, serving trays, coffee mugs and tumblers, lidded forms, and a variety of other pieces using hump and slump molds, coil building, slab construction, and, of

course, the wheel. Students may also learn decorative carving techniques as well as the use of decorative stamps and sprigs.

Additionally, a wide variety of glazing processes will be covered including the use of slips, underglazes, engobes, overglazes, sigillattas, and traditional glazes. Students will receive initial instruction on the loading, firing, and unloading of their work.

Clay II (Accelerated)

1 CREDIT (8868)

Prerequisite: Clay I
A materials fee may be required.

Clay has been used as a medium for both utilitarian purposes and artistic expression for thousands of years, crossing all cultures, lands, and groups of people. From the most primitive pit-fired pot to the most sophisticated computer-controlled kiln-fired art work, clay remains a medium of infinite fascination. This course focuses on expanding student understanding of historical, technical, and conceptual processes associated with working in clay. Students will refine their throwing skills and learn how to create complex forms such as pouring vessels, lidded vessels, and myriad other utilitarian forms. Hand-building processes will also be thoroughly examined and students will be free to choose which method(s) they prefer to pursue. Additional emphasis will be placed on surface embellishment, decorative carving, glaze experimentation, and loading, firing, and unloading kilns. Individual aesthetic expression will be highly encouraged.

Portfolio (Accelerated)

1 CREDIT (8900)

Prerequisite: Foundation of Drawing and Painting; with departmental approval
This course is highly recommended for the junior year.

Students will be expected to do outside reading, homework, and independent studio work as they work toward the production of a portfolio to use for application to art schools or art programs in traditional liberal arts colleges. It is recommended that this portfolio course be taken only after a student has taken at least one advanced art course that focuses on a particular medium.

AP Studio Art

1 ½ CREDIT (8899/8896)

Departmental approval required

Students will be involved in a concentrated studio of drawing, two-dimensional art and/or three-dimensional art. Emphasis in each area begins with fundamental techniques and includes design principles, the creative process, historical perspective, and contemporary trends. All students will be expected to do substantial outside-of-class work as they complete a portfolio in one or more of these areas for submission to the Advanced Placement program. It is recommended that this portfolio course be taken only after a student has taken at least one advanced art course that focuses on a particular medium. This course will run every day first semester and every other day second semester.

Advanced Art (Accelerated)

1 CREDIT (8897)

Departmental approval required

Students who wish to pursue intensive study in a particular medium, within the visual arts, beyond that offered in our regular offerings may take Advanced Art in a medium one time. In consultation with the instructor, the student in this course will develop a demanding course of study and artistic production. The student will be scheduled into a regular class section of a course in the particular medium of interest. Admission into this course will be reserved for those students who have demonstrated a sincere, significant interest in pursuing artistic excellence, and will be by departmental recommendation only.

Visual Art Capstone (Accelerated)

1 CREDIT (7702)

Departmental approval required
Satisfies the Senior Capstone requirement

Students who are proficient in one or more visual art mediums may choose to do a Visual Art Capstone for their senior capstone requirement. Each student will design a research-based visual art project to be presented on Capstone Day.

DRIVER EDUCATION

½ CREDIT (6000)

Students must be age 15 or above and hold a valid Learner's Permit. NEW HAMPSHIRE STUDENTS MUST BE 16 BEFORE THE LAST SCHEDULED CLASS.

Driver Education teaches the fundamentals of driving an automobile including proper and safe driving habits. The course consists of 30 hours of classroom instruction, six hours of observation, and six hours of behind-the-wheel driving time. Enrollments often exceed the capacity of the course. Those not offered a spot in the course will be placed on a waiting list based on the same criteria. If you request to be placed on the waiting list after the course has been scheduled and the waiting list created, you will be placed at the end of the waiting list without consideration of year of graduation or date of birth. If openings occur, students will be chosen from the waiting list and notified.

CAREER AND TECHNICAL EDUCATION

The Career and Technical Education department prepares students for both post-secondary education and the world of work. We provide educational opportunities covering industry- specific skill training and credentialing, general employability skills, academic and career skill integration, and personal enrichment to students from high schools across the region. Our students are prepared for current and future educational and workplace opportunities through hands-on learning, authentic workplace experiences, and classroom instruction.

Courses are offered in the following career clusters:

- Architecture/Construction
- Business and Management
- Hospitality and Tourism
- Human Services
- Transportation, Distribution, and Logistics

(TDL)

These courses provide important benefits to students including career awareness and exploration, applied learning of academic skills, and an array of other outcomes, such as positive habits of mind, strong thinking skills, and the opportunity to learn about oneself and others. Some of these courses also provide in-depth knowledge and experience in a specific career field. Many courses may be taken without prerequisites.

Career and Technical Education Capstone

Career and Technical Education Capstone (Accelerated)

1 CREDIT (7707)

Departmental approval required

This course is designed to allow students in the career and technical education department the opportunity to develop a Capstone project in their chosen field. Students will meet in a classroom every other day, where they will gain instruction and practice in research skills, oral communication skills, application of research to design, and the iterative process of prototyping, testing, researching, and redesigning their chosen project. On the alternative days, students will work with their CTE mentor/instructor working on their project design, testing, redesigning, and completing their project in their chosen field. They will present their work on Capstone Day.

