



**WILLISTON**  
NORTHAMPTON SCHOOL

# **COURSE OF STUDIES 2023-24**

# ACADEMICS AT WILLISTON

---

The academic program at the Williston Northampton School is designed to create a rigorous academic environment that inspires students to develop a wide range of intellectual interests and pursuits. Our core diploma requirements are enhanced by a rich and diverse elective program, enabling students with varied interests and strengths to find challenge and inspiration in their academic and artistic work.

The crucial relationship between dedicated and talented teachers and eager and interested students lies at the heart of our academic program. This relationship informs what happens in our classes, which are designed to emphasize collaboration and discussion. In the classroom, ideas are scrutinized, and opinions are shared in an atmosphere that promotes an open exchange among students and faculty and emphasizes the value and the beauty of thinking and creating. Our most immediate goal is to prepare our students well for their college careers, but we recognize that our broader and more important responsibility is to establish in our students an appreciation for the joys and complexities of learning that we hope will continue throughout their adult lives.

— Kim Polin, Academic Dean

## CONTENTS

---

Graduation Requirements .....	3
Academic Policies.....	4
Academic Support .....	8
Special Programs .....	9
English Courses .....	11
Mathematics Courses .....	15
Science Courses.....	21
Language Courses.....	28
History & Global Studies Courses .....	35
Visual & Performing Arts Courses.....	42
Middle School Courses .....	51

---

# GRADUATION REQUIREMENTS

---

In order to receive a diploma, a student must complete 57 academic credits in courses offered at the ninth through 12th grade level. A yearlong course receives three credits, and a trimester course receives one credit.

The 57 credits must include:

## **ENGLISH: 12 credits**

Students must be enrolled in an English course every trimester (ELL courses qualify).

## **MATHEMATICS: 9 credits**

This must include Algebra I, Geometry, and Algebra II; most students go beyond these requirements.

## **SCIENCE: 6 credits**

Three credits must be a yearlong physical science (Physics or Chemistry) and three credits must be a yearlong life science (Biology). Most students go beyond these requirements.

## **LANGUAGE: 6 sequential credits**

Each student must complete at least six credits in the same language during grades nine through 12. Students for whom English is not a first language need not fulfill credits in this department. Many of the most competitive colleges and universities either recommend or require at least three years of continuous language study. As a result, the Williston Northampton College Counseling Office strongly recommends that students study a language through at least the third level.

## **HISTORY & GLOBAL STUDIES: 8 credits**

Four-year students who enroll at the school for the ninth grade are required to complete the humanities program in the ninth grade. All students must complete the equivalent of World History (10th grade) and U.S. History (11th grade). Two- and three-year students must also take two additional history credits; one of the two must be a religion or philosophy course (6700 level).

## **VISUAL & PERFORMING ARTS: 3 credits**

Two-, three-, and four-year students must complete three credits. Students are urged to select from offerings both in the studio/performance courses and in the visual arts courses.

Note: Students, parents, and faculty advisors are advised to check the distribution requirements of particular colleges in which students may be interested, since requirements and recommended course programs vary.

## **ADDITIONAL DIPLOMA REQUIREMENTS:**

To receive a diploma, students must also:

- Enroll and receive a passing grade in all courses taken senior year (including five courses in the third trimester, each worth one credit)
- Exhibit positive citizenship
- Continue regular participation in the afternoon programs
- Maintain attendance through graduation ceremonies

Diplomas are granted on the voted recommendation of the faculty prior to graduation and confirmed by a vote of the Board of Trustees. Waiver of any diploma requirement may be granted only by the Head of School or his designated representative, the Academic Dean, the College Counselor, and, when waiver of a specific course is involved, the Department Head.

Seniors, including postgraduates, who are in jeopardy of failing a yearlong course, or who have failed a first trimester course, may be asked to withdraw from the school at the end of the fall trimester.

# ACADEMIC POLICIES

---

## **COURSE LOAD**

Students in grades nine through 12 are expected to take five courses each trimester, and students should expect about 45 minutes of homework from each class every day. Occasionally, a student might be permitted to take six courses for a trimester, but only after approval by the Academic Dean.

## **ADVISING & PLACEMENT**

When a student enters Williston at the Upper School level, an academic program is designed by the Academic Office after review of the student's records and any notes made by an admission officer during the admissions process.

For returning students in both the Middle and Upper Schools, the academic program is drawn up initially by the student and the student's faculty advisor and then reviewed by the department heads and Academic Dean. Students are advised to talk with their teachers about course choices and placement, and parents are urged to participate early in the process through consultation with the faculty advisor in April and May.

In April, the academic departments and the Middle School faculty provide the Academic Dean with the names of those students who are recommended for placement in honors and/or Advanced Placement (AP) sections. While the school endeavors to respond to legitimate requests for specific courses and to keep students and parents informed about the status of requests for honors and AP courses, placement in these courses is ultimately made by the Academic Dean in consultation with the academic departments.

In the Upper School, there are sometimes more courses offered in a trimester than will actually be taught. For most courses, it is necessary to have a minimum enrollment.

Please check the distribution requirements of particular colleges in which students may be interested, as requirement and recommended course programs vary.

## **AP COURSES (UPPER SCHOOL)**

All AP courses follow approved syllabi, which prepare students for the AP Exam in May. Students who enroll in an AP course should expect to take the AP Exam. If the student would like to opt out of an exam, they must complete a form with the Academic Office, which is signed by the advisor, AP Teacher, and College Counselor. Families are billed for the cost of each AP Exam.

## **ADD/DROP (UPPER SCHOOL)**

At the beginning of the fall trimester (for yearlong courses) and at the beginning of each trimester (for trimester electives), an Upper School student may use the established course change procedure to withdraw from a course. No record of the course will appear on the transcript if the withdrawal occurs by the day before interim comments are recorded in the term that the course begins. With the exception of these time periods, all withdrawals are recorded Withdrawn/Passing or Withdrawn/Failing on the transcript. No requests for withdrawal from a course may be considered or approved more than seven class days after interim comments are recorded.

Except under the most unusual of circumstances, students may not enter a course later than seven class days after the beginning of the course. A change in course level, for example from French III Honors to French III, would be an exception to this policy so long as the established course change procedure is followed.

## **GRADE REPORTS**

The school year consists of three trimesters with formal numerical grades recorded at the end of each trimester. Interim comments and letter grade ranges for all students may also be recorded at the midpoint of a particular trimester. Interim and trimester grades and comments are made available electronically to parents, students, and advisors on Veracross. For students whose grades are below 70, comments from teachers will be posted at the end of each trimester.

## **ATTENDANCE (UPPER SCHOOL)**

Students are expected to attend all of their classes, and to arrive to class on time. Three latenesses in a single trimester in any combination of commitments are equivalent to a unit, and a lateness of more than 15 minutes is typically considered as an absence. Any student who misses 8 or more class meetings of a class in a single trimester may be subject to Pass/Fail rather than numeric grades, or could face loss of credit in the class.

## **ACADEMIC STANDING**

### **Promotion Standards**

Upper School: For promotion from ninth to 10th grade, a student must have successfully completed 12 credits, including three credits in ninth grade English. For promotion from 10th to 11th grade, a student must have successfully accumulated 27 credits, including three credits in 10th grade English. For promotion from 11th to 12th grade, a student must have successfully accumulated 42 credits, including three credits in 11th grade English.

In order to receive a Williston diploma, a student must complete 57 academic credits in courses offered at the ninth through 12th grade level. This includes credits transferred from other schools. Williston accounts for these credits but does not display other schools' data on its transcript.

### **Academic Probation**

#### **Upper School**

For any student with a full load of five courses, a trimester grade report that includes two grades lower than 70 or one grade lower than 60 will result in the status of academic probation. A student who is carrying only four courses will be placed on academic probation with one grade below 70. If the student's grades at the end of the following trimester are not sufficiently improved for removal from academic probation status, the student will be permitted to continue at Williston only at the discretion of the Head of School and the Academic Dean. Each student who is placed on academic probation will meet with their teachers, advisor, and the Academic Dean to formulate an action plan. The student and the student's parents will be notified promptly of the probation, as well as the features of any assistance plan.

Seniors, including postgraduates, who are in jeopardy of failing a yearlong course or who have failed a first trimester course, may be required to withdraw from the school at the end of the fall trimester.

#### **Middle School**

Students' academic and social lives are carefully monitored by Middle School faculty and the Middle School Director. When concerns arise, contact is made between school and home. Any student whose trimester report includes two grades lower than 70 shall be placed on academic probation. A student on probation will meet with their parents and teachers, and the Middle School Director. The goal of that meeting will be to formulate a plan to assist the student.

If the student remains on academic probation at the end of the next term, the student will be permitted to continue at Williston only by vote of the faculty.

## **ACADEMIC HONORS**

The passing and college recommending grade at Williston is 60. Qualifications for Upper School honor roll are as follows:

- Honors: minimum grade point average of 87
- High Honors: minimum grade point average of 92

Honors designations are based on weighted trimester grade point averages. All honors and advanced placement courses receive a five-point bonus in the grade point average only.

### **Special Academic Honors**

Cum Laude Society: The highest honor for a student is election to the Cum Laude Society, a national organization that recognizes high academic achievement in independent secondary schools. Students eligible for election are those seniors who, in the judgment of the faculty membership, combine academic excellence and achievement with honorable citizenship, sound character, and active participation in school life.

Academic dishonesty resulting in dean's warning or probation or social misconduct resulting in probation may render a student ineligible for election to the Cum Laude Society. Violations of Williston's Honor Code are incompatible with the Society's values of honorable citizenship and sound character.

## **PRIZES & AWARDS**

The Upper School awards numerous endowed book prizes for academic achievement at the awards assembly. Also presented at this time are the major class prizes for outstanding achievement in all areas of school life. These major prizes include:

- The Bowdoin Book Prize (Grade 9)
- The Yale College Book Prize (Grade 9)
- The Williams Book Prize (Grade 10)
- The Smith College Book Prize (Grade 10)
- The Harvard Book Prize (Grade 11)

- The Dartmouth Book Prize (Grade 11)
- The Yale/Granniss Book Prize (Grade 11)

Twelve senior prizes are awarded at graduation. The top three are the Valedictory Prize for the first scholar known as the Archibald V. Galbraith Prize, and the Sarah B. Whitaker Award (the White Blazer) and the Joseph Sawyer Memorial Prize for the two most exemplary students in the graduating class.

## **ACADEMIC INTEGRITY**

### **Plagiarism**

Plagiarism is a form of academic dishonesty. Using ideas, words, phrases, and/or designs generated by anyone or anything other than the student without giving credit is prohibited. This includes both copying and pasting and the use of materials that are generated or edited by technological means. All work turned in (be it written, oral, artistic, or programmed for a computer) is to be the student's own, except where otherwise credited. Students are sometimes encouraged to make references to other works, but these references (including individual ideas, words, phrases, and/or designs) must be credited properly. Internet material must be credited in the same way as any other reference source. The use of translation websites is prohibited by the Language Department and the English Department. Any outside help (sources, proofreading, typing, or copying of another's work) that a student has used in preparation for a written, oral, or artistic work should be noted as such before the assignment is turned in for a grade. For written work, teachers often use a plagiarism detection program. Similarly, any questions that a student might have about plagiarism should be asked before a particular work is turned in to be graded.

### **Cheating**

Cheating is not tolerated. Students who give or receive information or otherwise cheat on assignments will be disciplined and are subject to probation, suspension, or separation from the school.

### **Ethics of Computer Use**

Any student who writes and/or uses a program for deceitful, malicious, or illegitimate intent or effect will be considered to be in violation of a major school rule. Please refer to the Acceptable Use Policy in the Student Handbook.

# ACADEMIC SUPPORT

---

Williston's Center for Academic Success provides services to meet a broad range of support needs. Our Director of Academic Support works with students, parents, advisors, teachers, and the Academic Dean to coordinate appropriate levels of academic support for students who require or request it. A summary of services is provided below; for a full description and our support practices, please see our Student Handbook and website at [www.williston.com/academics](http://www.williston.com/academics).

## **Teacher Extra Help & Peer Tutoring**

*Available to all students*

All students are encouraged to take advantage of extra help meetings with teachers both individually and in our subject-specific support centers (see below). These sessions may be scheduled during the school day or evening study hall. Students may also connect to other qualified students for assistance through Areté, Williston's peer-tutoring program.

## **The Writing Center**

*Available to all students*

The Writing Center offers one-on-one instruction to students who wish to improve their writing skills. The center is staffed by members of the English department and a well-trained group of student tutors.

## **The Math Resource Center & Science Resource Center**

*Available to all students*

These centers offer assistance by faculty and by student tutors selected by the faculty in all levels of our mathematics and science curricula.

## **Academic Strategy Documentation**

*Available to students with professionally documented learning needs*

For students with neuropsychological or psychoeducational testing, the Director of Academic Support reviews and discusses the documentation with families, and drafts a strategy document in collaboration with each student's family. This document is shared with teachers to help with the provision of appropriate educational strategies. The school also maintains a list of outside testing providers for families wishing to update or pursue new testing.

## **Academic Strategies Tutorial Class**

*Available to any student for a fee*

Students electing to join the Academic Strategies Tutorial Class will meet with an Academic Support staff member in four small-group classes in a two-week cycle to receive specific, targeted instruction to build note-taking, study, and organizational skills. Topics of the class include homework planning, study strategies, note-taking, reading, and technology. Students in the Academic Strategies class will receive regular written feedback on their use of strategies and academic success, which will also be shared with parents and other teachers.

