COURSE SELECTION & SCHEDULING

TENTH GRADE COURSE SELECTION

The following are some examples of possible tenth grade schedules. This is not an exhaustive list.

Option #1

1. English 10
2. Algebra II *or* Algebra II AB *or* Algebra II BC
3. Chemistry *or* Inorganic Chemistry
4. Western Civilization
5. World Language *or* Latin V
6. Required Elective *(either one full-year course or two semester courses)*

Option #2

1. English 10
2. Algebra II *or* Algebra II AB *or* Algebra II BC
3. Chemistry *or* Inorganic Chemistry
4. Western Civilization
5. World Language *or* Latin V
6. Fellows
7. Optional Elective

Option #3

1. English 10
2. Algebra II *or* Algebra II AB *or* Algebra II BC
3. Chemistry *or* Inorganic Chemistry
4. Western Civilization
5. World Language
6. Latin V
7. Optional Elective

Option #4

1. English 10
2. Algebra II *or* Algebra II AB *or* Algebra II BC
3. Chemistry *or* Inorganic Chemistry
4. Western Civilization
5. World Language *or* Latin V
6. Required Elective *(either one full-year course or two semester courses)*
7. Optional, Additional Elective

Sophomore Electives for the 2026–2027 School Year

- Art History I and III *(semester courses)*
- Band/Chorus/Orchestra/Yearbook *(full-year courses)*
- Democracy Around the World *(semester course)*
- Film *(semester courses)*
- Introduction to Computer Science *(semester course)*
- Introduction to World Religions *(semester course)*
- Mass Communications *(semester course)*
- Studio Art *(semester courses)*

For planning purposes, the following are typical schedules for the junior and senior years.

GRADE 11

1. English 11-12 *(semester offerings)*
2. Precalculus *or* Precalculus AB *or* Precalculus BC
3. Physics *or* Physics: Principles of Engineering *or* Physics: Mechanics and Electromagnetism
4. U.S. History
5. World Language
6. Required Elective *(either one full-year course or two semester courses)*

Semester-long Options

- African American History
- Art History
- Astronomy
- Democracy Around the World
- Film
- Geopolitics: China, Russia, and the Middle East
- Global Issues
- Health and Wellness Science
- Introduction to Computer Science
- Introduction to World Religions
- Latin American History
- Organic Chemistry
- Studio Art
- TECH
- U.S. Foreign Policy

Year-long Options

- Advanced Inorganic Chemistry
- Advanced Molecular Biology
- Band/Chorus/Orchestra/ Yearbook
- Computer Science: Java
- Latin VI
- Principles of Economics
- Psychology

GRADE 12

1. English 11-12 *(semester offerings)*
2. Statistics, Calculus, Calculus AB, Calculus BC *or* Multivariable Calculus and Linear Algebra
3. Ecosystem Dynamics, Advanced Molecular Biology, Advanced Anatomy & Physiology, Health and Wellness Science, Life Science in Society, Astronomy, Engineering: Process and Practice, Advanced Physics – C, Advanced Inorganic Chemistry, or Organic Chemistry
4. Political Science *(semester offerings)*/American Government
5. World Language
6. Required Elective *(either one full-year course or two semester courses)*

Semester-long Options

- Advanced Computer Science
- Advanced Statistics
- African American History
- Art History
- Democracy Around the World
- Film
- Geopolitics: China, Russia, and the Middle East
- Global Issues
- Introduction to Computer Science
- Introduction to World Religions
- Latin American History
- Mass Communications
- Studio Art
- TECH
- U.S. Foreign Policy

Year-long Options

- Band/Chorus/Orchestra/ Yearbook
- Computer Science: Java
- Principles of Economics
- Psychology

SCHEDULE & CLASS ROTATION

As of the 2026-2027 academic year, the Upper and Middle Schools will eliminate full rotation days and instead use a block bell rotation consisting of eight academic bells and daily community time. Every day, students will rotate through four academic bells each lasting for 75 minutes plus a 45-minute community bell which will be utilized for club meetings, assessment make-up, and school-wide activities. The next day, they will rotate through their other four academic bells and the 45-minute community bell. In the course of a week, students will attend each of their classes two or three times and will meet with all classes five times in a two-week span.