Career Awareness

Career Exploration (Standard)

1 CREDIT (6010)

Career Exploration is designed to teach students how to engage in the career-planning process, focusing on the exploration phase. Students will be involved in hands-on activities across the Career and Technical Education's 16 career clusters to better understand themselves and how they may intersect with the world of work after college or immediately after high school. Students will partake in demonstrations, shadow different classes, and complete self-assessments to explore careers by utilizing an online navigation program and a Career Choices curriculum. They will document their learning and career plans by developing a career portfolio.

Work-Based Learning (Standard)

1 CREDIT (6012)
1 BLOCK/1 OR 2 SEMESTERS
2 CREDITS (6011)
2 BLOCKS/1 OR 2 SEMESTERS

Prerequisite: With WBL Coordinator approval

Work-Based Learning is a unique plan of education, integrating classroom study with planned and supervised work experience. It is a partnership between St. Johnsbury Academy and community employers that allows students to participate in related career awareness and work-experience programs. These services combine practical applications in the classroom with skills useful in the workplace and for future employment. Students have the opportunity to gain career experience, develop self-confidence, acquire necessary workplace readiness skills, and in some cases, earn a wage.

Architecture/ Construction

Bridges, housing, water, sewer, and power distribution systems are just a few examples of human-made structures and systems connected with our natural environment.

All must be designed, engineered, and constructed by people with the goals of sustainability and long-term durability as driving forces.

Introduction to Woodworking (Standard)

1 CREDIT (6200)
1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

In this introductory course, students will learn workplace safety by demonstrating the proper use of hand and power tools, safely operating powered machinery, and understanding OSHA standards for small shops. Students will explore project planning, basic design, wood selection, joinery and finishing techniques. This course is project oriented and students are responsible for the purchase of materials for personal projects.

Advanced Woodworking (Standard)

1 CREDIT (6201)
1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

Students will learn more advanced skills in the areas of furniture design, construction, and finishing. Techniques will include raised panel construction, dovetail joints, wood turning, inlay, and marquetry. Students will be responsible for purchasing much of their own material.

Fine Woodworking (Accelerated)

2 CREDITS (6202)
2 BLOCKS/1 SEMESTER

Prerequisites: Beginning Woodworking and Advanced Woodworking

Students will learn more advanced woodworking techniques such as mortis and tenon, dovetails and veneering. Students will explore working with hand tools and mastering machinery operations. Students will discover woodworking as an art form through design, wood selection, carving and lathe work. Projects are student driven or students may choose to take on custom orders.

Introduction to Electricity (Standard)

1 CREDIT (6211/6212)
1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

Students will become familiar with basic electrical principles such as Ohm's Law. Each student will acquire a basic knowledge of D.C. and A.C. circuitry, and design, wire, and analyze each circuit. Areas of study will include series and parallel circuits, combination circuits, switching circuits, use of meters, use of various power tools, residential services, appliance circuits, and blueprint reading. This course is an excellent course to strengthen skills for students contemplating entering other craft areas in the construction field. It provides a sound foundation for post-secondary study at either two or four-year colleges.

Residential/Industrial Electricity I (Standard)

4 CREDITS (6217/6218)
2 BLOCKS/2 SEMESTERS

Prerequisite: Introduction to Electricity
Open to Juniors and Seniors

Residential/Industrial Electricity provides advanced units of study in A.C. and D.C. circuits, motors, motor controls, conduit bending, advanced blueprint reading, and on the job training. Students participate in the State Apprenticeship program and earn credit toward their journeyman's license.

Students may be referred to Work-Based Learning by their instructor based on the student's meeting the program's technical proficiencies.

Residential/Industrial Electricity II (Accelerated)

4 CREDITS (6231/6232)

2 BLOCKS/2 SEMESTERS

Prerequisite: Residential/Industrial Electricity I

Residential/Industrial Electricity II provides advanced units of study in A.C. and D.C. circuits, motors, motor controls, conduit bending, advanced blueprint reading, and on-the-job training. Students participate in the State Apprenticeship program and earn credit toward their journeyman's license.

Students may be referred to Work-Based Learning by their instructor based on the student's meeting the program's technical proficiencies.

Introduction to Heating and Plumbing (Standard)

1 CREDIT (6300)

In this introductory course, students will learn and demonstrate the basic skills that are needed in the heating and plumbing fields. Students will be introduced to specific tools and materials utilized by professionals in the field. As the semester progresses, students will learn about HVAC systems and structures, refrigeration, compressors, basic electricity, metering devices, and piping principles. In addition, students will be introduced to plumbing experiences such as installing, maintaining, and repairing pipe systems. A hands-on approach will be an essential learning principle for this class.

Heating and Plumbing I (Standard)

4 CREDITS (6301/6302)

2 BLOCKS/2 SEMESTERS

Heating and Plumbing I provides students with an in-depth, hands-on experience with HVAC systems and Plumbing. Students will have the opportunity to work with industry specific materials in residential and commercial settings. Within the HVAC programming, students will have experiences with systems and structures, thermodynamics, refrigeration, basic electricity, and piping principles. Students also will experience Plumbing essentials such as installing, maintaining, and repairing different types of pipe systems; water distribution systems; pipes, valves, fittings and fixtures. Students will be introduced to the State Apprenticeship Plumbing program.