Students must be enrolled in the class by the Director of Academic Support prior to the start of each trimester. Students who are referred to the Academic Strategies Tutorial after the first two weeks of a given trimester may be enrolled at a pro-rated fee on a space-available basis.

## **Subject Area Tutors**

*Available to any student for a fee*

Any student, with or without academic testing, who requires subject-area academic support may request a tutor. These tutors are paid for by the family, but are vetted by Williston and can work with students on campus before or after school or during students' free periods. Parents may request a tutor by contacting the Director of Academic Support.

## **Laboratory for Academic Success Evening Study Hall**

*Available to any boarding student for a fee*

In this dedicated study space held during evening study hall, faculty supervise and support students. The low teacher-student ratio allows every student to get customized attention and assistance to help them succeed.

# SPECIAL PROGRAMS

---

## **Honors Williston Scholars**

The Williston Scholars program is an honors class that allows students to pursue their individual academic and creative passions through a trimester of directed project work in a field of interest. Students in each department-specific Williston Scholars class engage as a cohort in self-chosen research projects under the close mentorship and instruction of a Williston faculty member. These classes meet in a class period like any other class and receive the same credit (1 credit per term). Students are guided through the steps of project development, research, implementation, and, ultimately, presentation. Students also connect with content experts both inside the school and out, drawing resources from the intellectual wealth of the Pioneer Valley's colleges and universities. Students with exemplary projects will be eligible for special recognition and departmental honors. Students are allowed to repeat Williston Scholars classes in the same subject at the discretion of the teacher. Honors Williston Scholars courses are offered in all academic departments.

## **Concentrations**

Williston offers our most passionate and motivated students the opportunity to sharpen the focus of their high school coursework by fulfilling the requirements of an academic "concentration" in one of five areas of study. Concentrations require that students complete an Honors Williston Scholars project along with a variety of other curricular and co-curricular subject-specific activities as determined by the associated academic department(s). Students who successfully meet the departmental criteria will have the concentration listed on their Williston transcript. Williston currently offers the following five concentrations:

- Visual Arts
- Performing Arts
- Humanities (offered jointly by the History & Global Studies and English Departments)
- Language
- STEM (offered jointly by the Math and Science Departments)

Please visit <https://www.williston.com/concentrations> to learn more about the requirements for each concentration and steps for applying for the designation on your transcript. For questions, please reach out to the department chair for the corresponding concentration.



# ENGLISH

The narrator of an Isaac Babel short story says about the writing of fiction, “No iron can pierce the heart with such force as a period put just at the right place.” This level of appreciation for language is vital to English classes at Williston, where we ask students to pay close attention to the texts they read and to care deeply about the writing they craft. In our seminar-style discussions, students also learn how to question thoughtfully and to speak purposefully. Analytical and imaginative skills grow from the confluence of these practices in reading, writing, and speaking, and, as a result, students ultimately connect more deeply with themselves and those around them.

Williston’s English faculty help students internalize the skills needed to be strong observers and communicators, and our classrooms serve as rich, yet comfortable arenas for risk-taking. The sophistication students gain from the challenges posed by their classmates and English teachers, though, is enhanced by the luxury we feel in being able to tap into the resources of the Five Colleges. Whether it is attending a poetry reading at Smith College or viewing a Shakespeare and Company production of *Hamlet* at the University of Massachusetts, our students appreciate the opportunity to supplement their work in the classroom with the vibrant cultural and academic richness that makes our educational community distinct.

In each of our English courses, students read a balance of genres, examining the way form affects meaning, and they encounter a wide range of subject matter. Students are offered appropriate analytical challenges at each grade level, as well as developmentally relevant themes and essential questions that center on the issue of what it means to be a human being in a complex world. Analytical writing assignments will often ask students to understand a text as a whole, while writing deeply about a small, ambiguous moment; this depth of analytical examination helps students gain the solid foundation needed for lengthy writing assignments in college. As students move to upper-level English courses, they also gain greater facility with incorporating outside sources into their own analysis, and this reading of literary criticism inevitably informs their writing of the same in any essays that follow.

Creative assignments in each course ask students to focus on “showing” scenes clearly with vivid details, absorbing the skills of the writers they study, and to carefully consider character motivations, obstacles, and vulnerabilities. Personal essays at each level help students gain a strong yet natural voice in expressing opinions or narrating stories from meaningful moments in their lives. To allow students to find an audience for their work, our department and school programs offer opportunities for students to publish pieces in our literary magazine, newspaper, or community blogs, and we also create forums for public readings, allowing students to engage even more deeply with the words they choose and the sentences they construct. Along with metacognitive writing assignments, where students reflect on their process and growth as writers, all of our reading and writing opportunities encourage the habits of caring about and paying attention to language, with an overarching goal of attempting to understand and express what is “true” about the human experience.

## ENGLISH 2200 (9)

### YEARLONG COURSE

This foundational course focuses on building analytical skills to help students learn how to read carefully, to ask important questions of the texts they study, and to write in response to those works. Personal essay assignments allow students to gain confidence in discovering their voices, and creative projects allow students to discover the joys and challenges of manipulating language to craft imaginative scenes. Storytelling is a main focus in English 2200, and texts in the course also address questions of the self in relation to community and family, such as *The House on Mango Street*, *The Catcher in the Rye*, and Shakespeare's *Romeo and Juliet*.

## ENGLISH 2300 (10)

### YEARLONG COURSE

This course builds on the skills gained in English 2200, beginning with an in-depth study of short fiction and the analytical essay that culminates in students' completion of the Sophomore Writing Project. In the winter trimester, students study the challenging language and themes of Shakespeare and Sophocles, complemented by personal and creative writing as well as dramatic exercises. The spring prepares students for the demands of junior year analysis with explorations of British and American poetry and novels such as *Frankenstein* and *Never Let Me Go*. The course continues the exploration of human nature, studying identity in texts where the self is cast into the role of misfit or outsider.

## ENGLISH 2400 (11)

### YEARLONG COURSE

This course explores a rich array of American literature, complementing students' study of U.S. History in the junior year. The focus of the writing is largely analytical, and teachers challenge students to provide much greater depth and sophistication in their essay content and presentation as they build on the solid foundation students gain in English 2300. Creative and personal essays continue to complement analytical assignments, while literary criticism figures more prominently as an aid to understanding texts from a variety of perspectives; this study of criticism also adds to students' own analytical writing skills. To explore American-themed questions related to freedom and individuality, conformity, or the American Dream, texts may include works by authors such as Coates, Fitzgerald, Miller, Chopin, O'Connor, Faulkner, Morrison, Dickinson, Whitman, Kesey, and Whitehead.

## 2490 AP ENGLISH LANGUAGE (11)

### YEARLONG COURSE

- Application required

This course is an advanced-level study of American Literature for juniors who have the analytical skills and intellectual curiosity necessary for a sophisticated examination of literature and language. Students should be passionate about reading and discussing challenging texts, and they should be prepared to write a great deal and in a variety of forms, including in-class essays. In preparation for the AP Exam in May, students will keep their eyes trained on the way authors use language, especially essayists' use of rhetorical strategies. To apply for this course, students must receive a recommendation from their 10th grade teacher. Summer work includes reading three novels.

## ENGLISH 2500 (12)

### YEARLONG COURSE

This course begins with students expressing themselves through personal essays, "snapshots," vignettes, and memoirs. Over the course of the first trimester, students build portfolios of their work, providing a rich variety of writing in support of potential college essays. Students examine models of essay style and structure from a range of writers. Through this advanced study of language and the craft of storytelling, students develop strong individual voices and compelling personal narratives.

In the winter trimester, students will study a particular genre or theme, honing their skills for the demanding and sophisticated work of college-level analysis. Texts may include *Hamlet*, *The Stranger*, and *Exit West*.

The challenge of the first two trimesters prepares students well for the spring, where the focus will shift toward more independent work based on students' specific interests in literature and writing. This senior capstone allows students to craft a project with the help of their teachers and to present their work to the school community.

## 2590 AP ENGLISH LITERATURE (12)

### YEARLONG COURSE

- Application required

This course offers our most challenging study of literature and is reserved for seniors with very strong skills in reading comprehension and analytical writing, as well as a deep commitment to examining college-level texts and criticism. The breadth and depth of study of the selected novels, poetry, and plays is quite substantial, as the course prepares students for the rigor of the AP Exam in May and for potential advanced study of English in college. In addition to experiencing an in-depth survey of poets from the Elizabethan era through the 21st century, students should expect to study Shakespeare, Camus, Hamid, Ellison, Plath, and a selection of contemporary writers. Students not already enrolled in AP English Language and Composition must apply for this course and obtain the recommendation of their 11th grade teacher.

## ELECTIVE COURSES

---

### **2618 JOURNALISM**

#### **OFFERED EACH TRIMESTER**

Associated with the production of the student newspaper, *The Willistonian*, this contemporary publication course allows students to have a community voice while giving them real-world writing skills and keeping them in stride with the evolving advances and trends of journalism. Students will learn and practice the skills of story development, including researching and vetting sources, interviewing, reporting, and editing. They will contribute to and help manage the production of a news website and a print publication offering hard and breaking news, feature and soft news stories, opinion columns, photo essays, and reviews. Various publications, including *The New York Times*, will be required online reading. Students may take this course multiple times for credit with instructor's permission.

### **2900 HONORS WRITERS' WORKSHOP**

#### **TWO TRIMESTER COURSE (FIRST AND SECOND TRIMESTER)**

This honors course is designed for student writers who want to gain insight into the fiction-writing and creative non-fiction processes. The class requires students to write, share writing, and discuss ways to constructively evaluate their own and each other's work. Four times during the course, a prominent published author reads from his or her work and teaches an evening workshop.

Students read from and discuss the work of the guest authors—a wonderful opportunity to engage with those who have made the writing craft a career. Authors who have visited in recent years include Karen Shepard, Jim Shepard, Roger Reeves, Colum McCann, and Colson Whitehead.

### **2910 HONORS WILLISTON SCHOLARS: ENGLISH (11, 12)**

#### **THIRD TRIMESTER**

- *Prerequisite: Departmental approval*

Williston Scholars courses are honors courses that provide students the opportunity to conduct a trimester-long project in their discipline of interest. See page 8 for complete description. This course is open to juniors and seniors in standard or AP English. Seniors enrolled in English 2500 may seek permission to transfer from the standard English section to Honors Williston Scholars: English for the third trimester.

## ENGLISH LANGUAGE LEARNERS

---

### **2101 ADVANCED ENGLISH FOR LANGUAGE LEARNERS (9,10)**

#### **YEARLONG COURSE**

This course is designed to support students' transitioning into standard English class. With a primary focus on literacy practices inherent to the language, students will improve their language acquisition and deepen their cultural understanding. The major components of this course help increase targeted skills in reading, writing, listening, and speaking. Students will be prompted to speak both formally and informally to focus on fluency, grammatical skills, and vocabulary development. Placement into Advanced ELL or standard English for non-native English speakers is determined by a review of previous course work in the language, test scores, and review by the Academic Dean. It may include an English aptitude test. All students in Advanced ELL will take standard English concurrently as a Pass/Fail course in order to further enhance their language learning.

# MATH

Mathematics is the language of the universe. It is beautiful, logical, abstract, relevant, and practical. Furthermore, a background in mathematics can lead you just about anywhere. Math majors have chosen careers in law, medicine, computer science, engineering, philosophy, and the visual and performing arts. An increasing number of professions require knowledge of higher mathematics.

The Williston Mathematics Department strives to expose all students to the beauty of the work by the great mathematicians—Noether, Erdos, Newton, Escher, Turing, and Lovelace—while also realizing that many, if not all, students will need mathematics for its practical applications. Through their studies of mathematics and with the support of a dedicated faculty, Williston students at all levels build habits of mind that prepare them for what lies ahead.

The primary goal of the Williston Mathematics Department is to help prepare students for college mathematics. The course sequence—Algebra I, Geometry, Algebra II—teaches the foundation of mathematics that all students need. Once they have mastered the foundation, students can delve more deeply into mathematics through a variety of upper-level courses. While the content of these courses varies, the goal of each course is the same: to help students become creative problem-solvers.

In addition to various course options, students will use a range of tools and learning environments. They will use computers to explore mathematics, or calculators to assist with graphing and computation. At other times, students will work in small groups to investigate a topic. These experiences encourage a flexible approach to mathematics.

Williston teachers are dedicated to supporting their students wherever they are at in their arc through the world of mathematics. Each course offers the opportunity to review basic skills and to master the core knowledge of the subject. Students are expected to actively participate with their whole class as well as in small groups. Students are challenged to move beyond memorized rules to discover the source of rules, to examine why they work, and to theorize about how they are used to solve problems.

**Note:** A TI-84 Plus graphing calculator is required for all math courses. It is the only model for which classroom instruction is provided.

## **3110 ALGEBRA I**

### **YEARLONG COURSE**

Algebra is the language of mathematics. This course develops the fundamentals of that language and emphasizes applications of algebra to a wide variety of problem situations.

