Morris County
Vocational School District
Inspire. Prepare. Succeed.

2026-2027 Course Guide

MORRIS COUNTY SCHOOL OF TECHNOLOGY
400 East Main Street
Denville, NJ 07834
973-627-4600
www.mcvts.org

MISSION STATEMENT

The Morris County Vocational School District is to provide vocational and enrichment programs that inspire and prepare students to succeed in today's world and pursue tomorrow's opportunities.

AFFIRMATIVE ACTION STATEMENT

The Morris County Vocational School District declares the intent of this Affirmative Action Statement is to ensure educational equality for all of our students regardless of race, ethnicity, religion, affection or sexual orientation, gender, nation of origin or disability. This includes, but is not limited to, recruitment, testing, interviewing, transferring in or out of district, grade promotion, social activities and recreational programs the District sponsors and supports.

BOARD OF EDUCATION

Ms. Barbara Dawson, President
Mr. John P. Hyland, Vice-President
Ms. Hanna Roth Starr, Board Member
Mr. John Paul Velez, Board Member
Dr. Nancy Gartenberg, Morris County Executive Superintendent of Schools
Mr. Michael Davison, Board Secretary

ADMINISTRATION

Dr. Anita Champagne, Superintendent
Michael Davison, School Business Administrator
Dr. Melissa Espana, Assistant Superintendent for Curriculum & Instruction
Mark Menadier, Principal of High School Academies
Athena Borzeka, Director of Student Services & Special Education
Michael Gowdy, Grants Program Manager
Scott Shaw, Director of Career & Technical Education
Lisa Adams, Assistant Principal of Instruction
Conor Devine, Assistant Principal of Clubs and Activities
LaToya Evans, Assistant Principal of Students

ACCREDITATION

Morris County Vocational School District holds national accreditation from
The Middle States Commission on Secondary Schools.

COUNSELING SERVICES

CEEB Code: 310281

The mission of the School Counseling Department is to ensure quality guidance and counseling services for each student at Morris County School of Technology. To fulfill this mission, counselors will assist students to:

- Assess their strengths, aptitudes and interests
- Plan their educational program
- Develop decision-making and problem-solving skills
- Identify their career options
- Build a foundation for a fulfilling life

Contact Information for the School Counseling Department

Main Telephone Number 973-627-4600 Ext. 230/238

Athena Borzeka	Director of Student Services & Special Education	Ext. 229
Marisa Dillon	School Counselor	Ext. 220
Ashley Brooks	School Counselor	Ext. 221
Jennifer Katz	School Counselor	Ext. 205
Michael Romano	School Counselor	Ext. 228
MyChelle Perez	School Counselor	Ext. 232
Steve Ward	School Counselor	Ext. 269

Child Study Team Services

A fully-staffed Child Study Team (CST) serves the students of Morris County School of Technology. Athena Borzeka, Director of Student Services & Special Education, supervises the interdisciplinary work of the CST, while also serving on the team. The CST is a multidisciplinary team of professionals that includes:

- School Psychologist, Robin Ravotto, Ext. 203
- School Social Worker, Amber Szuch, Ext. 204
- School Social Worker/SAC, Jennifer Geuther, Ext. 222

The Morris County Vocational School District will provide communication aids, auxiliary aids and services for effective communication to all secondary and post-secondary prospective and current students with hearing impairment, at no cost to the student being served in accordance with the student's individual educational plan or section 504 plan.

Members of the CST consult with classroom teachers, administrators, and parents regarding instructional methods and/or counseling necessary to meet the specific needs of individual students. CST members:

- Participate in the evaluation of students who may need special education programs and services;
- Participate in the determination of eligibility of students for special education programs and services;
- Deliver appropriate related services to students with disabilities (e.g., school-related counseling);
- Provide appropriate preventive and support services to non-disabled students;
- Provide services to the school staff regarding techniques, materials and programs for students experiencing difficulties in learning;
- Consult with school staff and parents in order to optimize learning for students; and
- Assist with designing, implementing and evaluating techniques to prevent or remediate educational difficulties.