Heating and Plumbing II (Accelerated)

4 CREDITS (6301/6302)

2 BLOCKS/2 SEMESTERS

Heating and Plumbing II builds upon the foundational skills in Heating and Plumbing I and provides students with an in-depth, hands-on experience with HVAC systems and Plumbing. Students will have the opportunity to work with industry specific materials in residential and commercial settings. Within the HVAC programming, students will work with systems and structures, thermodynamics, refrigeration, basic electricity, and piping principles. Students will also continue working with Plumbing essentials such as installing, maintaining, and repairing different types of pipe systems; water distribution systems; pipes, valves, fittings, and fixtures. Students continue the State Apprenticeship Plumbing program with the goal of completing the Vermont Plumbing Apprenticeship Year 2 test.

Students may be referred to Work-Based Learning by their instructor based on the student's meeting the program's technical proficiencies.

Introduction to Building Trades (Standard)

1 CREDIT (6203)

1 BLOCK/1 SEMESTER

In this introductory course, students will learn the basic skills used in the construction industry. Students will be introduced to shop safety, hand and power tools, and construction math. As the semester progresses, students will learn construction techniques and systems such as: floor systems, wall and ceiling framing, roof framing and applications, stair construction, and basic flooring. This course will focus on teamwork and developing proper worksite communication skills.

Building Trades I (Standard)

4 CREDITS (6204)

2 BLOCKS/2 SEMESTERS

Open to Juniors and Seniors

This course provides students with a field-based experience which focuses on frame construction and building renovations. Students will learn how to plan and design building projects. Residential projects will include framing and sheathing, roofing, and the installation of windows and doors. Basic understanding of floor systems, interior walls, and ceilings will be demonstrated on local job sites. Students will experience professionals in the field when new construction sites are part of the curriculum. The course allows students to earn an industry-recognized credential from the National Center for Construction Education and Research (NCCER).

Students may be referred to Work-Based Learning by their instructor based on the student's meeting the program's technical proficiencies.

Building Trades II (Accelerated)

4 CREDITS (6206/6207)

2 BLOCKS/2 SEMESTERS

Open to Juniors and Seniors

Building Trades II provides advanced skills in carpentry and other related construction areas. Students will be introduced to these valuable skills and apply them when building or repairing residential structures using a variety of materials and tools. Students will have the opportunity to work "Hands-on" with projects in a field-based environment. In-depth Blueprint reading, building layout, and house framing are major concepts covered. The course allows students to earn an industry-recognized credential from the National Center for Construction Education and Research (NCCER).

Students may be referred to Work-Based Learning by their instructor based on the student's meeting the program's technical proficiencies.

Business and Management

Introduction To Business (Standard)

1 CREDIT (6410)

1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

This course provides students with insight into the basic foundations of both successful and unsuccessful businesses, allowing students to understand the various forms that an organization can take. Students examine the importance of the environmental, social, global, economic, and technological influences on business, culture, and the economy. Students will participate in business simulations, outline activities, and group projects to enhance problem-solving, decision-making, and team-building skills.

Sales and Marketing (Standard)

1 CREDIT (6421)

1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

Sales and Marketing (Accelerated)

1 CREDIT (6423)
1 BLOCK/1 SEMESTER

Departmental approval required

This course provides a foundation for understanding and applying the functions of sales and marketing within local and global economies, with a particular focus on the language of marketing, historical and current patterns and trends, economic considerations, and technological changes, opportunities, and considerations. Information is presented and explored through a variety of mediums, including chapter work, daily tasks, and small and large scale projects throughout the semester that utilize the skills of multiple styles of learning, addresses cultural components, and provides for real world application of content in a context that students can relate to.

Entrepreneurship (Standard)

1 CREDIT (6422)
1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

Entrepreneurship (Accelerated)

1 CREDIT (6424)
1 BLOCK/1 SEMESTER

Departmental approval required

This course provides a foundation for students to become knowledgeable about the fundamentals of business ownership, as well as the impact of entrepreneurs on society from multiple perspectives: business owners, politicians, scientists, artists, consumers, etc. Students are encouraged to make economic and social connections and use the information to explore the creation of new businesses or additions to existing businesses. Utilizing the information gathered students explore phases of businesses from product creation through finance to experience the process of writing a business plan.

Business Management (Accelerated)

1 CREDIT (6426)

Prerequisite: Accelerated Business Course or departmental approval

This course allows students to continue to enhance their business knowledge and explore business interests and topics by providing an overview of business management and administration. Topics to be introduced would be business ethics, law, and global awareness. Specific consideration paid to current issues and their impact on operations, ethics, teamwork, leadership, entrepreneurship, and the global marketplace. Students will be encouraged to make economic and social connections and analyze current local and global developments that have the potential for an impact on one or more areas of business.

Personal Finance (Standard)

½ CREDIT (6425)
1 BLOCK/1 SEMESTER

Personal Finance will emphasize the importance of educated financial decisions. This course is intended for all students and will introduce the skills that are necessary for financial success. Topics will include saving and budgeting, banking, payment types, credit scores, financing higher education, renting vs. owning, insurance and taxes, consumer protection, and investing. Upon completion of this course, students will receive a certificate of completion. Meets every other day.