## **3210 GEOMETRY ESSENTIALS**

### **YEARLONG COURSE**

- *Prerequisite: Algebra I*

This course will provide an opportunity for students to develop a strong foundation in geometry. Emphasis is placed on personal and group investigations into geometric relationships on the plane and in space. Students use computers to explore and enrich the course.

## **3200 GEOMETRY**

### **YEARLONG COURSE**

- *Prerequisite: Algebra I*

The content of a traditional geometry course is covered, with emphasis placed on personal and group investigations into geometric relationships on the plane and in space. Students use computers to explore and enrich the course.

## **3205 HONORS GEOMETRY**

### **YEARLONG COURSE**

- *Prerequisites: Algebra I and departmental approval*

This course is offered for highly motivated and interested students who are ready to take more responsibility and initiative for their own learning. The content includes all of Geometry 3200 and other topics as well. An emphasis will be placed on exploring multiple methods of problem-solving. All are studied in greater depth, with an emphasis on deductive reasoning and proof.

## **3300 ALGEBRA II ESSENTIALS**

### **YEARLONG COURSE**

- *Prerequisites: Algebra I and Geometry or Geometry Essentials*

This course will provide an opportunity for students to develop a strong foundation in algebra. This second year of algebra emphasizes skill building and problem-solving. Students will complete an extensive study of linear equations, inequalities, systems of equations, polynomials, rational expressions, radicals, and quadratic functions.

## **3310 ALGEBRA II**

### **YEARLONG COURSE**

- *Prerequisites: Algebra I and Geometry*

The concepts of algebra explored in Algebra I and Geometry are developed further. The topic of functions is emphasized, in particular, in regard to linear, quadratic, exponential, and logarithmic functions. Algebraic manipulations and graphing functions are also emphasized.

## **3315 HONORS ALGEBRA II**

### **YEARLONG COURSE**

- *Prerequisites: Algebra I, Honors Geometry, and departmental approval*

This honors section is offered for highly motivated and interested students. The course covers significantly more material at a faster pace than does standard Algebra II (3310), including additional topics in graphing, polynomials, rational functions, trigonometry, and solving complex equations. In general, all topics are covered in greater depth. This course is required for continuation in more advanced honors math classes.

## **3400 PRECALCULUS**

### **YEARLONG COURSE**

- *Prerequisite: Algebra II*

This course begins with a careful study of functions. Linear and quadratic functions are reviewed. Students focus on exponential functions, logarithmic functions, trigonometric functions, polynomial functions, and rational functions. The emphasis throughout is to create a foundation for the study of calculus. The course emphasizes applications and careful reading and interpretation of mathematical problems. Graphing calculators are used extensively to help visualize mathematical relationships. Students need a strong background in algebra in order to do well in this course.

## **3405 HONORS PRECALCULUS**

### **YEARLONG COURSE**

- *Prerequisites: Honors Algebra II and departmental approval*

This is an advanced and enriched course for students who plan to continue with AP Calculus. Many topics will be explored with the use of technology. The course covers significantly more material at a faster pace than does standard Precalculus (3400) including graphical analysis, polar and parametric functions, complex arithmetic, conical sections, matrices, counting methods and discrete probability, sequences and series, and an introduction to limits. All topics are covered in much greater depth. Emphasis is placed on understanding mathematical concepts and interpreting mathematical solutions within the context of a certain problem.

### **3505 TRIGONOMETRY, PROBABILITY, & STATISTICS**

#### **YEARLONG COURSE**

- *Prerequisite: Algebra II or Algebra II Essentials*

This course will give students the knowledge and skills needed to navigate a world permeated by data. Students will learn to communicate graphically, numerically, and verbally, while building an understanding of the topics of trigonometry, probability, and statistics. Various software packages will be utilized. While the course emphasizes applications to real data, the aim of the course is to achieve mastery of mathematical theory and methods, by applying abstract ideas in a variety of contexts, including finance, sports, and the environment.

### **3510 TOPICS IN DISCRETE MATHEMATICS**

#### **YEARLONG COURSE**

- *Prerequisite: Algebra II or Algebra II Essentials*

This course focuses on real-world problem-solving strategies with emphasis on reasoning, communication, collaboration, and critical thinking. Problem-solving can be summarized as knowing what to do when you do not know how to start/approach a problem. Students will solve problems using matrix logic, systematic lists, elimination of possibilities, pattern recognition and more. This course is intended for juniors and seniors who have either completed Precalculus and are not prepared to continue with Calculus, or who have completed Algebra II or Trigonometry, Probability, and Statistics and are not prepared for Precalculus.

### **3590 AP STATISTICS**

#### **YEARLONG COURSE**

- *Prerequisites: Honors Precalculus or Precalculus and departmental approval*

This rigorous course acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Four broad conceptual themes are emphasized: exploring data, planning a study, anticipating patterns, and inferring statistical information. Students work on projects involving the hands-on gathering and analysis of real-world data. This course will have applications for students who wish to pursue studies in laboratory science, engineering, psychology, economics, or sociology, among others.

### **3600 CALCULUS**

#### **YEARLONG COURSE**

- *Prerequisites: Honors Precalculus or Precalculus and departmental approval*

This course covers the fundamental ideas of college-level calculus. The concepts of limits, differentiation, integration, and their application are developed through a careful analysis of the properties of graphs, numerical tables, and algebraic equations.

### **3690 AP CALCULUS AB**

#### **YEARLONG COURSE**

- *Prerequisites: Honors Precalculus and departmental approval*

This college-level course covers the required syllabus for AP Calculus and additional topics at the discretion of the instructor. This advanced course is intended for students who thrive on mathematical challenge. The core concepts of limit, derivative, and integral are studied through a combination of discovery, lecture, and individual work. Graphing calculators will be used extensively to help visualize functions and their relationships.

### **3695 AP CALCULUS BC & MULTIVARIABLE CALCULUS**

#### **YEARLONG COURSE**

- *Prerequisites: AP Calculus AB and departmental approval*

This class is intended for advanced students who are ready for college-level mathematics. The course begins with a study of sequences and series, leading toward the development of the Taylor Series. Students will complete the balance of the BC Calculus curriculum in the fall. The study of multivariable functions provides the central core of the latter part of this course. We will use computer software to visualize surfaces in three dimensions. We will also discuss the topics of n-space. The course will extend the concepts of limit, derivative, and integral to these multivariable functions and will cover the content of both BC calculus and vector calculus.

### **3700 HONORS DISCRETE MATHEMATICS**

#### **YEARLONG COURSE**

- *Prerequisites: Honors Precalculus and departmental approval*

This college-level math course is for advanced students who love mathematical challenges, and who work well independently. Discrete Mathematics considers a collection of topics designed to provide the background for college work in mathematics, computer science, operations research, and other related fields. Topics include linear algebra, combinatorics, graph theory, number theory, and mathematical proof techniques. Additional topics are chosen at the discretion of the instructor.

## ENGINEERING & COMPUTER SCIENCE

---

These interdisciplinary courses weave together concepts from science, technology, engineering, and mathematics to support the introduction of programming, electronics, and computer science.

### 3801 ENGINEERING & ROBOTICS

#### SINGLE TRIMESTER

- *Prerequisite: Geometry or departmental approval*

We explore fundamentals of engineering and robotics in this introductory course. Students learn the C++ and C/ROBOTC computer programming languages and program robots to move in various situations using motors, servo motors, encoders, and real-time sensors. Class “challenges” will test each student’s mastery of course topics.

### 3810 VIDEO GAME PROGRAMMING

#### SINGLE TRIMESTER

This course introduces the fundamentals of developing 2D and 3D video games using the Unity development platform. Designed to be project oriented, the course covers topics in game design—animation, physics engines, collision detection, scene modeling, user interface development, audio—in a series of practical examples through which students will develop and extend their understanding of these ideas. In addition, the course will in parallel introduce the fundamentals of computer programming through the object-oriented language C#.

### 3807 PROGRAMMING IN PYTHON

#### SINGLE TRIMESTER

This course introduces students to the Python computer language and the world of object-oriented programming. Major programming constructs—data types, conditionals, control structures, and analytic skills—will be introduced and explored. Students will learn to plan, design, and construct Python classes and objects and to work with several Python modules and packages. Programs developed during the trimester will utilize simple algorithms and control structures, method calling, arrays and array lists, and other advanced topics.

### 3895 AP COMPUTER SCIENCE PRINCIPLES

#### YEARLONG COURSE

- *Prerequisite: Algebra II completed or co-enrolled*

As designed by College Board, “AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem-solving.” The five major units in the course are: the Internet, Digital Information, Algorithms and Programming, Big Data and Privacy, and Building Apps. Unlike AP Computer Science, which focuses solely on mastery of the Java programming language, this course is meant to be an introduction to a variety of sociological, creative, ethical, and economic considerations in addition to the basic computational structures underlying all programming languages.

### 3890 AP COMPUTER SCIENCE A

#### YEARLONG COURSE

- *Prerequisites: Completion of Precalculus (3400 or 3405) or Honors Algebra II (3315). Also, completion of at least one trimester coding course (38xx) or equivalent prior experience by permission of instructor*

This intensive college-level course covers the syllabus for AP Computer Science A. The Java programming language is used to explore advanced topics including classes, objects, lists, inheritance, recursion, searching/sorting, and complex data.

### 3910 HONORS WILLISTON SCHOLARS: MATH (11, 12)

#### SINGLE TRIMESTER

- *Prerequisite: Departmental approval*

Williston Scholars courses are honors courses that provide students the opportunity to conduct a trimester-long project in their discipline of interest. See page 9 for complete description.

# **SCIENCE**

The science faculty at Williston strive to instill in their students a passion for science. We encourage inquisitiveness about the natural world and challenge our students to understand what they cannot see.

The core curriculum includes traditional physics, chemistry, and biology courses. The department strongly recommends that students take these yearlong courses in that order. Advanced Placement courses in biology, chemistry, physics, psychology, and environmental science are available for highly motivated students. Through trimester electives, juniors and seniors can engage in detailed study of specific topics such as animal behavior, genetics, ecology, psychology, organic chemistry, or astronomy.

The pursuit of science at Williston is not limited to the classrooms of Scott Hall. It's not unusual to see projectiles flying from windows around campus when physics students study velocity and acceleration. Videography and applications on the Surface tablet give students the opportunity to record their experiences and let faculty introduce classes to sophisticated experimental designs. From our campus pond and fields, biology students gather samples that are subjected to a wide variety of analyses.

Outdoor labs allow our students to study the environment directly and take advantage of open spaces to test theories learned in the classroom. Through indoor laboratory experience, our students gain confidence in using sophisticated equipment and analyzing data. Classes in the Science Department often blend computer-assisted data collection with established student inquiry and analysis using cutting-edge technology.

We instill in students an appreciation of the evolution of scientific principles and the fluidity of scientific "facts." Through close work with faculty, our students gain insight into the collaborative nature of scientific inquiry and its role in scientific questioning and experimentation.

Students gain a solid foundation from the Science Department's core courses that they can then sharpen with electives, which strengthen the sophisticated interests of both students and faculty. The science faculty are committed to challenging themselves and their students through ever-changing experimentation and demonstration. As reflected in our curriculum and practiced in our daily lessons, science is an active subject at Williston.



## **4310 PHYSICS (9, 10)**

### **YEARLONG COURSE**

This course uses an inquiry-based approach to introduce students to the fundamental principles of the natural world: motion, forces, and energy. Much of the material will rely on hands-on projects and experiments. Students will work collaboratively to discover both qualitative and quantitative scientific relationships, develop observational and critical thinking skills, and work to communicate effectively in a scientific forum. Topics in the course are designed to engage the students' scientific curiosity in the world around them.

## **4315 HONORS PHYSICS (9, 10)**

### **YEARLONG COURSE**

- *Prerequisites: Concurrent enrollment in Honors Geometry or a more advanced math course, and departmental approval.*

This course covers the same topics as Physics 4310 (motion, forces and energy) but will provide a deeper understanding of the topics. Students will use right angle trigonometry problem-solving.

## **4200 ENVIRONMENTAL CHEMISTRY (10, 11, 12)**

### **YEARLONG COURSE**

- *Prerequisite: Placement by the department*

This course approaches the study of chemistry by focusing on the effects of chemistry on our daily lives with less emphasis on mathematical analysis. Mining and refining metals, air pollutants and the greenhouse effect, the environmental impact on water supplies, and the chemistry of energy sources are a few of the recurring environmental connections covered in this course. Students read and report on current event science articles and will complete a summative project each trimester. This course uses very little math in its investigation and will prepare students for Biology.

## **4210 CHEMISTRY (10, 11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: Completion of Physics 4310 or 4315. Concurrent enrollment with Algebra 2 or higher is recommended*

Designed to give a basic understanding of the nature of matter and of its relation to energy, the aim of this course is to explain the primary laws, hypotheses, and theories of chemistry.

## **4215 HONORS CHEMISTRY (10, 11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: Concurrent enrollment in Honors Algebra II or a more advanced math course, and departmental approval*

This course covers the same topics as Chemistry 4210 but will provide a deeper understanding of the topics at a faster pace and with more rigorous problem-solving. This course provides a strong foundation for the AP Chemistry curriculum.

## **4100 BIOLOGY (11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: Physics required, and Chemistry strongly suggested*

This course is an introduction to the basic biological principles and methods used in science. Homework and lab work are designed to encourage students to interact with the material and to understand how experiments explain the interrelationships between organisms and their environment. Following an opening section on the scientific method and chemistry of life, we focus on the cell and its parts and functions. The rest of the year is spent looking at DNA structure and function, genetics, reproduction, and a closer examination and comparative study of body systems.