DAILY SCHEDULE

TIME	ROYSTER MIDDLE SCHOOL	TIME	TUNSTALL UPPER SCHOOL
8:15–8:30	Chapel	**8:15-9:30**	Block 1
8:35–9:50	Block 1	**9:35 - 9:50**	Chapel
9:50–10:05	Break	**9:50- 10:05**	Break
10:05–11:20	Block 2	**10:05–11:20**	Block 2
11:25–12:40	Block 3	**11:25–12:40**	Block 3
12:40–1:10	Lunch	**12:40-1:25**	Community Bell
1:10–1:55	Community Bell	**1:25-1:55**	Lunch
2:00–3:15	Block 4	**2:00–3:15**	Block 4
3:30–5:30	Athletic/Arts Practice	**3:30-5:30**	Athletic/Arts Practice

TUNSTALL BELL ROTATION

8:10 (Bell)	AX	BX	CX	DX	EX	FX	GX	HX
8:15-9:30	A Block	B Block	C Block	D Block	E Block	F Block	G Block	H Block
9:35-9:50	Chapel							
9:50-10:05	Break							
10:05-11:20	C Block	D Block	E Block	F Block	G Block	H Block	A Block	B Block
11:25-12:40	E Block	F Block	G Block	H Block	A Block	B Block	C Block	D Block
12:40-1:25	Community Bell							
1:25-1:55	Lunch							
2:00-3:15	G Block	H Block	A Block	B Block	C Block	D Block	E Block	F Block

NEW COURSES

FINE ARTS

Academy Singers CREDIT: 0.5

Academy Singers is an auditioned ensemble that meets on alternate bells and is open to students who are concurrently enrolled in Chorus. Designed for singers seeking an advanced and enriched choral experience, this select group focuses on musical growth through challenging and diverse repertoire spanning a wide range of styles and historical periods. Emphasis is placed on refined vocal technique, advanced harmony and part independence, expressive performance, and heightened ensemble artistry. In addition to participating in the winter and spring concerts, Academy Singers will enjoy expanded performance opportunities throughout the year, representing the school in the community while striving for the highest level of musical excellence.

Art History III: Special Topics—19th Century European Art CREDIT: 0.5

This 19th-century art history course aims to equip students with a critical understanding of how art both shaped and responded to the profound political, social, and technological changes of the modern era. Focusing on movements such as Romanticism, Realism, Impressionism, and Post-Impressionism, the course develops students' visual analysis skills while situating artworks within contexts such as industrialization, nationalism, colonialism, and the rise of the modern city. Students learn to engage with primary sources, scholarly debates, and museum practices, building the ability to interpret artistic innovation, patronage, and exhibition culture, and to articulate informed arguments about the emergence of modern art. Students must take Art History I or Art History II as a prerequisite for Art History III.

Chamber Orchestra CREDIT: 0.5

Chamber Orchestra is an advanced, auditioned strings ensemble that meets on alternating bells and is open to students concurrently enrolled in Orchestra. This select group provides an enriched musical experience, performing a wide range of challenging repertoire that spans classical masterworks, contemporary compositions, and stylistically diverse works. Emphasis is placed on advanced instrumental technique, refined ensemble playing, expressive interpretation, and musical independence. Chamber Orchestra members engage in rigorous rehearsal and benefit from additional performance opportunities beyond the winter and spring concerts, representing the school in special events and community appearances while striving for the highest level of artistic excellence.

HISTORY & SOCIAL SCIENCES

Democracy Around the World CREDIT: 0.5

Democracy Around the World is an elective, semester-long course on the promise, and problems, of modern democracies. We will first create a theoretical framework and common vocabulary regarding different forms of democracy and their associated challenges. The core of the course will then be a series of international case studies drawn from a variety of regions and cultures around the world and from the last century or so. Examples of such case studies could include, but are not limited to, Turkey, Venezuela, South Africa, and Germany.

Global Issues CREDIT: 0.5

What are the most urgent challenges facing our world today, and how can they be addressed in an increasingly interconnected global community? Why are some problems so complex that no single nation can solve them alone? This semester course for juniors and seniors examines major global issues that transcend national borders and require international cooperation, collective action, and creative problem solving. Students will explore the historical roots and contemporary dimensions of global challenges such as peace and conflict, economic globalization, nationalism and internationalism, climate change and environmental sustainability, migration, development, public health, and human rights. Through case studies and current events analysis, students will investigate the roles of governments, international organizations, corporations, non-governmental organizations, and social movements in shaping global outcomes. Particular topics will be selected in collaboration with students based on their relevance and global significance, allowing the course to respond dynamically to unfolding world events. By the end of the course, students will have developed a deeper understanding of global interdependence and the analytical tools necessary to evaluate complex international issues and propose informed, practical responses.