Hospitality and Tourism

Restaurants and Food/Beverages Services

Essential Cooking Skills (Standard)

1 CREDIT (6510)
1 BLOCK/1 SEMESTER

This cooking class covers the full range of student goals, from those learning to cook for themselves to those aspiring to a career in the hospitality profession. Working in a professional kitchen and the classroom, students will learn the foundations of cooking through a range of categories: cooking methods, soups and stocks, vegetable cookery, meats and fish, pastas and other starches, simple baking to include breads and desserts. Students will build skills while learning kitchen safety and sanitation. Students will be introduced to hospitality service through school functions and other public events.

Culinary Arts Level I (Standard)

4 CREDITS (6521)
2 BLOCKS/2 SEMESTERS

This course introduces students to the foundational concepts, skills, and techniques in culinary arts, baking & pastry, and hospitality. This course provides hands-on experience, learning and practicing basic professional cooking techniques and baking methods. This course is an immersive two-semester, double block sessions, with one semester at The Hilltopper Restaurant and a second semester in the Streeter Commercial Bake Shop. The Culinary Arts Signature Program takes place within the Hilltopper Restaurant, where students will hone their knife skills and culinary techniques including identifying cuts of meat, seafood, and vegetables, while learning fundamental cooking methods such as grilling, roasting, baking, sautéing, steaming, and frying using fresh and local ingredients. Many of the items prepared will be served at the Hilltopper Restaurant. The semester culminates with a three-course or banquet buffet menu project that is created, prepared and served by the students. The Streeter Bake Shop houses the Baking & Pastry program with students learning foundational techniques in baking breads, both quick and yeast risen doughs, batters, pastry, restaurant quality desserts with a final challenge to design, bake and decorate a wedding cake. Culinary Arts Level 1 combines both theory and practical applications, emphasizing safety, teamwork, communication, time management, organization, and professional workplace conduct. Culinary Arts Level 1 will prepare students for introductory culinary certifications, such as ServSafe Food Handler, which is valuable for entry-level employment. Students are evaluated through hands-on skill assessments, written exams, and performance-based projects.

Culinary Arts Level II: Advanced Culinary Techniques & Hospitality Management (Accelerated)

4 CREDITS (6522)
2 BLOCKS/2 SEMESTERS

Prerequisite: Completion of Culinary Level I

Culinary Arts Level 2 is a continuation of foundational skills and focuses on advanced techniques, management skills, and industry-standard practices. The Culinary Arts Signature Program is designed for students interested in pursuing post-secondary hospitality education or direct food service

careers for culinary arts, and hospitality. The course consists of two semesters, with immersive, hands-on experiences in the Hilltopper Restaurant challenging students to elevate their proficiency and manage real-world culinary and hospitality situations at the Hilltopper Restaurant. Building on the skills learned in Level 1, this advanced course places a greater emphasis on refining techniques, menu planning, and introducing the fundamentals of culinary business operations. Culinary Arts Level 2 professional practices include advanced knife skills and butchery, advanced cooking techniques, menu development and cost control, service & hospitality management, entrepreneurship & business fundamentals, and leadership. Beyond the kitchen and classroom, we visit local farms, restaurants, food producers, and vendor food shows. The Culinary Level 2 culminating project is to design, cook, and serve a fine-dining, four-course tasting menu with a focus on seasonality, local sourcing, and sustainability. Students will take on leadership roles in planning, marketing, kitchen production and front-of-house operations. This course level aims to prepare students for advanced industry-recognized certifications in ServSafe Manager and the opportunity to earn five college dual enrollment credits through White Mountain Community College.

Human Services

Introduction to Human Services (Standard)

1 CREDIT (6610)
1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

In this introductory course to the Human Services career cluster, students receive an overview of the Human Services profession including social services, public safety, child development, early childhood education, health careers, geriatrics, social issues, career exploration, communication, goals, and decision making. One block each week is spent visiting area agencies and working on projects in the community.

Human and Professional Services I (Standard)

4 CREDITS (6600)
2 BLOCKS/2 SEMESTERS

Open to Juniors and Seniors

This course begins with the exploration of self and community, moving into the social issues of other cultures. Students will learn about human development, ethics, social issues, and conflict resolution. Students will have internships three days each week and are in the classroom two days each week. Internships are self-selected and provide the student with experience in at least two area agencies of their choice. May result in three college Human Services credits for qualified students. May earn three college credits per course from the Community College of Vermont.

Human and Professional Services II (Accelerated)

4 CREDITS (6601)
2 BLOCKS/2 SEMESTERS

Open to Juniors and Seniors

Build on skills learned in Human and Professional Services I with an emphasis on providing services to individuals and families in all development stages. Expands the exploration of social issues, ethics, conflict resolution, human development, criminal justice, and geriatric issues. Students serve internships three days each week and are in the classroom environment two days each week. Internships are self-selected and longer in length than Human and Professional Services I. Along with skill development, a secondary goal of these internships is to enhance student preparation for post-secondary life—career or college. May earn three college credits per course from the Community College of Vermont.

Transportation, Distribution, and Logistics (TDL)

Transportation, distribution, and logistics workers move people and products by road, air, rail, and water. They work as drivers, pilots, engineers, or captains; repair, maintain, design, or build the vehicles, trains, planes, and ships that move people and products; or work behind the scene to make sure the products and people get to the right place on time.