## **4105 HONORS BIOLOGY (11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: Physics and Chemistry, and departmental approval*

This course covers the same topics as Biology 4100, but will provide a deeper understanding of the topics at a faster pace. This course provides a strong foundation for the AP Biology curriculum.

## **4190 AP BIOLOGY (11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: Biology 4100 or 4105, Chemistry 4210 or 4215, and departmental approval*

This course follows a syllabus approved by the college board, and the expectations for both daily preparation and laboratory work are high. The objectives are to understand the underlying principles which encompass the core scientific principles, theories, and processes governing living organisms and biological systems, as well as developing competence in experimental practice and analysis of scientific evidence.

## **4290 AP CHEMISTRY (11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: Chemistry 4210 or 4215, and departmental approval*

This course is for students who have successfully completed a year of chemistry and wish to extend their knowledge beyond the introductory level. The topics and lab exercises of an approved AP curriculum are followed.

## **4350 PHYSICS (11, 12)**

### **YEARLONG COURSE**

- *Prerequisite: Algebra II*

This first-year course is designed as an introduction to physics for incoming juniors and seniors. Extensive time will be spent on lab experiences that aid in the conceptual development of the basics of motion and energy. Computer-assisted laboratories will supplement the classic experiments. This course will also include units on waves, light, and sound. Students develop problem-solving skills that require the completion of Algebra II. The course includes multiple construction projects that encourage the students to be creative while demonstrating their understanding of physical properties.

## **4391 AP PHYSICS 1 (10, 11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: One year of Physics (4310, 4315, or 4350) recommended, concurrent enrollment in Precalculus, and approval of the department*

This course is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum), work, energy, and power.

## **4490 AP PHYSICS C (11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: One year of any Physics class, concurrent enrollment in AP Calculus or higher, and approval of the department*

This course is the equivalent of a college level physics course for engineers or natural science majors, and reviews all the topics covered in such a course, with greater level of complexity allowed by adding calculus. Completion of the course prepares the student for the AP Physics C exams in Mechanics and Electricity & Magnetism. Electricity & Magnetism units include electrostatics with Gauss' Law, complex circuits, magnetism, electromagnetic induction, RC and LR circuits, and Maxwell's Equations. Units in Mechanics include kinematics, energy, momentum, SHM, and rotational motion.

## **4550 EARTH & ENVIRONMENTAL STUDIES (11,12)**

### **YEARLONG COURSE**

- *Prerequisite: Completion of science graduation requirement (see page 3)*

This course exposes students to the genetic, geologic, and anthropogenic factors that shape our world today. There is a heavy focus on scientific methods, research, and communication with practicing/teaching scientists. The first trimester focuses on the forces that drive evolution and the origin of Homo sapiens, as well as the anthropology of early humans and the peopling of the planet. It culminates by looking at current trends in evolution: antibacterial resistance and GM food. The second trimester shifts the focus to our planet and the geological forces which shape it. After studying natural forces, students spend time investigating man-made forces driving change to our environment. The course culminates by looking at contemporary scientific issues facing society.

## **4590 AP ENVIRONMENTAL SCIENCE (11, 12)**

### **YEARLONG COURSE**

- *Prerequisites: Biology (completed or concurrent), Chemistry, and departmental approval*

This course follows a syllabus approved by the college board. The course will provide students with scientific principles, methodologies, and concepts necessary to understand the many interrelationships of the natural world. This course is intrinsically interdisciplinary and will include identification and analysis of natural and man-made environmental problems, evaluating the risks associated with such problems, and examining solutions for their resolution or prevention.

# ELECTIVE COURSES

---

## **4505 ASTRONOMY: PLANETARY (10, 11, 12)**

### **SINGLE TRIMESTER**

- *Prerequisite: Physics 4310 or higher Physics course*

Students will study the development of our modern understanding of the solar system, including the forces that govern the motion of the planets, phenomena including eclipses, and phases of the moon. We will also survey comets, meteors, asteroids, and the planets of our solar system.

## **4506 ASTRONOMY: STELLAR (10, 11, 12)**

### **SINGLE TRIMESTER**

- *Prerequisite: Physics 4310 or higher Physics course*

This course will concentrate on the nature of stars and stellar evolution. To do this, we will study the nature of light and matter, including the wave-particle duality of both. We will also discuss the various types of telescopes and explore how their optics work. As we look at the life of stars we will consider black holes, supernovas, and pulsars. We will also study the origins and possible fates of the universe.

## **4503 GENETICS (11, 12)**

### **SINGLE TRIMESTER**

- *Prerequisite: Biology, or concurrently with Biology after trimester one*

This course investigates the molecular workings of cellular genetics. The specifics behind DNA replication, protein synthesis, and the regulation of gene expression will be covered in depth. Chromosome mutations and the various genetic disorders that they cause will be studied, as well as genetic engineering, epigenetics, and the ethical and moral issues that arise as a result of new technology. In this discussion-heavy class, students read current event genetic articles and case studies from popular science genetics books. Students will complete several independent research projects.

## **4502 OUTDOOR ECOLOGY**

### **SINGLE TRIMESTER**

- *Prerequisite: Completed full year of Chemistry 4210 or 4215*

This course engages the student in the general study of ecology through application to the local area in which we live. Students explore the complexity of interactions between living things and their environment through readings, analyzing scientific data, and hands-on investigations. Students experientially become acquainted with the methods of ecological study including observation, modeling, and experimentation. Students spend approximately one-third of the class time outdoors observing and investigating components of the variety of ecosystems present on campus and in the surrounding areas. The culminating project gives students the opportunity to demonstrate understanding by applying several areas of study to a topic or region of their own interest within the frameworks of the course.

## **4507 HUMAN PHYSIOLOGY AND KINESIOLOGY (11, 12)**

### **SINGLE TRIMESTER**

- *Prerequisites: Chemistry, and Biology or Concurrent Biology*

This course introduces human physiology and kinesiology while focusing on the maintenance of homeostasis through the operations of complex control systems. Study will encompass all levels of the hierarchy of human structure and integrated function with emphasis on the skeletal, muscle, nervous, and endocrine systems. Lab activities accompany topics and, when possible, principles are applied to exercise.

## **4510 FORENSIC SCIENCE: PHYSICAL (11 WITH PERMISSION, 12)**

### **SINGLE TRIMESTER**

- *Prerequisites: Chemistry and Biology (completed or concurrently)*

This course builds upon core topics learned in physics and chemistry and relies on lab-based scientific inquiry. The curriculum includes chromatography, fiber and glass analysis, toxicology, arson, ballistics, and tool mark analysis. Other topics include witness testimony, evidence classification, and crime scene investigation.

## **4514 FORENSIC SCIENCE: BIOLOGICAL (11 WITH PERMISSION, 12)**

### **SINGLE TRIMESTER**

- *Prerequisites: Chemistry and Biology (completed or concurrently)*

This course builds upon core topics learned in biology and relies on lab-based scientific inquiry. The curriculum includes autopsy, human remains, entomology, serology, blood spatter, DNA analysis, fingerprints, hair and soil analysis, and handwriting analysis.

## **6417 SCIENCE AND HISTORY OF CLIMATE CHANGE (10,11,12)**

### **SINGLE TRIMESTER**

Co-taught by members of the science and history departments, this course will explore the mechanisms and implications of a changing climate. It will begin with a study of the physical principles involved in planetary scale energy budgets and how human-led changes in society affect chemical and ecological processes. With keen attention to the inequitable burdens of climate change on human populations, the course challenges students to consider future as well as historical changes in patterns of production and consumption. Course materials include a variety of primary and secondary sources, plus laboratory activities to study how people have interacted with, and altered the environment over time. With a solid understanding of the mechanics of climate change, students will investigate options for the mitigation of climate change and how society can adapt to changes that do occur.

## **4600 BEHAVIORAL PSYCHOLOGY (10 WITH PERMISSION, 11, 12)**

### **SINGLE TRIMESTER**

- *Not open to students who have already completed 4690 AP Psychology*

This course provides a scientific study of behavior and the mind and brain. The focus will be on both the historical development of the field of psychology, as well as current research and application.

### **4610 SOCIAL PSYCHOLOGY (10 WITH PERMISSION, 11, 12)**

#### **SINGLE TRIMESTER**

- *Not open to students who have already completed 4690 AP Psychology*

This course provides a systematic introduction to the field of social psychology, which studies how the thoughts, feelings, and behaviors of a person are influenced by the actual, imagined, or implied presence of others. The course will cover topics such as attitudes, group behavior, prejudice and discrimination, interpersonal relationships, conformity, obedience, and altruism.

### **4611 CHILD DEVELOPMENT (11, 12)**

#### **SINGLE TRIMESTER**

This course will focus on human growth and development from birth through adolescence. We will investigate child development theory, as well as research- and evidence-based practices about the physical, social/emotional, and cognitive/language development of children. Part of the course will include observations of children in an early childhood setting and in the home.

### **4690 AP PSYCHOLOGY (11, 12)**

#### **YEARLONG COURSE**

- *Prerequisite: Departmental approval*

This survey course is designed to introduce students to the systematic and scientific study of behavior and mental processes of human beings. Students are exposed to the psychological theories, principles, and phenomena associated with each of the major subfields of psychology, including the ethics and methods of research, biological bases of behavior, human development, sensations and perception, cognition, thinking and language, intelligence, learning, states of consciousness, personality, abnormal psychology, therapy, and social psychology. Case studies, debates, in-class presentations, class discussions, and an experiment design will complement practice with AP-style questions and essays.

### **4910 HONORS WILLISTON SCHOLARS: SCIENCE (11, 12)**

#### **SINGLE TRIMESTER**

- *Prerequisite: Departmental approval*

Williston Scholars courses are honors courses that provide students the opportunity to conduct a trimester-long project in their discipline of interest. See page 9 for complete description.

### **The following course rotates and will not be offered in 2023-2024:**

4392 AP Physics 2

4501 Animal Behavior

4504 Organic Chemistry

4509 Botany (11, 12)

# LANGUAGE

The Williston Northampton School's Language Department inspires students to communicate in new ways, to make meaningful connections, to expand their world view, and to enrich their communities.

Williston's language program is committed to developing the linguistic and cultural literacy of our students and encouraging them to become active citizens of our increasingly multicultural world. As students learn language through reading, writing, speaking, and listening, they also experience how the study of another language opens doors to a greater understanding of others—and of themselves. We teach language actively and place students in the central role. Our teachers blend traditional and contemporary teaching styles to provide students with a variety of ways to develop their fluency and ease of expression.

All modern language courses, whether beginning or advanced, prioritize students' oral proficiency in the language. In all four languages and at every level, we encourage our students to examine and understand the ways of thinking that make each culture unique. Students implement their language skills through culturally rooted projects and presentations to foster a broader understanding of the cultures that speak the target language.

Williston's location in the Pioneer Valley and our ties with the Five Colleges provide our students with invaluable opportunities. Latin students attend the Pioneer Valley Classics Association's annual Classics Day at the University of Massachusetts, where they participate in workshops and contests that deepen their understanding of Roman culture. Members of the Toumani Diabaté Symmetric Orchestra and Malian musician Rokia Traoré have visited French classes to speak about their music and culture, and students later attended their concerts. Chinese students have enjoyed Taiwanese dance performances at the Fine Arts Center of the University of Massachusetts.

The Language Department also supports and encourages travel abroad. French students may visit the Québec Winter Carnival, and excursions to France have provided students with homestay opportunities and travel throughout the country. Latin students have taken trips to Italy to see firsthand the physical monuments of classical culture. Chinese students have traveled to China to experience the language and culture, all while visiting iconic sites such as the Great Wall and Forbidden City. Language students can also embrace travel opportunities through School Year Abroad, an interscholastic program that sends students to Spain, France, Italy, or China for the summer, a semester, or an entire school year.

# CHINESE

---

**Please note: The 2023-24 school year will be the last year that Chinese is offered.**

## **5320 CHINESE II**

### **YEARLONG COURSE**

- *Prerequisite: Chinese I*

This course is a continuation of Chinese I, with a review of grammar and the further development of reading and writing skills in Mandarin. Throughout the year, students explore cultural themes. Students learn to comprehend and produce more complex sentence structures, with a focus on expressing individual interests through interpersonal communication and presentational modes. Students in the course begin to accumulate more sophisticated vocabulary and grammar.

## **5330 CHINESE III**

### **YEARLONG COURSE**

- *Prerequisite: Chinese II*

Designed for students who have completed two years of high school-level study of Mandarin, this course further develops the skills of listening, speaking, reading, and writing. As the complexity of sentence structure increases, students broaden their self-expression. The course emphasizes spontaneous language production. Students continue to explore cultural topics throughout the year.

## **5345 HONORS CHINESE IV**

### **YEARLONG COURSE**

- *Prerequisites: Chinese III and departmental approval*

In this rigorous course, students develop proficiency in the four skills of reading, writing, speaking, and listening. Students learn to read and write complex sentence structures as they undergo a comprehensive study of Chinese grammar and the practice of formal writing intended for a variety of uses. The course prioritizes vocabulary acquisition as well as the conversation skills necessary to communicate proficiently with native speakers. Coursework is based in the presentational mode, with students creating and sharing their original Chinese compositions. Cultural and linguistic study is grounded in authentic materials from a variety of genres.