MATHEMATICS

Advanced Computer Science: Data Structures and Algorithms CREDIT: 0.5

Building on the foundations of Computer Science: Object-Oriented Programming in Java, this semester-long course explores how to design software that is both powerful and efficient. Students will move beyond basic programming to study more sophisticated "blueprints" used by professional engineers: Data Structures and Algorithms. Through a series of lab-based challenges, we will build and use collections like Linked Lists, Stacks, Queues, Hash Tables, Maps, and Trees to handle massive amounts of information optimizing runtime and memory utilization. The course culminates in an optimization project where students must apply their knowledge to solve a complex, real-world data problem.

Linear Algebra and Multivariable Calculus CREDIT: 1

Linear Algebra and Multivariable Calculus is a year-long course for those students who have completed Calculus BC and will provide them exposure to additional advanced mathematics courses offered in college. The first semester will be devoted to Linear Algebra and the topics will include matrices, vector spaces, systems of equations, bases and dimension, and eigenvalues and eigenvectors. The second semester will be devoted to Multivariable Calculus and the topics will include the geometry of Euclidean Space, differentiation of vector-valued functions, tangent planes, and double and triple integrals.

SCIENCE

Advanced Molecular Biology CREDIT: 1

This course explores the fundamental principles of living systems from a molecular perspective. The course emphasizes the relationship between the structure and function of the four major biological macromolecules—carbohydrates, proteins, lipids, and nucleic acids—and their roles in biological processes encountered in everyday life. During the first semester, students examine the molecular basis of cellular biology; in the second semester, they investigate how genetic mechanisms drive the evolution of organisms. The laboratory component reinforces core concepts through hands-on experience with a variety of experimental techniques, including microscopy and gel electrophoresis.

Astronomy CREDIT: 0.5

This semester-long, comprehensive astronomy course introduces students to the wonders of the universe, from our solar system to distant galaxies. Students will explore fundamental astronomical concepts through engaging hands-on activities, observations, and critical thinking exercises designed to develop scientific literacy and foster curiosity about space. The course includes a mathematical component emphasizing algebraic problem-solving to quantify astronomical phenomena. While enrollment in or completion of physics is helpful, it is not required.

Life Science in Society CREDIT: 0.5

This semester-long course explores some of the most debated and socially impactful topics in contemporary life science. We will explore how scientific understanding is shaped—and sometimes distorted—by history, politics, economics, and misinformation through reading, journaling, and classroom discussion. Students will critically analyze how scientific advances interact with society, how public opinion forms around biological issues, and why certain scientific concepts become controversial. This science course will be a participation- and discussion-based class with little wet lab experiences. Possible topics may include safety and reliability of medical imaging technology, gene editing and CRISPR technology, vaccination and public health, and health and nutrition.

Health and Wellness Science CREDIT: 0.5

Health and Wellness Science is a semester-long introductory course designed to help students understand how major body systems support human health, performance, and overall wellness. The course focuses on the cardiovascular, respiratory, digestive, immune, and nervous systems, while also exploring how lifestyle choices influence long-term health. Students will investigate how these systems function independently and together to maintain homeostasis. Through hands-on labs, dissections, case studies, and real-world health applications, students will build foundational knowledge useful for future coursework in biology, anatomy and physiology, exercise science, and health sciences. The course also introduces students to career pathways connected to medicine, health sciences, neuroscience, nutrition, public health, and biomedical research.

TECH CREDIT: 0.5

The Engineering Collective Hub (TECH) brings students together during an academic bell to work on projects in science and engineering that are centered around a program external to the school. Students elect the program(s) they want to engage with and then work as a team to complete their project. This semester-long course is offered in both the fall and spring and projects will vary by semester based on competition schedules. Past students have chosen to build a robot for the FIRST Tech Challenge, design and fly rockets for the American Rocketry Challenge, program a drone for the Aerial Drone Competition, and plan a city with architectural software for the Future City Competition. Enrolled students might choose one of these programs or find a new one that they want to pursue. Students who are not enrolled in TECH can still participate in TECH during their study hall or community time. Students will receive a letter grade for their work in TECH which will be reflected on their transcript; however, their grade in TECH will not contribute to their GPA nor will the credit they earn count toward graduation requirements.