Introduction to Welding (Standard)

1 CREDIT (6806)
1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

In this introductory course to the Manufacturing career cluster, students are introduced to elementary practices of welding. Students explore basic welding types (SMAW, GMAW, GTAW, CRSW and Oxy-fuel welding), two types of metal cutting (Oxy-fuel and Plasma Arc), the basic welding symbols, and a weldment drawing, the basic techniques for material preparations. This course uses both group and individual projects and problem-based scenarios as instructional opportunities. Students practice general employability skills such as effective communication, interpersonal skills, and presentation skills. The course is recommended for students interested in Automotive Technology I.

Advanced Welding (Accelerated)

1 CREDIT (6807)
1 BLOCK/1 SEMESTER

Prerequisite: Introduction to Welding (Standard)
Open to Sophomores, Juniors, and Seniors

In this advanced course, students are introduced to advanced practices of welding. Students continue to develop competence in SMAW, GMAW, GTAW in all positions, develop skills needed for AWS flat certification in SMAW, understand the metallurgy of common metal for welding, explore GTAW for Stainless and Aluminum and thin metals, and become competent understanding welding symbols and interpreting weldment drawing. Students will also practice creating a welding project from estimating to building. This course uses both group and individual projects and problem-based scenarios as instructional tools. Students practice general employability skills such as effective communication, interpersonal skills, and presentation skills.

Introduction to Automotive Technology (Standard)

1 CREDIT (6910)
1 BLOCK/1 SEMESTER

Open to Sophomores, Juniors, and Seniors

In this introductory course, students will explore entry level automotive maintenance. Students will be introduced to workplace safety, engine diagnostics, exploration of suspension and brake systems, and introduction to electrical systems. Students will also explore minor body repair. The course is designed to prepare students for Auto Technology I.

Automotive Technology I (Standard)

4 CREDITS (6911/6912)
2 BLOCKS/2 SEMESTERS

Open to Juniors and Seniors

Automotive Technology I offers hands-on shop experience and problem-based learning in a fully equipped mobile equipment repair (mechanics) and/or collision-repair (auto body and painting) facility. Students will learn about areas of the automotive industry

as well as transferable skills that apply to automotive systems, oversee scheduling of appointments, ordering parts, managing stock items, assessing collision damage, and mixing and applying modern automotive finishes.

Automotive Technology I provides students with the knowledge and skills necessary to make informed decisions about pursuing a career in the Transportation, Distribution, and Logistics career cluster. This course is an excellent choice for all students who will need to understand and maintain their own vehicles and equipment or those who wish to follow this path to post-secondary education and employment.

Students may be referred to Work-Based Learning by their instructor based on the student's meeting the program's technical proficiencies.

Automotive Technology II (Accelerated)

4 CREDITS (6931/6932)

2 BLOCKS/2 SEMESTERS

Prerequisite: Automotive Technology I
Open to Seniors

In Automotive Technology II students focus their efforts in a specific career concentration continuing to build on the skills and knowledge learned in Automotive Technology I while focusing on skills and knowledge specific to their choice. Students will be encouraged to pursue further education, obtain ASE or ICAR credentials and/or seek an apprenticeship program in the industry.

Students may be referred to Work-Based Learning by their instructor based on the student's meeting the program's technical proficiencies.

APPENDIX

Procedure for Course Selection

With a wide range of courses and about one thousand students, arranging an overall schedule that enables students to achieve their desired goals within the limits of the daily schedule, available faculty, and facilities is a complex task that requires careful planning. The guidance office goes to great lengths to facilitate the scheduling process. To help enable this, the following timeline guides the process:

January
St. Johnsbury Academy begins the course selection process. Current juniors will meet with a guidance counselor to discuss course selections for the next school year and the options available in the context of their educational plans. Student course selections will be shared with families.

February
Current sophomores and freshmen will meet with a guidance counselor to discuss course selections for the next school year and discuss the options available in the context of their educational plans. Student course selections will be shared with families.

May
An initial schedule is distributed to each student for a final discussion with their family and to ensure that the proper courses are listed. Student schedules produced in May will not contain teachers' names or the time at which courses meet.

August 15
Teacher course assignments, and meeting times and locations are arranged over the summer by mid-August. Student schedules are finalized and academic course loads are balanced over the summer. Up until August 15 students have the unlimited ability to change their course selections. After this date, schedules become increasingly difficult to change.

After August 15
General Rules and Credit Requirements

- "Picking" of teachers and/or when a course meets is not allowed.
- Level changes MUST be discussed and approved by Department Chairs.
- We do not guarantee when a course will be taken (either block or semester)
  Class schedules are subject to change by block and / or semester over the summer.
- Assume all courses in the bulletin will be offered unless you hear otherwise.
- The Policy for appeals on schedules is as follows:
  Discuss with Department Chair; followed by the Director of Guidance.
- All students in the IS Program will be scheduled by the Director of Special Services and Case Managers.
- **Students will NOT be allowed to make changes to their schedule after August 15, 2025. This includes both Sem. 1 and Sem. 2 courses.**

First day of the semester
Students will receive their schedules, which include the course, location, and teacher name.

After Week 8 of either semester
No course changes may be made. If a course is dropped for any reason after week 8, the student will be denied credit in that course.

Communication among students, parents and guidance personnel is key to a successful course selection and schedule. Guidance counselors, advisors, students, and parents should be fully aware of the student's needs and each other's responsibilities. Senior year courses can be critical in the college admission process and we encourage seniors to take a challenging academic course load.