# FRENCH

---

## **5110 FRENCH I**

### **YEARLONG COURSE**

Students build a foundation in listening, speaking, reading, and writing in the French language. Emphasis is placed upon mastery of the French sound system, basic vocabulary, and fundamental grammar concepts in the present tense.

## **5120 FRENCH II**

### **YEARLONG COURSE**

- *Prerequisite: French I*

Material covered in the first year is reviewed along with additional grammar, vocabulary, and idioms. Students learn the passé composé and, time-permitting, imparfait tenses and begin work on narrating in the past. Emphasis is placed upon strengthening and advancing the four major skills of language study—listening, speaking, reading, and writing—while familiarizing students with the culture and traditions of French-speaking people.

## **5125 HONORS FRENCH II**

### **YEARLONG COURSE**

- *Prerequisites: French I and departmental approval*

An honors section is offered as an accelerated and enriched version of the standard course, with additional reading, writing, and conversational demands. Tenses covered: passé composé and imparfait.

## **5130 FRENCH III**

### **YEARLONG COURSE**

- *Prerequisite: French II*

Vocabulary acquisition increases in the third year while students expand their study of grammar and review of all previously learned material. New tenses will include the imparfait and futur. Readings provide opportunities for conversation and composition, while developing the student's awareness of and appreciation for cultural differences.

### **5135 HONORS FRENCH III**

#### **YEARLONG COURSE**

- *Prerequisites: Honors French II and departmental approval*

An honors section is offered as an accelerated and enriched version of the standard course, with increased reading and conversational demands as well as close attention to the finer points of French grammar. Tenses covered: futur and conditionnel.

### **5140 FRENCH IV**

#### **YEARLONG COURSE**

- *Prerequisite: French III*

This course seeks to develop students' existing skills in spoken and written French through the interactive study and discussion of a variety of films, music, and texts. Students also deepen their listening and reading skills while building vocabulary and essential grammar. Themes may include daily life in France, regional French culture through films, modern French culture, and francophone themes.

### **5160 HONORS FRENCH SEMINAR**

#### **YEARLONG COURSE**

- *Prerequisite: French IV or Honors French III and departmental approval. This course is designed for French language learners.*

Students focus on reading, writing, and cultural literacy in preparation for the AP French Language course. Students develop vocabulary and reading comprehension strategies with contemporary, francophone, and literary readings. Fluent written expression is developed through a comprehensive review of French grammar in conjunction with written compositions. Students learn about the diverse cultures of the francophone world through a variety of media (songs, films, and texts).

### **5190 AP FRENCH LANGUAGE**

#### **YEARLONG COURSE**

- *Prerequisites: Honors French Seminar sequence and departmental approval. This course is designed for French language learners.*

This course, conducted entirely in French, contains a wide variety of student-centered activities, all of which practice at least one of the communicative skills tested by the AP Exam. Further, all tenses are reviewed throughout the year, as are various grammar points, depending on the need demonstrated by that year's students. Throughout the course of the year, students establish and examine essential questions for each of the College Board's six themes: global challenges, science and technology, contemporary life, personal and public identities, beauty and aesthetics, and families and communities. In addition to this work and the practice exercises furnished by preparing for the AP French Exam, class is supplemented by authentic materials including: articles, short stories, blog entries, poems, novels, films, radio broadcasts, podcasts, and music.

## **LATIN**

---

### **5710 LATIN I**

#### **YEARLONG COURSE**

This introductory course gives students a solid grounding in the fundamental elements of Latin. Emphasis is placed on learning vocabulary and building translation skills. Students strengthen English vocabulary and language skills through close examination of Latin words and syntax. Roman cultural and historical investigations round out our study.

### **5720 LATIN II**

#### **YEARLONG COURSE**

- *Prerequisite: Latin I*

Students continue the study of Latin vocabulary, grammar, syntax, culture, and history begun in Latin I. Emphasis is placed on reading and comprehension skills, in addition to cultural topics.

### **5725 HONORS LATIN II**

#### **YEARLONG COURSE**

- *Prerequisites: Latin I and departmental approval*

An honors section is offered as an enriched version of the standard Latin II program in which the demands of the course dramatically increase.

## 5730 LATIN III

### YEARLONG COURSE

- *Prerequisite: Latin II*

In this course, students complete their study of advanced grammar and begin translating and analyzing passages of authentic Latin prose and poetry. Cultural and historical units emphasize Roman values as well as key historical and mythological themes and figures.

## 5735 HONORS LATIN III

### YEARLONG COURSE

- *Prerequisites: Honors Latin II and departmental approval*

An honors section is offered as an enriched version of the standard Latin III program in which the demands of the course dramatically increase.

## 5745 HONORS LATIN IV

### YEARLONG COURSE

- *Prerequisites: Honors Latin III and departmental approval*

In this course, students translate prose and verse selections from a variety of Latin authors, with a focus on the events of the late republic and early empire. In preparation for the AP course, students build vocabulary, strengthen translation, develop stylistic analysis skills, and investigate essential questions of Roman history.

**The following course will not be offered in the 2023-24 school year:**

5790 AP LATIN

# SPANISH

---

## 5510 SPANISH I

### YEARLONG COURSE

Students build a foundation in listening, speaking, reading, and writing in the Spanish language. Stress is placed upon mastery of the Spanish sound system, basic vocabulary, and fundamental grammar concepts.

## 5520 SPANISH II

### YEARLONG COURSE

- *Prerequisite: Spanish I*

Material covered in the first year is reviewed along with additional grammar, vocabulary, and idioms. Emphasis is placed upon strengthening and advancing the four major skills of language study—listening, speaking, reading, and writing—while familiarizing the students with the culture and traditions of Spanish-speaking peoples.

## 5525 HONORS SPANISH II

### YEARLONG COURSE

- *Prerequisites: Spanish I and departmental approval*

An honors section is offered as an accelerated and enriched version of the standard Spanish II program with increased reading and conversational demands.

## 5530 SPANISH III

### YEARLONG COURSE

- *Prerequisite: Spanish II*

The third year stresses vocabulary development and reviews and expands the study of Spanish grammar, with intensive practice of the Spanish verb system and tenses, including the indicative, imperative, and subjunctive moods. Readings provide opportunities for conversation and composition, while developing the student's awareness of, and appreciation for cultural differences.

## 5535 HONORS SPANISH III

### YEARLONG COURSE

- *Prerequisite: Honors Spanish II and departmental approval*

An honors section is offered as an accelerated and enriched version of the standard Spanish III program with increased reading and conversational demands, as well as closer attention to the finer points of Spanish grammar.



## 5540 SPANISH IV

### YEARLONG COURSE

- *Prerequisite: Spanish III*

This course introduces students to the civilizations and cultures of Spain and Latin America. Through project-based learning, students study the Spanish-speaking worlds of today through the lens of historical events. A review of grammar provides students with the linguistic tools for daily communicative activities. Contemporary Spanish and Latin American films serve as platforms for students to delve further into cultural topics while improving their oral and written proficiency through daily exercises.

## 5560 HONORS SPANISH SEMINAR

### YEARLONG COURSE

- *Prerequisites: Departmental approval and completion of Spanish IV or Honors Spanish III*

Students wishing to take the AP Spanish Language course must enroll in this course. Students continue to develop their reading, writing, listening, and speaking skills in this course. Contemporary readings provide students with insight into Hispanic cultural viewpoints. Students work on developing accuracy in their written expression through review of Spanish grammar and the composition of letters and essays. Students focus on improving fluency in speaking by giving presentations on topics such as a volunteer opportunity in a Spanish-speaking country or a creative autobiographical project.

## 5590 AP SPANISH LANGUAGE

### YEARLONG COURSE

- *Prerequisites: Departmental approval and completion of Honors Spanish Seminar*

Taken as a fifth year of Spanish, this college-level course focuses on developing a high level of competence in speaking, writing, listening, and reading. Literary and journalistic texts continue the study of Hispanic culture and serve as the basis for vocabulary study, class discussions, and compositions. The course includes a variety of advanced speaking and listening activities and a thorough review of grammar.

## 5910 HONORS WILLISTON SCHOLARS: LANGUAGE (11, 12)

### SINGLE TRIMESTER

- *Prerequisite: Departmental approval*

Williston Scholars courses are honors courses that provide students the opportunity to conduct a trimester-long project in their discipline of interest. See page 9 for a complete description.

# SCHOOL YEAR ABROAD

---

The Language Department encourages students to consider participation in the School Year Abroad (SYA) program in China, France, Spain, or Italy. SYA is designed for high school students, and at Williston most participants are juniors.

At SYA, intensive language study is an integrated part of an ongoing college preparatory program. Credits may be transferred from SYA to Williston upon successful completion of course work.

Sophomores interested in a junior year abroad should speak with the Academic Dean during the first trimester of 10th grade prior to applying. Interested juniors in good academic and social standing may, at the end of the first trimester of 11th grade, petition the Academic Dean for permission to attend SYA during senior year. These proposals will be reviewed by the Academic Standards Committee.

Upon successful completion of the SYA program, the student may expect to receive a diploma from Williston provided that 1) the petitioning student has completed at least two years of study at Williston and 2) the academic diploma requirements of Williston have been met.

For more information about the program, call (978) 725-6828, email [mail@sya.org](mailto:mail@sya.org), or visit [www.sya.org](http://www.sya.org).

# **HISTORY & GLOBAL** **STUDIES**

The History & Global Studies curriculum provides students with an understanding of the forces that have shaped the past and continue to influence the world today. Our program encourages the development of the critical skills necessary to make educated choices that will determine the future. In short, we prepare students to embrace an ever-changing world.

We examine life in a global community through required study in the Humanities, World History, and either U.S. History or U.S. Government, and deepen that understanding through core electives such as European History, Comparative Government, and Economics. In addition, we offer the opportunity to study a range of topics including International Relations, Women's and Gender Studies, Immigration, and Germany and World War II. Through our religion and philosophy courses, the department introduces students to the ideas, beliefs, cultures, and spiritual writings of the world's greatest religions and philosophical traditions.

History & Global Studies faculty aim to foster their students' curiosity and help them develop the skills necessary for lifelong learning. Students learn that history is not a static body of dates and facts but an evolving series of interpretations of the past. Through the process of reading and writing, and taking part in problem-solving discussions, students learn to investigate historical questions, analyze sources, and effectively express their ideas. Through our relationships with the Five Colleges, students can take advantage of unique opportunities to participate in special courses, lectures, workshops, and visits to the nearby colleges that are part of Williston's vibrant academic community.

As our students develop a critical understanding of their world, we hope to inspire them to become engaged citizens who exercise both independence of thought and respect for individual differences in their search for truth and justice.

## **NINTH GRADE HUMANITIES**

The ninth grade humanities program consists of three trimester courses in human rights, religious studies, and the arts. Each ninth grade student is required to complete the human rights and religious studies course long with one introductory art trimester of their choosing. See below for the list of introductory arts classes.

### **6110 HUMANITIES: HUMAN RIGHTS & SOCIAL JUSTICE**

#### **SINGLE TRIMESTER**

This course introduces students to the study of social justice movements and human rights issues. Students will trace the origins and history of international human rights and consider human rights in practice today, exploring how different actors—such as national governments, the U.N., international courts, NGOs, and individuals—influence human rights around the world. Students consider current challenges in human rights, and the ways that social justice movements promote and protect human rights, as well as the influence of social media on social justice movements. In conjunction with the Humanities: Religious Studies course, students will be well prepared for future history and global studies courses. They will learn research, critical thinking, writing, and rhetoric that will serve as a foundation for future classes. The course will emphasize CORE—the ninth grade theme. Students will be evaluated based on rubrics linked to Curiosity, Organization, Reflection and Empathy for each unit.

### **6710 HUMANITIES: RELIGIOUS STUDIES**

#### **SINGLE TRIMESTER**

This course introduces students to the academic study of religion and philosophy by exploring Buddhism, Islam, and the major theories of Western Ethics. Students study Buddhism and Islam in its historical and cultural contexts, analyzing its core values and practices before completing a research project exploring its impact around the globe today. Additionally, this course introduces students to the discipline of philosophy by studying the key ideas in western ethics, providing them the necessary background to write a thesis defense paper on an applied ethics topic of their choice. In conjunction with the Humanities: Human Rights & Social Justice course, this course provides students with a broader perspective of global issues. By practicing research, critical thinking, writing, and rhetoric, students will be well prepared for future history and global studies courses at Williston and beyond. The course will emphasize CORE—the ninth grade theme. Students will also be evaluated based on rubrics linked to Curiosity, Organization, Reflection and Empathy throughout the course.

### **HUMANITIES: ARTS**

#### **SINGLE TRIMESTER**

Ninth graders will each choose one of the following arts courses as part of their humanities sequence. See the Visual and Performing Arts section for course descriptions.