The MCST Child Study Team's focus centers on developing creative ways to help students realize their potential in school. This focus is not to be restricted to diagnosis, labels or categories, but to look at students as individuals, and to involve students, parents and teachers in a problem-solving process leading to student success.

Morris County School of Technology
Graduation Requirements

Students who desire an Academy Endorsed Diploma will be required to acquire a minimum of 150 credits and meet all graduation requirements in accordance with New Jersey Administrative Code 6A:8-5.1.

Required Courses:

- ☑ Four years of English (20 credits)
- ☑ Four years of Health/Physical Education (20 credits)
- ☑ Three years of Mathematics (15 credits)
- ☑ Three years of Science (15 credits)
- ☑ Three years of Social Studies (15 credits)
- ☑ One or Two Years of World Language (5 or 10 credits)[#]
- ☑ VPA electives (5 credits)
- ☑ Elective Courses (7.5 credits)
- ☑ 2.5 Credits Financial Literacy
- ☑ Academy Program
  - 5 credits Work Based Learning *
  - 35 credits over four years in Academy course work

* A 5-credit course that includes an approved 120-hour internship.

[#] Beginning with the Class of 2029, students will be required to complete one year of World Language to satisfy the graduation requirement. Classes of 2027 and 2028 will need to complete two years of World Language to satisfy the graduation requirement.

In addition, students **must** meet the following assessment requirement:

THREE PATHWAYS AVAILABLE	ENGLISH LANGUAGE ARTS	MATHEMATICS
First Pathway New Jersey Graduation Proficiency Assessment in grade 11. Please see the NJDOE website for more information.	Demonstrate proficiency on the New Jersey Graduation Proficiency Assessment in grade 11 by meeting the designated cut score as set forth by the NJDOE.	Demonstrate proficiency on the New Jersey Graduation Proficiency Assessment in grade 11 by meeting the designated cut score as set forth by the NJDOE.
Second Pathway * Students who sat for the New Jersey Graduation Proficiency Assessment in grade 11 and did not demonstrate proficiency are able to demonstrate proficiency in ELA and/or mathematics by meeting the designated cut score on one of these assessments as set forth by the NJDOE.	• ACT Reading • Accuplacer WritePlacer • Accuplacer WritePlacer ESL • PSAT 10 Evidence-Based Reading and Writing (EBRW) • PSAT 10 Reading • PSAT/NMSQT EBRW • PSAT/NMSQT Reading • SAT EBRW • SAT Reading	• ACT Math • Accuplacer Elementary Algebra • Accuplacer Next-Generation R Quantitative Reasoning, Algebra, and Statistics (QAS) • PSAT10 Math Section or PSAT/NMSQT Math Section • PSAT10 Math or PSAT/NMSQT Math • SAT Math Section • SAT Math Test
Third Pathway* -Students who completed the New Jersey Graduation Proficiency Assessment in grade 11 and did not demonstrate proficiency are able to demonstrate proficiency in ELA and/or mathematics through a portfolio appeal in grade 12.	Meet the criteria of the NJDOE Portfolio Appeal for ELA	Meet the criteria of the NJDOE Portfolio Appeal for Math