Scheduling Policies

- Freshmen must take eight credits, which must include Humanities, Health, a math course, and Biology. Most freshmen also take Introduction to Physical Education.
- Sophomores and juniors must take eight credits of study for the year If a student is enrolled in an AP class, they may take 7½ credits.
- Seniors must take at least seven credits, though they may take eight. Seniors who sign up for eight credits will not be allowed to drop to seven after the August 15 cutoff date.
- Students may take a fifth course in a semester if that course is Guided Studies, English as a Second Language, or a Performing Arts (acting, band, chorus, or dance) course. Students will not be allowed to drop the fifth course after the August 15 date.

Teacher/Time Request
Requests to change teachers are not honored. No changes are allowed solely for a change in the time a course is offered.

Driver Education
Driver Education during the school year is a highly desired option and is requested through the course selection process with their guidance counselor. Previous requests do not carry over to the next year and must be made again each year. Acceptance into Driver Education is based on year of graduation and date of birth. Those not offered a spot in the course will be placed on a waiting list based on the same criteria. If you request to be placed on the waiting list after the course has been scheduled and the waiting list created, you will be placed at the end of the waiting list without consideration of year of graduation or date of birth. If openings occur, students will be chosen from the waiting list and notified.

Student Schedule Appeal
Occasionally, special situations arise that do not fall under the guidelines above. These may lead a student to make a special request to appeal a scheduling decision. In that case, the first appeal must be made to the Department Chair, the second appeal must be made to the Director of Guidance, and the final appeal must be made to the Assistant Headmaster for Academics & Student Life.

SAMPLE *4-Year Course Selection*

Competitive College Preparatory

For those interested in attending highly competitive colleges and universities

FRESHMAN YEAR

HUMANITIES
Humanities (Accelerated)

SCIENCE
Biology (Accelerated)

MATHEMATICS
Algebra I (Accelerated)
Geometry (Accelerated)

LANGUAGE
First of 4 courses in a single language

HEALTH AND WELLNESS
Health
Introduction to Physical Education

SOPHOMORE YEAR

ENGLISH
AP Seminar or Literary Perspectives (Accelerated)

SOCIAL STUDIES
World Civilization Post-1500 (Accelerated) or
AP World/European History

SCIENCE
Physics (Accelerated)

MATHEMATICS
Algebra II (Accelerated)
Trigonometry (Accelerated

LANGUAGE
Second of 4 courses in a single language

Third of 4 courses in a single language

ELECTIVES
Combination of courses to make **one** full blocks — chosen to complement student's academic plan

JUNIOR YEAR

ENGLISH
AP Seminar or Rhetoric and Composition (Accelerated) or AP English Language

SOCIAL STUDIES
United States History (Accelerated or AP)

SCIENCE
Research Methods (Accelerated)

MATHEMATICS
Precalculus (Accelerated)

LANGUAGE
Fourth of 4 courses in a single language

ELECTIVES
Combination of courses to make **two or three** full blocks — chosen to complement student's academic plan

SENIOR YEAR

ENGLISH
Literature and Composition (Accelerated) or AP English Literature

SOCIAL STUDIES
AP Psychology or Microeconomics, AP United States Government and Politics

SCIENCE
AP STEM, Chemistry, or Elective: Digital Electronics or Civil Engineering and Architecture or Biotechnical Engineering

MATHEMATICS
AP Calculus AB or BC

ELECTIVES
Combination of courses to make **two or three** full blocks — chosen to complement student's academic plan

CAPSTONE
AP Research, Senior Capstone or Engineering Design and Development Capstone (Accelerated)

*Students wishing to take **AP courses** in a given subject area will need to take the appropriate **AP Prep courses** as electives.*

College Preparatory

For those interested in attending 4-year colleges and universities

FRESHMAN YEAR

HUMANITIES
Humanities (Accelerated/Standard)

SCIENCE
Biology (Accelerated/Standard)

MATHEMATICS
Algebra I (Accelerated/Standard)

LANGUAGE
First of 3 courses in a single language

ELECTIVES
Chosen to complement academic plan

HEALTH AND WELLNESS
Health
Introduction to Physical Education

SOPHOMORE YEAR

ENGLISH
AP Seminar or Literary Perspectives (Accelerated/Standard)

SOCIAL STUDIES
World Civilization Post-1500 (Accelerated/Standard)

SCIENCE
Physics (Accelerated/Standard)

MATHEMATICS
Geometry (Accelerated/Standard)

LANGUAGE
Second of 3 courses in a single language

ELECTIVES
Chosen to complement academic plan

Combination of courses to make **two** full blocks — chosen to complement student's academic plan

JUNIOR YEAR

ENGLISH
AP Seminar, AP English Language, or Rhetoric and Composition (Accelerated/Standard)

SOCIAL STUDIES
United States History (Accelerated/Standard)

SCIENCE
Research Methods (Accelerated/Standard)

MATHEMATICS
Algebra II (Accelerated/Standard)

LANGUAGE
Third of 3 courses in a single language

ELECTIVES
Chosen to complement academic plan

Combination of courses to make **two** full blocks — chosen to complement student's academic plan

SENIOR YEAR

ENGLISH
AP Research, AP English Literature or Literature and Composition (Accelerated/Standard)