- 7050 Studio Basics
- 7120 Digital Design: 2D
- 7122 Digital Design: CAD
- 7210 Drawing
- 7411 Sculpture
- 7501 Darkroom Photography
- 7502 Digital Photography
- 7511 Film Making I
- 7601 Acting I
- 7623 Playwriting & Screenwriting
- 7734 Concert Choir
- 7745 Instrumental Ensemble

### **6105 MODERN WORLD HISTORY (10)**

#### **YEARLONG COURSE**

The course begins in 1200 C.E. and reaches the present day, covering several regions of the world. We focus on the impact of history on present concerns through various lenses, such as technology, race, gender, class, and global intellectual transformations. Students build historical thinking skills including contextualization, comparison, causation, and continuity and change over time. Using an inquiry-based approach to learning, students learn to read and analyze primary sources, write thesis-driven research essays, give oral presentations, and engage meaningfully in discussions.

### **6190 AP WORLD HISTORY: MODERN (10)**

#### **YEARLONG COURSE**

- *Prerequisite: All applicants must be approved by the department*

This course accomplishes the mission of the standard Modern World History course but offers a broader range of sources and discussions. Students will be prepared for and are expected to take the AP Exam in May.

### **6310 UNITED STATES HISTORY (11, 12)**

#### **YEARLONG COURSE**

This study of United States history is designed to help students develop a critical appreciation of American society, improve their mastery of the skills of inquiry and expression, and discover greater intellectual curiosity, persistence, and responsibility. Students consider the human actions and forces responsible for social, economic, and political institutions from colonial times to the present. Students practice exploring historical questions, engaging in critical thinking, and expressing their ideas in diverse ways. These include participating in class discussions, analyzing primary sources, writing essays, and presenting their work. A main focus of this course is the creation of a major independent research paper.

### **6390 AP UNITED STATES HISTORY (11, 12)**

#### **YEARLONG COURSE**

- *Prerequisite: All applicants must be approved by the department*

This course accomplishes the mission of the standard United States history course but offers a broader range of sources and discussions. Students will be prepared for and are expected to take the AP Exam in May.

### **6592 AP UNITED STATES GOVERNMENT & POLITICS (11, 12)**

#### **YEARLONG COURSE**

- *Prerequisite: All applicants must be approved by the department*

This full-year course will give students an analytical perspective on government and politics in the United States. The course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes in American politics. Students are expected to take the AP Exam in May. This course fulfills the graduation requirement for a full year of U.S. History.

## **ELECTIVE COURSES**

---

The following elective courses are either one or three trimesters in length, and unless indicated otherwise, are open to 10th graders only by permission of the department.

### **6200 EUROPEAN HISTORY: RENAISSANCE TO THE PRESENT (10, 11, 12)**

#### **YEARLONG COURSE**

This course presents an overview of the important forces that shaped European History from the Renaissance to the Present. Each unit will emphasize the development of important skills, including reading primary sources, writing an historical essay, giving oral presentations, and media literacy. The class will focus on important themes in the history of Europe with an emphasis on art, economic, political, and social history.

### **6290 AP EUROPEAN HISTORY (10,11,12)**

#### **YEARLONG COURSE**

- *Prerequisite: All applicants must be approved by the department*

This college-level survey course focuses on the main themes in modern European history, including political and diplomatic, intellectual and cultural, and social and economic history. Course curriculum, materials, and expectations are designed to prepare students for success on the AP Exam, but the broader goal of the course is to challenge students to improve their skills at writing, reading, presentation, and analysis, emphasizing comprehension, comparison, synthesis and the formulation of generalizations with sustaining evidence. The course uses a college-level textbook and primary source documents to provide students with an understanding of the chronology of modern European history, beginning with the Renaissance and concluding with the fall of Communism in Eastern Europe, the reunification of Germany, and the crisis of global terrorism. Students are expected to take the AP Exam in May.

### **6595 AP AFRICAN AMERICAN STUDIES (11,12)**

#### **YEARLONG COURSE**

- *Prerequisite: Must have completed or be concurrently enrolled in U.S. History 6310, 6390, or 6592*

This new pilot course, as the College Board explains, “is an interdisciplinary course that draws from a variety of fields—history, literature, the arts, geography, science—to explore the vital contributions and experiences of African Americans. As with all AP courses in the humanities, this is a course that offers direct engagement with evidence and events.” Students will be prepared for and are expected to take the AP Exam in May.

## **6400 NATIVE AMERICAN HISTORY (11, 12)**

### **SINGLE TRIMESTER**

Students will examine the development of American history from the perspective of Native Americans. We will investigate both the development of various eastern woodland Indian nations and the process of interaction between the first settlers and the subsequent European immigrants. The themes of accommodation, resistance, adaption, and persistence will be considered.

## **6404 WOMEN'S & GENDER STUDIES (11, 12)**

### **SINGLE TRIMESTER**

This is a course for students seeking to explore history and contemporary society through the lens of gender. Using the three waves of feminism as a framework, we will explore the social, political, economic, and lived realities of people based on their gender roles. Students will explore how race, class, age, sexuality, and other identities complicate notions of gender, as they expand their understanding of United States and Western European history. Through engagement with secondary and primary sources, research and reflective writing, classroom discussion, and media analysis, students will perform interdisciplinary inquiry into the personal and political field of gender studies.

## **6405 GERMANY IN WORLD WAR II (11, 12)**

### **SINGLE TRIMESTER**

This comprehensive study of the personality, deeds, and impact on Europe of Adolf Hitler examines the man, the rise to power of the Nazi Party, World War II, and the details of the Holocaust. The course considers values and attitudes that are important for the present as well as critical for understanding the past.

## **6415 SOCIAL MOVEMENTS IN THE UNITED STATES (10, 11, 12)**

### **SINGLE TRIMESTER**

- *Prerequisite: Must have completed or be concurrently enrolled in U.S. History 6310, 6390, or 6592*

This course examines the political, economic, historical, and ideological origins of selected movements, from the late 19th century to the present. It will explore the rhetoric/tactics employed to achieve the movements' goals, along with the responses these movements elicited from the public and from structures of power.

## **6416 HISTORY OF SPORT (11, 12)**

### **SINGLE TRIMESTER**

This course explores the history of sport within and beyond the borders of the U.S. Students will consider various perspectives on the growth of sport in society. With an eye to issues relevant to 21st-century students, we will examine perspectives on histories of Title IX, sports broadcasting, sports betting, and the NCAA.

## **6417 SCIENCE AND HISTORY OF CLIMATE CHANGE (10, 11,12)**

### **SINGLE TRIMESTER**

Co-taught by members of the Science and History departments, this course will explore the mechanisms and implications of a changing climate. It will begin with a study of the physical principles involved in planetary scale energy budgets and how human-led changes in society affect chemical and ecological processes. With keen attention to the inequitable burdens of climate change on human populations, the course challenges students to consider future as well as historical changes in patterns of production and consumption. Course materials include a variety of primary and secondary sources plus laboratory activities to study how people have interacted with and altered the environment over time. With a solid understanding of the mechanics of climate change, students will investigate options for the mitigation of climate change and how society can adapt to changes that do occur.

## **6505 COMPARATIVE GOVERNMENT & POLITICS (11, 12)**

### **YEARLONG COURSE**

Students in this course are introduced to political science while studying six core countries—Great Britain, Russia, China, Iran, Nigeria, and Mexico. In addition, the course explores general concepts pertaining to political relationships and the constitutional features common to virtually all national governments. As students gain a deeper appreciation and understanding of how governments function, we will explore related concepts including regionalism, democracy, sovereignty, pluralism, nationalism, ideology, globalization, and national security.

## **6695 AP MICRO & MACROECONOMICS (11, 12)**

### **YEARLONG COURSE**

The goal of this course is to give the student a thorough understanding of the principles of economics that apply to the functions of individual decision makers—both consumers and producers—within the larger economic system. It places primary emphasis on the nature and functions of product markets, and on the role of government in promoting greater efficiency and equity in the economy. Students are expected to take both the AP Microeconomics and AP Macroeconomics exams in May.

## **6702 JUDAISM, CHRISTIANITY & ISLAM (10, 11, 12)**

### **SINGLE TRIMESTER**

This course offers an in-depth look at the sacred traditions of Judaism, Christianity, and Islam, with a special focus on their sacred texts. By reading selections from the Bible, the Quran, and other primary sources, students will learn how such writings have been, and continue to be, interpreted by adherents of those traditions. They may also come to appreciate how these sacred texts are relevant and meaningful to their own lives.

## **6703 PHILOSOPHY (11, 12)**

### **SINGLE TRIMESTER**

This course introduces students to some of the major fields of philosophy, such as logic, epistemology, identity, and ethics. Students begin by learning the elements of critical thinking fundamental to building a cohesive and coherent philosophical argument. They then progress to the examination of philosophical treatises written by important figures in the history of Western philosophy: René Descartes, David Hume, and John Locke. Special attention is paid in the course to the close reading of difficult primary texts.

## **6706 ETHICS AND SOCIETY (10, 11, 12)**

### **SINGLE TRIMESTER**

This course explores several theories in the history of Western ethics, including those espoused by Immanuel Kant, John Stuart Mill, and Philippa Foot. After grappling with the primary texts of these thinkers, students look at how such ideas have the power to affect everyday lives and how they might apply to moral dilemmas, both ancient and new. Class discussion, film analysis, and thesis defense papers are fundamental to the course.

## **6910 HONORS WILLISTON SCHOLARS: HISTORY & GLOBAL STUDIES (11, 12)**

### **SINGLE TRIMESTER**

- *Prerequisite: Departmental approval*

Williston Scholars courses are honors courses that provide students the opportunity to conduct a trimester-long project in their discipline of interest. See page 9 for complete description.

### **The following courses rotate and will not be offered in 2023-2024:**

- 6591 AP Comparative Government (11, 12)
- 6402 International Relations (11, 12)
- 6406 Immigration (11, 12)
- 6407 African American History (11,12)
- 6411 Contemporary World Issues (10,11,12)
- 6413 History & Culture of the Americas (11,12)
- 6600 Economics (11,12)
- 6704 Hinduism, Buddhism, & Taoism (10,11,12)
- 6707 Existentialism (11,12)

# **VISUAL & PERFORMING** **ARTS**

The Visual & Performing Arts Department at Williston houses the various arts disciplines within a single department. Our faculty, who are practicing artists in their chosen fields, all bring their professional experiences to their teaching. We strive to instill in our students a broad respect for learning; to develop in them a respect for and enduring interest in the arts through knowledge and experience; to stimulate their awareness of their own creative potential, not only in the arts but in other endeavors; and to equip them with the skills and discipline necessary for pursuing one or more of the visual or performing arts.

The arts faculty, while diverse in their own artistic pursuits, share a common concern for developing human expressiveness and a profound commitment to making the arts an integral part of their students' lives and the life of the entire school community. The arts have historically been a strong thread that binds together all human endeavors and reveals the human response to the world and to one's sense of self. Such awareness illuminates and gives depth to our own experiences. By engaging in studio practices and performing arts—painting, dancing, playing music, singing, and acting—students develop intellectual and cognitive operations that are central to all experiences in school and in life. Study of the arts provides a meaningful and constructive connection to other cultures and to the history of the world. Through the arts, students discover a unique opportunity to create community and to share with others, while experiencing the excitement of one's own creative realization and self-discovery. It is our mission as well to train the audiences of tomorrow. We aim to shape audiences who, through their enlightened perception and understanding of the arts, will find their lives enhanced and immeasurably enriched both now and into the future.

The lives of our students are also enriched by our close relationships with the Five Colleges and by the many cultural and artistic offerings in the Pioneer Valley that Williston calls home. Our students have opportunities to attend concerts, dance recitals, theatrical performances, and visit the marvelous galleries and museums throughout the area, while also taking advantage of our proximity to New York City and Boston. In addition, students and professors from the nearby colleges and universities have enriched our arts classroom experience through lectures, workshops, and demonstrations on our campus.

With the exception of AP Music Theory, Honors Chamber Singers, and AP Studio Art, courses in the Visual and Performing Arts Department are one trimester in length.

Note: Studio art and photography courses do not use textbooks, but they do require a material fee for classroom supplies. Specific class fees are included in the individual course descriptions.

## **7050 STUDIO BASICS**

### **SINGLE TRIMESTER**

- *Studio fee: \$125*

This introductory course provides basic instruction in a variety of 2D media and art-making concepts. Its units of study and projects use different materials and techniques like drawing, painting and printmaking to explore the art elements (color, form, line, shape, space, texture, and value) as well as the principles of design (balance, repetition, contrast, harmony/unity, variety, rhythm, dominance). Students will gain an understanding of how to arrange the elements of art to create a variety of effects through the principles of design.

## **7411 SCULPTURE**

### **SINGLE TRIMESTER**

- *Studio fee: \$125*

This introduction to sculpture course will include a variety of approaches to working "in-the-round." Students will use an array of mediums while learning about fundamental three-dimensional design concepts. In this course, students will examine the way art is used to express self, narratives, or to interpret the world around them. Students will be introduced to historical and contemporary artists and techniques.

## **7130 ARCHITECTURAL DESIGN**

### **SINGLE TRIMESTER**

- *Studio fee: \$100*

This course is to introduce students to the fundamentals of architectural planning, design and modelling. During this course, students will bring a residential design to fruition through bubble maps, floor plan drawings, elevation drawings, and a culminating sculpted model. Students will explore existing contemporary and historical architecture to find inspiration.

## **7210 DRAWING**

### **SINGLE TRIMESTER**

- *Studio fee: \$100*

This course is for students interested in exploring a variety of drawing techniques and artistic concepts. Guided and independent assignments will encourage each student to develop their artistic voice while building upon fundamental skills. Projects will be both observational and expressive, representational and abstract. Students will engage in visual research, dialogue, and art viewing.