*Students must take the NJGPA to be eligible for second and/or third pathway

Four Year Course Offerings

Required	Selection
English (4 years)	• English I • English II* • English III* • English IV*
Mathematics (3 years)	• Algebra I • Geometry* • Algebra II/Trigonometry* • Pre-Calculus* • Calculus • Calculus Honors • Foundations of College Mathematics • Probability and Statistics
Physical Education/Health (4 years)	• Physical Education/Health 9 • Physical Education/Driver's Ed 10 • Physical Education/Health 11 • Physical Education/Health 12
Science (3 years)	• Astronomy • Biology • Chemistry* • Environmental Science • Forensic Science • Physics • Physics Honors
Social Studies (3 years)	• World History • US History I* • US History II* • Economics Honors*^
World Language (1 year for Class of 2029 & 2030); 2 Years for Classes of 2027 & 2028)	• Spanish I • Spanish II • Spanish III* • Advanced Spanish Studies* • Spanish Heritage I • Spanish Heritage II
Visual and Performing Arts Electives (1 year) Subject to availability	• Advertising Art and Design • Foundations of Art • Studio Art • Cinema Studies • Content Creation and Design • Digital Arts and Design • Fundamentals of Music • Modern Band: Performance and Production • Modern Band: Arrangement and Style • Music Technology I • Music Technology II • Public Speaking • Yearbook
Other Electives (2 per year) Subject to availability	• ACT/SAT Preparation in English and Writing • ACT/SAT Preparation in Mathematics • Algebra I Foundations • Animal Science Exploration • Biotechnology Exploration • Computer Science Exploration • Creative Writing • Cross Cultural Perspectives^ • Culinary Arts Exploration • Design Exploration • Education and Learning Exploration • Flexibility and Strength Training • Financial Literacy • Fundamentals of Programming^ • Genocide Studies • Global Commerce Exploration

	• Global Issues^ • Healthcare Exploration • Human Behavior I • Introduction to Data Science^ • Journalism • Law and Public Safety Exploration • MultiMedia Exploration • Philosophy and Logic • Principles of Scientific Inquiry in the Health Sciences • Superheroes: Modern Mythology • Social Media Marketing • Yearbook

Academy Programs**
 	
(Course descriptions by grade level starting on page 20)
	• Animal Science
	• Biotechnology
	• Computer & Information Sciences
	• Culinary Arts
	• Design
	• Education & Learning
	• Global Commerce
	  ◦ Finance & International Business
	  ◦ Supply Chain Management
	• Government & Legal Studies
	• Health Care Sciences
	• Law & Public Safety
	• Multimedia

Other	• Option II Learning • Independent Study • Self Directed Learning (no credit)
Special Education	• Study Skills
Structured Learning Experience (SLE)	5-Credit course which includes an approved 120-hour internship in academy field of study

*Honors course available
~graduation requirement

Grade Point Average

A cumulative grade point average (GPA) is maintained on all students beginning with the freshman year based on final grades in each course. It is essential that all students recognize the importance of GPA in the college admissions process. At Morris County School of Technology, transcripts contain a student's grade point average (GPA). In calculating GPA, the converted quality points are multiplied by the number of credits assigned to the course. The resultant course quality points are totaled and divided by the total credits attempted by the student. Thus, the following formula is used:

$$\frac{\text{Total Course Quality Points}}{\text{Total Credits Attempted}} = \text{GPA}$$

Grading System and Quality Points

Listed below is the weighted Grading System Structure:

		College courses & Honors courses	General
97-100	A+	5.3	4.3
94-96	A	5.0	4.0
90-93	A-	4.7	3.7
87-89	B+	4.3	3.3
84-86	B	4.0	3.0
80-83	B-	3.7	2.7
77-79	C+	3.3	2.3
74-76	C	3.0	2.0
70-73	C-	2.7	1.7
67-69	D+	2.3	1.3
64-66	D	1.0	1.0
60-63	D-	0.7	0.7
Below 60	F	0.0	0.0

I = Incomplete	WP = Withdrawn Passing*
M = Medical Exemption	WF = Withdrawn Failing*
A = Audit	P = Passing
	S = Satisfactory

*Courses dropped after drop/add deadlines will receive a WP or WF for a grade

Honor Roll

To be distinguished as a High Honor Roll student, one must have a numerical average of at least 95% with no grade lower than a 90 (A-).

To be distinguished as an Honor Roll student, one must have a numerical average of 90% and have no grade lower than an 87 (B+).