SOCIAL STUDIES
AP or Accelerated Electives

SCIENCE
Electives

MATHEMATICS
Trigonometry (Accelerated/Standard)

ELECTIVES
Combination of courses to make **two or three** full blocks — chosen to complement student's academic plan

CAPSTONE
Senior Capstone or Engineering Design and Development Capstone (Accelerated)

SAMPLE *4-Year Course Selection*

Biomedical and Health Science

For those interested in attending Biomedical and Health Sciences programs at 4-year colleges and universities

FRESHMAN YEAR

HUMANITIES
Humanities (Accelerated/Standard)

SCIENCE
Biology (Accelerated/Standard)

MATHEMATICS
Algebra I (Accelerated/Standard)

LANGUAGE
First of 3 courses in a single language

ELECTIVE
Chosen to complement academic plan

HEALTH AND WELLNESS
Health
Introduction to Physical Education

SOPHOMORE YEAR

ENGLISH
AP Seminar or Literary Perspectives (Accelerated/Standard)

SOCIAL STUDIES
World Civilization II Post-1500 (Accelerated/Standard)

SCIENCE
Physics (Accelerated/Standard)

MATHEMATICS
Geometry (Accelerated/Standard)

LANGUAGE
Second of 3 courses in a single language

ELECTIVES
Chosen to complement academic plan

Combination of courses to make **two** full blocks — chosen to complement student's academic plan

JUNIOR YEAR

ENGLISH
AP Seminar, AP English Language and Comp (Accelerated), or Rhetoric and Composition

SOCIAL STUDIES
United States History (Accelerated/Standard) or AP U.S. History

SCIENCE
Research Methods (Accelerated/Standard)

MATHEMATICS
Algebra II (Accelerated/Standard)

LANGUAGE
Third of 3 courses in a single language

ELECTIVES
Chosen to complement academic plan

Combination of courses to make **two or three** full blocks — chosen to complement student's academic plan, see sidebar

SENIOR YEAR

ENGLISH
AP English Literature and Composition (Accelerated) or Literature and Composition (Accelerated/Standard)

SOCIAL STUDIES
Electives or AP U.S. Government and Economics or AP Microeconomics

SCIENCE
Chemistry — Accelerated or AP or other electives

MATHEMATICS
Trigonometry (Accelerated/Standard)

ELECTIVES
Combination of courses to make **two or three** full blocks — chosen to complement student's academic plan, see below

CAPSTONE
Senior Capstone or Engineering Design and Development Capstone (Accelerated)

Fine Arts Major or Art School

For those interested in attending a 2-year or 4-year art school or majoring in art at a university

FRESHMAN YEAR

HUMANITIES
Humanities (Accelerated/Standard)

SCIENCE
Biology (Accelerated/Standard)

MATHEMATICS
Algebra I (Accelerated/Standard)

LANGUAGE
First of 3 courses in a single language

FINE ARTS*
Introductory Level Course

HEALTH AND WELLNESS
Health
Introduction to Physical Education

SOPHOMORE YEAR

ENGLISH
AP Seminar or Literary Perspectives (Accelerated/Standard)

SOCIAL STUDIES
World Civilization Post-1500 (Accelerated/Standard)

SCIENCE
Physics (Accelerated/Standard)

MATHEMATICS
Geometry (Accelerated/Standard)

LANGUAGE
Second of 3 courses in a single language

Third of 3 courses in a single language

ELECTIVES
Combination of courses to make **two** full blocks — chosen to complement student's academic plan

JUNIOR YEAR

ENGLISH
AP Seminar or Rhetoric and Composition (Accelerated/Standard)

SOCIAL STUDIES
United States History (Accelerated/Standard)

SCIENCE
Research Methods (Accelerated/Standard)

MATHEMATICS
Algebra II (Accelerated/Standard)

FINE ARTS*
Combination or courses to make **four** full blocks — choice based on student's art concentration

SENIOR YEAR

ENGLISH
AP English Literature and Composition (Accelerated), or Literature and Composition (Accelerated/Standard)

SOCIAL STUDIES
Electives

SCIENCE
Elective example: Anatomy and Physiology

MATHEMATICS
Trigonometry (Accelerated/Standard)

FINE ARTS*
Combination of courses to make **two or three** full blocks — chosen to complement student's academic plan

CAPSTONE
Senior Art Capstone

Students will choose courses based on their desired concentration:* ***Music/Theater* *or* ***Visual Arts.***

SAMPLE *4-Year Course Selection*

Career and Technical Education: Post-Secondary or Immediate Employment

For those interested in attending a 2-year or 4-year technical college or university or seeking employment

FRESHMAN YEAR

HUMANITIES
Humanities (Basic, Standard, or Accelerated)

SCIENCE
Biology (Basic, Standard, or Accelerated)

MATHEMATICS
Pre-Algebra and Algebra I

TECHNICAL EDUCATION
Career Exploration

HEALTH AND WELLNESS
Health
Introduction to Physical Education

SOPHOMORE YEAR

ENGLISH
Literary Perspectives (Accelerated/Standard)

SOCIAL STUDIES
World Civilization (Accelerated/Standard)

SCIENCE
Physics (Basic, Standard, or Accelerated)

MATHEMATICS
Geometry

TECHNICAL EDUCATION
Intro Courses

ELECTIVES
Combination of courses to make **two** or **three** full blocks — chosen to complement student's academic plan

JUNIOR YEAR

ENGLISH
Rhetoric and Composition (Accelerated/Standard) or Tech Comm. I

SOCIAL STUDIES
United States History (Basic, Standard, or Accelerated)

SCIENCE
Research Methods (Basic, Standard, or Accelerated)

MATHEMATICS
Algebra II

TECHNICAL EDUCATION
Combination or Pathway courses to make **four** full blocks — choice based on student's academic plan.