## **7310 PAINTING**

### **SINGLE TRIMESTER**

- *Studio fee: \$150*

This course starts with overcoming the fear of painting. Through various group and individual projects, students will learn painting techniques in acrylics and oils. Students will work from observation, photographs, and imagination. The course will stress the fundamental methods and materials of painting, emphasizing the appropriate use of tools and materials.

## **7400 CERAMICS**

### **SINGLE TRIMESTER**

- *Studio fee: \$125*

In this course, students will explore the fundamentals of creating functional pottery on the wheel. Through the creation of cylinders, mugs, bowls (and more!), students will learn finishing techniques for adding handles, applying surface textures and applying glazes. They will find inspiration from historic and contemporary forms to inform their personal artistic expression. Students will develop their ideas through writing, sketching, and presenting.

## **7122 DIGITAL DESIGN: CAD**

### **SINGLE TRIMESTER**

- *Studio fee: \$125*

This course teaches students how to use three-dimensional (3D) modeling software (Fusion 360) and how to prepare those designs for real world creation and assembly primarily with 3D printers, but with options to use a CNC machine, and/or a laser cutter. By using a combination of 3D modeling software and printers/cutters in the classroom students will research, design, build, and iterate their designs. Projects include building a 3D model from 2D plans, designing your own board game pieces, and researching, designing, and building a solution to a specific design problem.

## **7120 DIGITAL DESIGN: 2D**

### **SINGLE TRIMESTER**

- *Studio fee: \$75*



Two Dimensional (2D) Graphic Design teaches the use of programs in the Adobe Suite (Photoshop, Illustrator, and InDesign). Each project has a heavy emphasis on the principles of design in order for students to understand how to present ideas to viewers in a visual language. Projects range from logo design, typography exploration, page layouts, advertising, and photo manipulation. Students will look to existing designs and seek ways to develop their own artistic style.

## **7501 DARKROOM PHOTOGRAPHY**

### **SINGLE TRIMESTER**

- *Studio fee: \$150*

In this introductory photography course, students will explore the traditional (film-based) photographic image-making process. Students will be taught, utilizing an SLR camera, how to manually adjust the aperture, shutter, and light meter to gain creative control of their images. Students will learn how to process black and white negative film in the lab and how to enlarge silver gelatin prints in the darkroom. In addition, students will gain an understanding of photography as a visual art form and an understanding of the basic principles of composition and design through exercises, discussions, and group critiques. Film cameras are available to rent for the trimester.

## **7502 DIGITAL PHOTOGRAPHY**

### **SINGLE TRIMESTER**

- *Studio fee: \$150*

An introduction to color photography and digital imaging, this course examines the current state of the photographic process. Using Adobe Photoshop and digital SLR cameras, students will investigate file types, printer utilities, paper options, layers, tools, and additional fundamentals of the “digital darkroom.” Assignments will cover a broad range of concepts, ranging from the technical to the emotional, as students discover how color and light can be manipulated to construct more dynamic and creative images. Group discussions and critiques will help students gain insight into how their concepts are interpreted and help them become stronger visual thinkers. Digital SLR cameras are available for rent for the trimester.

## **7503 ADVANCED PHOTOGRAPHY**

### **SINGLE TRIMESTER**

- *Prerequisite: 7501 or 7502 or permission of the instructor*
- *Studio fee: \$250*

This course expands upon the fundamental techniques learned in Photography 7501 and 7502. Greater emphasis is placed upon addressing the pre-visualization of the photograph and obtaining the skills needed to make that concept a reality through extensive exercises in lighting and composition. Some of the techniques students may investigate are: studio light, electronic flash, negative scanning, fiber printing/toning, and alternative camera types such as the Holga. As the course progresses, increased emphasis will be placed upon going beyond the technical to create stronger, content-aware, highly personal images. Group and individualized critiques will be utilized to help students decipher the complex process of defining a cohesive body of work. Students will participate in the Photographers’ Lecture Series and associated workshops. Digital cameras are required for the course and are available for rent for the trimester. Additional equipment (film cameras, lights, etc.) will be provided when required.

## **7506 DOCUMENTARY PHOTOGRAPHY (10, 11, 12)**

### **SINGLE TRIMESTER**

- *Prerequisite: 7501, 7502, 7511 or permission of the instructor*
- *Studio fee: \$150*

Although this course will provide an overview of photojournalism and documentary photography both past and present, the primary directive will be creating images to tell stories that have relevance and impact. In that context, students will research and photograph both short exercises and a longer-term project during the trimester. Digital cameras will be the primary method of image capture, but phone and analog-based imaging are also possibilities. Students will produce a final photo essay in a self-published book format that tells a complete story through images and words.

## **7511 FILM MAKING I**

### **SINGLE TRIMESTER**

- *Studio fee: \$150*

This is an introductory course in the process of digital film making. This is not a film theory or film appreciation course, but a hands-on studio class, utilizing digital video cameras and editing software (Adobe Premiere) to create actual short films. Color, light, camera movements, sound capture, camera angles, and editing techniques are some of the topics that will be discussed and demonstrated. Through group and individual exercises, students will obtain the fundamental skills needed to create a well-crafted film from start to finish. Camera kits, tripods, external hard drives, editing stations, and all other necessary equipment are provided.

## **7512 FILM MAKING II**

### **SINGLE TRIMESTER**

- *Prerequisite: 7511 or permission of the instructor*

- *Studio fee: \$150*

This course expands upon the basic concepts and technical skills involved in creating a film from Film Making I. We will examine a variety of film and video sources and discuss their concepts and structure to gain an understanding of the complex framework required in the process of creating an original film. Scripts, storyboards, and pre-production skills will be discussed and applied to the creation of individual and group film projects. Students will be required to participate in the annual Williston Film Festival and encouraged to submit projects throughout the trimester for consideration. Cameras, computers, software, and all other equipment will be provided. Lighting kits, DSLRs, Glidecams, and other specialized equipment will be available for student use.

## **7190 AP STUDIO ART**

### **TWO TRIMESTER COURSE**

- *Prerequisites: Two visual art classes or permission of the instructor. Students may petition the instructors and Academic Office to take this class a second time for credit*
- *Studio fee: \$150*

AP Studio Art involves a rigorous curriculum addressing students' "sustained investigation." Students choose a theme or art style to experiment within throughout the trimester. The class is co-taught by the three visual art teachers to allow students a range of feedback and guidance throughout this process. Students will be expected to submit an AP Studio Art Portfolio to the College Board at the end of the course.

## **7601 ACTING I**

### **SINGLE TRIMESTER**

This course introduces students to acting techniques used to craft a stage performance. The course begins with an introduction to improvisation and theater vocabulary before moving on to scene work. Students learn how to apply the Stanislavski system and Meisner technique to embody characters in monologues and scenes. Viola Spolin- and Keith Johnstone-based improvisation is used to teach spontaneity and imaginative thinking. Scene selection is drawn from modern and contemporary American Realist theater. Along with their scene work, students explore the social and historical forces that produced these works. By the end of the trimester, students will complete one monologue and two scenes.

## **7602 ACTING II**

### **SINGLE TRIMESTER**

- *Prerequisite: 7601 or departmental approval*

This course provides students with further technique to hone their craft as actors. Building on the work in Acting I, students will apply their knowledge of character analysis and blocking to the staging of short plays. Students will also explore theater as a tool for social justice and create an original piece on the topic of their choosing. The course is individualized to address particular needs of students, and scene selections are made in order to address areas where students need to be challenged. By the end of the trimester, students will complete a monologue, a 10-minute play, and a social justice theater project.

## **7623 PLAYWRITING AND SCREENWRITING**

### **SINGLE TRIMESTER**

This course is an introduction to dramatic composition. Students enrolled in this course will learn about dramatic structure and character development and will become proficient at writing dialogue for the stage and screen. As they imagine new characters and develop stories for performance, students will learn to trust their writer's voice, and become confident dramatists and storytellers. A respectful and generous creative exchange will be promoted in the classroom for students to receive the critical feedback needed to enrich their work. By the end of the trimester, students will write a monologue, a scene for a stage play and another scene for a film, and their choice of a 10-minute play or a short film script.

## **7734 CONCERT CHOIR**

### **SINGLE TRIMESTER**

- *No experience required!*

Students in Concert Choir learn the fundamentals of vocal ensemble performance, develop music literacy skills, gain solo audition experience, and study a diverse repertoire of choral music from modern, popular, classical, and world-music traditions. Students share their work in a variety of formal and informal concerts and events, and field trips may be offered. Additional participation in Teller Chorus is encouraged. Students can take this course multiple times for credit. Concert Choir is the best preparation for Honors Chamber Singers. Concert Choir is open to all Williston students!

## **7731 HONORS CHAMBER SINGERS**

### **YEARLONG COURSE**

- *Prerequisite: Concert Choir, Teller Chorus, Musical Theater, Private Lessons, or other prior experience; Auditions take place in spring or over summer for new students.*

Honors Chamber Singers is Williston's honors-level auditioned SATB choir. Members enjoy creating community, developing their voices and musicianship, and engaging in the joys and challenges that attend the art of singing. HCS performs music from past and present, from all over the world. Individual practice and weekly sectional rehearsal outside of class time is required. Additional participation in Teller Chorus is encouraged, and students are expected to audition for the MMEA Western District chorus. Field trips may be offered, and HCS serves as a touring and recruitment ensemble to promote Williston and alumni affairs. Auditions are held each spring for the coming year's ensemble.

## 7745 INSTRUMENTAL ENSEMBLE

### YEARLONG ENROLLMENT ENCOURAGED

This is an evening class that meets once a week and receives two credits for yearlong engagement. The class is open to string, wind and piano players with some experience. This ensemble will cover a variety of repertoire. At the end of each trimester, the group will perform in an instrumental music concert.

## 7790 AP MUSIC THEORY

### YEARLONG COURSE

- *Prerequisite: Teacher approval required*

Students in AP Music Theory explore the written and aural language of music. Through sight singing, ear training, analysis, and composition, students develop advanced musicianship skills and prepare for the AP Music Theory exam. The first half of the year focuses on the fundamentals of music notation and composition, and the second half of the year focuses on applying those skills in analysis and composition projects. Concurrent participation in vocal or instrumental music at Williston is highly encouraged.

## 7910 HONORS WILLISTON SCHOLARS: VISUAL ARTS (11, 12)

### SINGLE TRIMESTER

- *Prerequisite: Department approval*

Williston Scholars courses are honors courses that provide students the opportunity to conduct a trimester-long project in their discipline of interest. See page 9 for complete description.

## 7911 HONORS WILLISTON SCHOLARS: PERFORMING ARTS (11, 12)

### SINGLE TRIMESTER

- *Prerequisite: Department approval*

Williston Scholars courses are honors courses that provide students the opportunity to conduct a trimester-long project in their discipline of interest. See page 9 for complete description.

### The following courses rotate and will not be offered in 2023-2024:

7504 Alternative Photographic Processes

7622 Directing

# EXTRACURRICULAR ARTS

---

## DANCE ENSEMBLE

In this afternoon program option, students have opportunities to choreograph and perform in a variety of dance styles for two major dance productions each year. Dancers take weekly classes in ballet, jazz, and contemporary dance styles, and train with our Director of Sport Performance. The ensemble also studies with local guest artists, as well as nationally known performing artists through the Grum Visiting Artist Program.

## TELLER CHORUS

Teller Chorus is a mixed-voice choral ensemble which rehearses and performs choral music selected from a wide range of cultures and genres. The ensemble meets Tuesday evenings and presents two concerts per year.

## THE WILLISTON THEATER

The Williston Theater offers opportunities to act or work in a variety of backstage capacities. In the fall trimester, The Williston Theater mounts a production of a non-musical play, classical or contemporary. During the winter trimester, the program mounts a winter musical in collaboration with the dance and music instructors. A section of tech theater is offered each trimester. Students select whether they want to work in the scenic shop or costume shop during the trimester. These sections support the construction of props, scenery, and costumes for theater productions and other performing arts events.

## PRIVATE INSTRUCTION

Private instruction in voice and instrumental music is available for additional hourly fees. Regular lessons and practice sessions are expected. Please see the Director of Choirs for more information.

## **THE VISUAL & PERFORMING ARTS INTENSIVE PROGRAM**

The Visual and Performing Arts Intensive Afternoon Program exists to provide opportunity and support for the serious musicians, visual artists, or theater technicians. Students in this program are required to participate in the Williston Arts Walk at the end of each trimester. Arts Intensive has a \$30 materials fee.

## **JAZZ ENSEMBLE**

Jazz Ensemble meets in the evenings once a week to rehearse and play jazz repertoire and will perform in instrumental concerts throughout the year. It is open to musicians with some experience.

## **WILLISTON FUSION**

Williston Fusion is an extracurricular a cappella ensemble open to all students. The group rehearses before and after school throughout the year. Performances include the Holiday Concert, Winter Warmer, pops-style concerts, and festivals with guest artists. Singers in Fusion must participate in an academic choir (Concert Choir or Chamber Singers).

# MIDDLE SCHOOL

---

The Middle School is an important part of the Williston community. We share resources with the Upper School—the theater, library, athletics and arts facilities, and most of the academic buildings—and still maintain a separate identity on campus. The Middle School, which consists of grades seven and eight, has approximately 35 students per grade. With an average class size of 13, Middle School students know each of their teachers and their peers well.