UPDATES TO EXISTING COURSES & CURRICULAR STRUCTURE

COURSE UPDATES AND DURATION CHANGES

With the addition of the **Academy Singers** class, the **Chorus** class description has been updated as follows:

Chorus CREDIT: 0.5

Chorus is a dynamic, performance-based ensemble that meets every second bell and welcomes students of all experience levels who are eager to grow as singers and musicians. This course explores a broad spectrum of musical styles, with a special emphasis on popular music and contemporary genres. Students develop healthy vocal technique, confident stage presence, and strong ensemble skills through collaborative rehearsal and performance experiences. A central focus of the ensemble is harmony singing, as students learn to blend, balance, and perform in multiple parts, building attentive listening skills and musical independence. Chorus members perform in two formal concerts each year—the winter and spring concerts—as well as additional school and community events as they arise, fostering creativity, teamwork, and a lifelong appreciation for making music together.

With the addition of the **Chamber Orchestra** class, the **Orchestra** class description has been updated as follows:

Orchestra CREDIT: 0.5

Orchestra is a performance-based strings ensemble that meets every second bell and welcomes students who play violin, viola, cello, or bass and who are eager to develop their musicianship in a collaborative setting. This course explores a broad range of repertoire, spanning classical masterworks, contemporary selections, film music, and popular styles, providing students with a well-rounded ensemble experience. Emphasis is placed on developing strong instrumental technique, tone production, ensemble balance, and expressive performance skills. Students learn to perform as a unified group while building confidence and musical independence through engaging rehearsals and repertoire. Orchestra members showcase their work in two formal concerts each year—the winter and spring concerts—while cultivating teamwork, discipline, and a lifelong appreciation for string performance.

COURSE NAME CHANGES

Advanced Biology is being replaced with **Advanced Molecular Biology** *(course description provided on p. 5)*.

Inorganic Chemistry I will become **Inorganic Chemistry**.

Inorganic Chemistry II will become **Advanced Inorganic Chemistry**.

Introduction to Computer Science will move from a year-long course to a semester course with the following updated course description:

Introduction to Computer Science CREDIT: 0.5

This semester-long course provides a foundational exploration of computer science using Python, a language celebrated for its readability and wide-ranging applications in research, data science, and the arts. Students begin by utilizing an online IDE platform to master core programming concepts, such as variables, functions, conditional logic, and loops, by writing code that generates dynamic graphics and animations. As the course progresses, students move beyond graphical manipulation to explore standard text-based scripting, learning how Python can be used to automate repetitive tasks and process data. By focusing on algorithmic thinking and structured problem-solving, this course equips students with a versatile toolkit applicable across various academic disciplines. No prior programming experience is required.

Organic Chemistry will move from a year-long course to a semester course with the following updated description:

Organic Chemistry CREDIT: 0.5

This semester-long course is designed for juniors and seniors who plan to pursue college studies in medicine, biomedical engineering, or chemical engineering. The course provides a rigorous introduction to the foundational concepts of college-level organic chemistry, including drawing bond-line structures and mastering chemical nomenclature, as well as exploring the structure, function, and reactivity of major organic functional groups. This foundational material is then used to examine the major classes of reaction mechanisms commonly encountered in organic chemistry. The course concludes with a survey of instrumental analysis techniques. Through an emphasis on conceptual understanding and problem-solving, students are prepared for success in a college-level organic chemistry course.

CURRICULAR CHANGES

Fine Arts:

- Art History I, II, and III are offered rotationally and therefore all are not taught every year

History & Social Sciences:

- Geopolitics, U.S. Foreign Policy, and Democracy Around the World are offered rotationally and therefore all are not taught every year

Mathematics:

- Students who complete Calculus BC as juniors will take a year-long course called Linear Algebra and Multivariable Calculus as seniors rather than taking a semester of Multivariable Calculus and a semester of Advanced Statistics
- Advanced Statistics will continue to be a semester elective for seniors in Calculus AB or Calculus BC as well as those in Linear Algebra and Multivariable Calculus but it will also be open to juniors in Calculus BC

Science:

- All science courses offered as electives to juniors must be taken while co-enrolled in either Physics, Physics: Principles of Engineering, or Physics: Mechanics and Electromagnetism
- Organic Chemistry and Advanced Inorganic Chemistry will be offered yearly rather than every other year
- Students who have not met the Physics course pre-requisite for Advanced Physics – C but who are enrolled in Calculus AB or Calculus BC can register for Advanced Physics – C pending instructor approval

DISCONTINUED COURSES

Contemporary Political Issues