SENIOR YEAR

ENGLISH
Literature and Composition (Accelerated/Standard) or Technical Communications II

SOCIAL STUDIES
Electives

SCIENCE
Elective

MATHEMATICS
Trigonometry

TECHNICAL EDUCATION
Combination of Pathway courses to make **four** full blocks — chosen to complement student's academic plan (may include co-op second semester).

NOTE:
Students may take an approved Learning Support Program, English as a Second Language course, or Performing Arts course as a fifth course each semester. Freshman and Sophomore students not taking a 5th course will be assigned automatically to a Study Block.

Accreditation

St. Johnsbury Academy is a member of the New England Association of Schools and Colleges, the National Association of Independent Schools, the Independent Schools Association of Northern New England, and the Vermont Independent Schools Association.

The Academy is fully accredited by the New England Association of Schools and Colleges and has been approved by the Vermont State Department of Education. In addition, the Academy is a member of the College Entrance Examination Board and has been designated by that body as an Examination Center.

St. Johnsbury Academy admits students of any sex, race, color, religion, national or ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of sex, race, color, religion, handicap, sexual orientation, national or ethnic origin in the administration of its education policies, admission policies, scholarship programs, and athletic and other school administered programs.

The Academy shall maintain a written policy on student records that is consistent with the Family Education Rights and Privacy Act.

The student must be capable of participating in a full-time academic program, viz., four academic classes per day, with support classes as needed. The student will be satisfactorily promoted by: the public Local Education Agency or equivalent under state regulations; an approved home school plan; or a recognized or approved independent school or equivalent under state regulations; for other non-approved private schools, we will require additional information regarding the curriculum addressed and student performance. The student will be between the ages of 13 and 19 years of age at the time of enrollment or between the ages of 13 and 21 for students who are eligible for special education.

The Vermont State Department of Education in Montpelier requires Vermont private schools to publish the following statement:

16 VSA 166 Approved independent schools

(b) Approved independent schools. On application, the state board shall approve an independent school which offers elementary or secondary education if it finds, after opportunity for hearing, that the school provides a minimum course of study and that it substantially complies with the board's rules for approved independent schools. Except as provided in subdivision (6) of this section, the board's rules must at minimum require that the school has the resources required to meet its stated objectives, including financial capacity, faculty who are qualified by training and experience in the areas in which they are assigned, and physical facilities and special services that are in accordance with any state or federal law or regulation. Approval may be granted without state board evaluation in the case of any school accredited by a private, state or regional agency recognized by the state board for accrediting purposes.

(1) On application, the state board shall approve an independent school which offers kindergarten but no other graded education if it finds, after opportunity for hearing, that the school substantially complies with the board's rules for approved independent kindergartens. The state board may delegate to another state agency the authority to evaluate the safety and adequacy of the buildings in which kindergartens are conducted, but shall consider all findings and recommendations of any such agency in making its approval decision.

(2) Approvals under this section shall be for a term established by rule of the board but not greater than five years.

(3) An approved independent school shall provide to the parent or guardian responsible for each of its pupils, prior to accepting any money for that pupil, an accurate statement in writing of its status under this section, and a copy of this section. Failure to comply with this provision may create a permissible inference of false advertising in violation of 13 VSA 2005.

(4) Each approved independent school shall provide to the commissioner on October 1 of each year the names and addresses of its enrolled pupils. Within seven days of the termination of a pupil's enrollment, the approved independent school shall notify the commissioner of the name and address of the pupil. The commissioner shall forthwith notify the appropriate school officials as provided in section 1126 of this title.

(5) The state board may revoke or suspend the approval of an approved independent school, after opportunity for hearing, for substantial failure to comply with the minimum course of study, for failure to comply with the board's rules for approved independent schools, or for failure to report under subdivision (b)(4) of this section. Upon revocation or suspension, students required to attend school who are enrolled in that school shall become truant unless they enroll in an approved public school, approved or recognized independent school or approved home instruction program.

(6) This subdivision applies to an independent school located in Vermont which offers a program of elementary or secondary education through correspondence, electronic mail, satellite communication or other means and which, because of its structure, does not meet some or all the rules of the state board for approved independent schools. In order to be approved under this subdivision, a school shall meet the standards adopted by rule of the state board for approved independent schools which can be applied to the applicant school and any other standards or rules adopted by the state board regarding these types of schools. A school approved under this subdivision shall not be eligible to receive tuition payments from public school districts under chapter 21 of this title. However, a school district may enter into a contract or contracts with a school approved under this subdivision for provisions of some education services for its students.

Disclaimer

The courses and curricula described in this catalog, and the teaching personnel listed herein, are subject to change at any time by official action of St. Johnsbury Academy.

The statements in this catalog are for information only and in no way constitute a contract between the student and St. Johnsbury Academy.

St. Johnsbury Academy reserves the right to change any regulation or requirement at any time.

CHARACTER | INQUIRY | COMMUNITY

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