Our dedicated and experienced faculty are much more than traditional teachers. They are compassionate and sincere individuals who constantly strive to have their students excel. Faculty are visible and accessible to the students. Most are advisors; all are involved in numerous ways with students outside of the classroom.

Teachers are concerned with the cognitive development of their students, but teaching never happens in a vacuum; the faculty are aware that the student's social, moral, and physical development are crucial as well. This is why community service plays such an important role in the Middle School curriculum and why collaborative learning happens all the time. Civility. Respect. Acceptance. Concepts like these are constantly reinforced in the Middle School.

Middle School students are encouraged to become self-motivated and dedicated students. Faculty help students succeed by providing them with a foundation of subject-appropriate study skills. Faculty hope that their students appreciate (maybe even love) their particular academic subject. The teachers' enthusiasm is often infectious. Students walk away from each course with a solid foundation in the subject and the skills necessary to take the lessons learned in the Middle School and apply them in the Upper School and beyond.

Learning, of course, is not limited to the classroom. Through our relationships with the Five Colleges in our local community, we can provide our students with field trips, community service opportunities, and visiting speakers that enhance and enrich our academic program. These opportunities and experiences help our students truly understand that learning happens everywhere.

Each student is assigned to an advisor who monitors the student's academic progress and discusses pertinent social issues. Advisory groups meet regularly through the course of the year to plan community service projects, discuss school-wide issues, and periodically define, review, and redefine academic goals.

The Middle School is a place where adolescents are challenged. The program is demanding, but not overwhelming. Students are amazed at what they can accomplish at Williston. They will also find the experience rewarding and fun.

# PROGRAM OF INSTRUCTION

---

Each student's course of study includes English, History and Global Studies, Language (French, Latin, Spanish), Mathematics, Science, Art, Music, Theater, and Health (eighth grade). Brief outlines of each of the required courses follow.

## YEARLONG COURSES

### ENGLISH

---

#### 2000 ENGLISH 7

In this course, students explore and strengthen the communication skills of reading, writing, speaking, and listening, all in a respectful and supportive environment. The development of critical thinking skills is stressed and supported continuously, as students acquire the building blocks for analyzing literature and for communicating their ideas effectively in a wide variety of contexts. The analytical writing process is introduced and practiced throughout the year in response to classroom texts. Students also enjoy many opportunities to work with the material creatively. Students read fiction, nonfiction, poetry, drama, and short stories. Foundational grammar and mechanics are formally introduced and practiced, and students continue building their vocabularies through the readings.

#### 2005 ENGLISH 8

This course fosters intellectual and personal growth, academic independence, and personal confidence through a close study of literature, writing, and speaking. Students develop new skills as they read and write with a purpose in mind. These skills are cultivated in analytical and creative writing assignments as well as in class discussions based on the selected literature. In our analyses we focus on how to write an effective thesis with supporting textual points to develop persuasive critical arguments in essay form. In creative writing assignments, students are responsible for presenting clear and meaningful fiction through point of view, dialogue, narration, and description.

Throughout the course of the year, with teacher oversight, each student authors a lengthy and creative Humanities Project based on a personal passion or interest. Students may supplement their projects with audio and visual technology or a performance if desired. The culmination is a unique and well-constructed literary piece in which the student demonstrates intellectual independence, creativity, and sound writing skills.

### LANGUAGE

---

Language courses emphasize mastery of grammar and vocabulary while incorporating opportunities to further students' cultural literacy. Middle Schoolers' language sequences combine some Middle-School-only sections (1A or 1B) with Upper School sections. This combination in each language may change from year to year based on the needs of the students.

**Please note: The 2023-24 school year will be the last year that Chinese is offered and new students will not be added to the program.**

#### 5320 CHINESE II

This course is a continuation of Chinese 1 with a review of grammar and the further development of reading and writing skills in Mandarin. Throughout the year, students explore cultural themes. Students learn to comprehend and produce more complex sentence structures, with a focus on expressing individual interests through interpersonal communication and the presentational modes. Students in the course begin to accumulate more sophisticated vocabulary and grammar.

#### 5110 FRENCH I

Students build a foundation in listening, speaking, reading, and writing in the French language. Emphasis is placed upon mastery of the French sound system, basic vocabulary, and fundamental grammar concepts in the present tense.

## 5105 FRENCH 1B

This course is designed to establish a foundation in listening, speaking, reading, and writing in the eighth grade. Emphasis is placed upon mastery of the French sound system, basic vocabulary, fundamental grammatical concepts, and exploring French-speaking cultures.

## 5710 LATIN I

This introductory course gives students a solid grounding in the fundamental elements of Latin. Emphasis is placed on learning vocabulary and building translation skills. Students strengthen English vocabulary and language skills through close examination of Latin words and syntax. Roman culture and history are explored through hands-on, language-based projects.

## 5720 LATIN II

- *Prerequisite: Latin I*

Students continue the study of Latin vocabulary, grammar, syntax, culture, and history begun in Latin I. Emphasis is placed on reading and comprehension skills, in addition to cultural topics.

## 5725 HONORS LATIN II

- *Prerequisite: Latin I and Departmental approval*

An honors section is offered as an enriched version of the standard Latin II program in which the demands of the course dramatically increase.

## 5500 SPANISH 1A /

## 5505 SPANISH 1B

These courses are designed to establish a foundation in listening, speaking, reading, and writing in both the seventh and eighth grades. Emphasis is placed upon mastery of the Spanish sound system, basic vocabulary, and fundamental grammatical concepts. After successful completion of the two-year sequence, students take Spanish II or Honors Spanish II in the Upper School.

# HISTORY & GLOBAL STUDIES

---

## 6000 GEOGRAPHY 7

Students in this course develop a greater awareness and appreciation for the scope of physical and human geography through in-depth investigations of issues affecting different regions of the world. Throughout the year, students build their study and writing skills, work on creative projects, and orally present information related to the topics studied. Using the skills developed in trimester one and two, students in trimester three will explore local history, using themes from the year to investigate a topic of their choice. Students will conduct research, visit archives, write a research paper, and give a public presentation.

## 6005 CIVICS 8

This course introduces students to the concept of citizenship in our society and the responsibilities associated with it. To become informed citizens, students will study the historical roots of America's constitutional system and determine how those constitutional principles are expressed locally and nationally. The course utilizes curriculum from *We the People: The Citizen and the Constitution*. The goal of this program is to provide students with the tools to participate competently and responsibly in the public sphere. In the spring, students will build on their foundation of constitutional knowledge to write a mini research paper based on a topic of their choice. Enhancing activities include debates, a mock trial, a simulated congressional hearing, and field trips to the local court house, the State House, and Washington, D.C.

# SCIENCE

---

## 4000 LIFE SCIENCE 7

In a life science context, students practice scientific methods of thinking through observation, data collection, and interpretation. Students join with scientists from Harvard Forest by collecting data from campus trees in a long-term ecological research project documenting the length in the growing season in relation to climate change. The school garden acts as a living laboratory in which students encounter the cycles of life in an array of organisms from every classification group: plants, animals, fungi, protists, and bacteria. Students establish a traditional foundation in life science concepts while learning to conduct their own investigative research and exploring current issues in our world today. The classroom aims to be alive with student interactions as well as with a variety of plants and animals for observation and study. Students participate in several field trips that take advantage of the wealth of resources within the Five College area. All students participate in the Science Fair, which affords them the opportunity to investigate a life science topic of their choice.

## **4005 PHYSICAL SCIENCE 8**

In eighth grade physical science, we combine academic rigor and challenging topics with hands-on learning and fun. The focus is always on process and how the main ideas of science tie together across disciplines. The course is divided into three main parts, including an introduction to chemistry, which involves students in learning about molecular structures by building molecular models. Discussions about the nature of energy and heat are tied to what we learn about molecules with experiments on phase changes and combustion. This course also includes a section on weather, climate, meteorology, and the hydrologic cycle on earth. In this section we use what we learned about energy and phase changes to understand how the Earth's cycles work and how water moves around the planet. We will come to understand climate change and will address many of the key themes surrounding it. The third main component of this course is the Science Fair project: students choose a physical phenomenon to investigate through experiments. This aspect of the class encourages and develops an understanding of the scientific method and builds the student's confidence in lab skills and procedures.

## **MATHEMATICS**

---

Pre-Algebra, Algebra Standard, and Algebra Honors are offered. Some seventh and eighth graders will take Geometry or Algebra 2 if they have completed the prerequisite courses. The goal of the mathematics program is to prepare students for future mathematics courses while providing a variety of strategies for reading, learning, and studying mathematics.

### **3000 PRE-ALGEBRA**

This course seeks to solidify and extend basic number concepts and to prepare students for Algebra I. Topics will include work with integers, decimals, fractions, equation and inequality solving, ratio, proportion and percent, and graphing on the coordinate plane. Emphasis will be placed on the application of knowledge through word problems and projects.

### **3100 ALGEBRA I**

The eighth grade Algebra I course seeks to build an algebraic foundation for students so that they are prepared to proceed to more advanced mathematics courses. Topics will include work with integers, writing and solving multi-step equations and inequalities, graphing linear equations and inequalities, proportion and percent equations, graphing and solving systems of equations and inequalities, properties of exponents, and an introduction to quadratics. Emphasis will be placed on the application of knowledge through problem-solving and writing.

### **3105 HONORS ALGEBRA I**

- *Prerequisite: Teacher recommendation*

The Honors Algebra I course is offered to seventh and eighth grade students who learn at a faster pace, are better able to handle abstract reasoning, and are ready to take more responsibility and initiative for their own learning. The topics include all of the standard Algebra 1 concepts as well as an in-depth study of quadratics. Emphasis will be placed on the application of knowledge through problem-solving and writing.

## **TRIMESTER COURSES**

### **STEM**

---

#### **3800 STEM FOUNDATIONS 7**

Students will study a variety of concepts in technology and engineering that will support and enhance their work in the sciences and math. Technical topics will include programming, design challenges, and robotics. Students will also consider technology's impact on themselves, their community, and society at large.

## **VISUAL & PERFORMING ARTS**

---

#### **7001 THEATER 7**

The seventh grade theater course offers students an introduction to improvisation, acting, and playwriting. Students learn by doing. They are expected to participate actively in daily warm-ups and theater games. The course begins with group-building exercises that allow the class members to gain comfort with each other and with performing onstage. Students learn the improvisation technique of Viola Spolin and Paul Sills, playing numerous theater games that allow them to work spontaneously from their imaginations, create vivid characters and settings, and gain a sense of scene structure. Students apply these skills to the Story Theatre project, which culminates in a performance for the Middle School community.



## **7011 THEATER 8**

In this course, eighth graders will get a preview of the Shakespeare Project, the rehearsal process, and responsibilities involved in bringing a production to its feet. The course begins with group-building exercises that build trust and cohesion in the class. Improvisation exercises are also used so that students begin to use their imaginations to create characters, understand scene structure, and gain comfort on stage. Once this foundation has been laid, students will explore Shakespeare's world and the play we will produce later in the year. (Past plays include *A Midsummer Night's Dream*, *Romeo and Juliet*, and *The Tempest*.) The course culminates with the writing of original scenes and monologues based on the play.

## **7002 ART 7**

In seventh grade art, we look at a variety of 2D techniques and materials. Students start with learning the elements and principles of design while learning how to implement them. From there we explore many different 2D mediums including cut paper assemblages, perspective drawing, and digital collage making with Photoshop. This course focuses on self-reflective skills and logical, process-driven decision making in a low-pressure environment. Trial and error exercises in both wet and dry media will result in success with this introductory course.

## **7012 ART 8**

Expanding on the basics learned in seventh grade, students in eighth grade progress from 2D to 3D art. The class designs and builds cardboard landscapes and creatures, before moving on to digital work including 3D modeling and poster design in Photoshop. At the end of the trimester, students will work on a self-designed culminating project as well as a large group project which will be displayed on campus. Students should expect to get hands on and creative with their work!

## **8TH GRADE SHAKESPEARE PROJECT**

In the spring, the entire eighth grade class embarks on bringing a full-length production of one of William Shakespeare's play to life. Students may choose to come on board as actors, directors, stage managers or designers. Class time will be spent exploring the play and characters, writing original scenes, rehearsing independently and with teacher supervision, and designing and building sets and costumes. This will all happen in a supportive environment conducive to theatrical risk-taking. By electing to be part of the eighth grade Shakespeare project students agree to participate wholeheartedly regardless of what position or role they are given. The project culminates in a fully staged performance for family, friends, and the Williston community. Past plays include *A Midsummer Night's Dream*, *The Tempest*, and *Romeo and Juliet*.

## **HEALTH**

---

### **7014 HEALTH 8**

This course exposes students to issues that affect their physical, intellectual, social, and emotional well-being. Topics covered include mental health, social health, nutrition, physical fitness, human sexuality, the human life cycle, substance abuse, infectious diseases, and environmental health. Classes are lecture and discussion based. The goal of this course is to equip students to make informed, well-thought-out decisions about issues that affect their health in our increasingly complex society.

## **MIDDLE SCHOOL MUSIC**

---

Students can participate in one of the following musical ensembles that rehearse during the evening: Jazz Ensemble, Chamber Ensemble, Teller Chorus, and a cappella groups.