Incomplete grades, or change of grades after honor roll has been run, can affect eligibility.

Honors Course Eligibility and Expectations

Honors Courses

Honors Courses are available for students (**grades 10-12 only**) in specific disciplines: English, Social Studies, Mathematics, Science, and World Language Courses. These courses offer enrichment in the scope of material presented, in the depth of exploration and in the expectation of student performance.

Entrance Requirements for Sophomore, Junior, and Senior Year

To qualify for honors-level course placement, students enrolled in a non-honors course must achieve an "A" average (90%) through marking periods 1-2, as well as scoring an 87% or above each marking period. If a student meets this criterion, he/she will be scheduled for honors-level coursework. Each student's placement will be revisited at the conclusion of the school year. Any student who fails to maintain an "A" average or score below an 87 during the 3rd & 4th marking periods may forfeit his/her eligibility to enter an honors class.

Students who do not meet the grade requirements, but wish to apply for an honors-level course, must complete an Honors Program Appeal Form for each discipline. The window for submitting the form will be open at the beginning of May of each school year. (The exact appeal due date and the appeal form will be sent to students via email.) In addition to several student-generated responses, the Honors Program Appeal Form also consists of a teacher recommendation. When recommending students, teachers take into account classroom behavior and attitude, student motivation and work ethic, reactions to setbacks, and the student's acceptance of responsibility.

Students' Rights and Responsibilities in the Honors Program

If it becomes evident that a student is unable to achieve at least a "C" average, as evidenced by marking period one and two grades, the placement will be reviewed. Communication between the teacher, parent, student, and school counselor will occur. If the recommendation is that the student be re-assigned to the regular academic program, a conference with the student, parent, teacher and school counselor may be scheduled. Decisions regarding reassignment will be made on a case-by-case basis.

Students receiving a final grade of "C" or lower will automatically lose the opportunity to continue in the Honors program within that discipline during the next school year.

Should the student be moved to a non-honors class for any reason during the school year, the student will not be eligible for Honors the following school year.

If a student is removed from an honors section, their cumulative grade will be determined based on the general scale.

*2026-2027 Grade 12 Option Experience

The Grade 12 Option Experience structured scholarship program where qualified MCVSD high school seniors may accelerate their learning by enrolling in college-level courses aligned with their current Academy curriculum. Students are dually enrolled in high school and college, building two transcripts: a Morris County School of Technology (MCST) transcript and a permanent college transcript issued by CCM. Students are able to meet their high school graduation requirements through dual enrollment.

The following criteria must be met to be eligible to participate:

1. Demonstrate previous academic success as measured by the cumulative GPA from grades 9 and 10, with a minimum GPA of 2.95 for Denville campus, full-time Academy programs. This grade threshold may vary with satellite Academy programs.
2. Meet the minimum passing score on at least one of the state approved assessments for graduation.

3. Achieve **one** of the following placement qualifications:
    - a. An SAT score of at least 590 in Verbal **and** 560 in Math, or
    - b. A score of 23 or better on the ACT English **and** Math portions, or
    - c. Successfully pass the Accuplacer test given by County College of Morris.
4. Full-time vs. Part-time Eligibility:
    - **Full-time:** A GPA of 2.95 or above is required to attend CCM as a full-time visiting high school student.
    - **Part-time ("Academy Only"):** Students with a GPA of 2.94 or below are eligible to attend CCM as a part-time visiting high school student, taking their core academic coursework at MCST and traveling to CCM to take one approved Academy course per semester.
5. Attendance, academics, and discipline records must be in good standing.
6. Students and parents/guardians must complete a Memorandum of Understanding, including all waivers and full acceptance of the scholarship program's terms and conditions.

*2026-2027 school year; may change in subsequent years

Option II: Expanded Opportunities for Fulfilling High School Graduation Requirements

Option II establishes alternate pathways for students of the Morris County Vocational School District to satisfy requirements for high school graduation and meet or exceed the New Jersey Student Learning Standards (NJSLS) in accordance with the New Jersey Administrative Code (N.J.A.C. 6A:8-5.1(a)1ii).

Option II may include but is not limited to one or more of the following alternatives: student exchange programs, summer coursework, interdisciplinary or theme-based programs, independent study, internships, community service, accredited college coursework, online or distance learning, meaningful research and structured learning experiences.

Option II alternatives requested by eligible students must meet or exceed the proficiencies established by the NJSLS, receive prior approval by the principal and/or the Option II Review Committee and demonstrate satisfactory performance as measured by district-approved competency assessment instruments in order for credit to be awarded. Please see the Option II Application for procedures and guidelines (available on the School Counseling website in the spring).

Academy Scholars

Due to the uniqueness of MCST and the individualized nature of each academy and its students, MCST chooses an Academy Scholar for each Academy in lieu of selecting a valedictorian or salutatorian.

Academy Scholars exemplify the vision and mission of MCST through outstanding academic achievement, leadership, and a strong interest in learning with a focus on their academy/career cluster. These students are well-pointed and work to reach their fullest potential with consistent effort to excel and grow and inspire others both educationally and personally.

At the end of Junior year, the top four students in each academy (determined by GPA) are invited to apply for distinction of Academy Scholar. Students are required to submit a personal profile, one letter of recommendation, and a video statement. Applications are reviewed by the Academy Scholars Committee. Two students from each academy are then chosen to move on to a final interview by an administrative panel. Students are scored based on a rubric. The Academy Scholar distinction is awarded to the student with the highest composite score.

COURSE DESCRIPTIONS

ENGLISH

English I (9)
This course is structured as a survey that introduces students to the various units of study that they will be required to examine, analyze, and understand during their years of high school. Through a variety of texts from various authors, students will learn the "basics" of Language Arts, including elements of reading, writing, speaking, listening, language, and research. Students will have the opportunity to engage in in-depth critical analyses of various genres of literature, non-fiction texts, poetry and drama while utilizing a variety of media. Students will develop basic Language Arts Skills, as well as the ability to think critically, and articulate thoughts coherently in both written and verbal formats. This course emphasizes Language Arts skills and critical thinking based on texts from a variety of authors and multiple perspectives.

English II (10)
In order to provide an all-inclusive experience, students will study a selection of classic novels, drama, non-fiction, and poetry by diverse authors. The overarching theme of this year asks students to examine the relationship between themselves and society. In order to become a truly engaged member of our MCST learning community and beyond, it is important that each student develop an appreciation for informed citizenship and grapple with the intricacies of group dynamics. Therefore, particular emphasis is placed on developing research skills, analyzing/implementing rhetorical and persuasive strategies, and actively participating in various group discussion formats.

English II – Honors (10)
This course provides tenth grade Honors students an opportunity to examine the relationship between individuals and society through a selection of classic novels, Shakespearean drama, short stories, contemporary essays, poetry, and various non-fiction texts. Students will work to improve research, communication, collaboration, presentation, and problem solving skills with a focus on analyzing and implementing rhetorical and persuasive strategies, developing critical thinking skills, and participating in robust, text-based discussions. In addition, this course provides opportunities for students to engage in in-depth critical analyses of cultural and social norms through various media formats.

English III (11)
Through a study of the varied voices of American literature, students in this course will analyze the American Dream, develop an understanding of the nature of self-reliance, grapple with the ideas of perception and reality, and finally look at the past and present to help define the future. Students will read a diverse selection of fiction and non-fiction works, continue to develop their persuasive writing and speaking skills, enhance their research skills, and take the next step in preparing for their senior experience.

English III – Honors (11)
This course provides eleventh grade Honors students an in-depth study of the multiple perspectives of American literature. Students will have the opportunity to reflect on and develop their own aspirations, analyze the American Dream, develop and understand the nature of self-reliance, grapple with the ideas of perception and reality, and finally look to the past and present to help define the future. Students will read a diverse selection of fiction and non-fiction works that allow opportunities for interdisciplinary connections. In addition to reading an all-inclusive collection of texts, students will continue to develop their persuasive writing and speaking skills, enhance their research skills, and take the next steps in preparing for their senior experience.

English IV (12)
As the culminating year in a four year course of study, English IV provides students with opportunities to practice the critical thinking, reading, and writing skills they have been developing and honing during their years of secondary education. With an emphasis on the skills students will need to be successful as they continue their education and/or enter the workforce, English IV presents a variety of reading, writing, and discussion activities and projects for continued practice and development of skills, while simultaneously

providing opportunities for students to think metacognitively about what it truly means to be deeply, thoughtfully, and critically engaged with the world as students, workers, and community members.

English IV – Honors (12)
As the culminating year in a four year course of study, English IV Honors provides students with ample and varied opportunities to demonstrate the critical thinking, reading, and writing skills they have been developing and honing during their years of secondary education. Whereas both English IV and English IV Honors emphasize the skills students will need to be successful as they continue their education and/or enter the workforce, by offering a variety of reading, writing, discussion activities and projects for continued practice and development of skills while simultaneously providing opportunities for students to think metacognitively about what it truly means to be deeply, thoughtfully, and critically engaged with the world as students, workers, and community members, English IV Honors requires students to engage more deeply and broadly. Accordingly, the course encompasses a wide body of sophisticated texts which require students to perform more sophisticated critical analyses, and it asks students to respond effectively and comprehensively through writing and discussion to complex issues and areas of inquiry.

MATHEMATICS

Algebra I (9)
This first-year algebra course introduces students to symbolic reasoning through the exploration of linear, quadratic, and exponential functions. Students will master writing, solving, and graphing equations and inequalities, including systems in two variables. The curriculum covers polynomial operations, exponent rules, and multiple methods for solving quadratics—including factoring, completing the square, and the quadratic formula. Beyond pure algebra, students will analyze data sets through measures of central tendency, correlation, and standard deviation, applying these skills to real-world modeling and complex problem-solving.

Algebra I Foundations (9)
This semester-long elective course is a review and reinforcement of Algebra I skills and concepts. The key content involves writing, solving, and graphing linear, quadratic, and exponential equations and inequalities, including systems of linear equations and inequalities in two variables. Quadratic equations are solved by factoring, completing the square, graphically, or by application of the quadratic formula. The course also includes the study of monomial and polynomial expressions, exponents, and functions. Students will be exposed to various data displays and measures of central tendency and will develop an understanding of correlation and standard deviation. Algebraic skills are applied in a wide variety of problem-solving situations, with the focus on modeling. Are we offering this?

Geometry (9/10)
(Prerequisite: Algebra I)
This course integrates the investigation of geometric properties with practical applications to strengthen mathematical reasoning. Students develop problem-solving skills through the study of linear and angular measurements, parallel and perpendicular relationships, and triangle congruence. The curriculum explores the properties of plane figures and solids, similarity, and right-triangle trigonometry. Students will also analyze the transformations of figures on the coordinate plane, including translations, reflections, rotations, and dilations. An additional focus of the course is the development of logical thinking, where students are introduced to both inductive and deductive reasoning to construct formal proofs and justify geometric conjectures.

Geometry – Honors (10)
(Prerequisite: Algebra I)
This rigorous course accelerates the investigation of geometric properties, transitioning students toward formal mathematical systems and abstract reasoning. Students develop advanced problem-solving skills through an in-depth study of parallel lines and planes, congruent and similar polygons, and complex triangle relationships. The curriculum expands upon the properties of plane figures and solids to include coordinate geometry, circles, and right-triangle trigonometry. A primary focus of the honors level is the mastery of formal logic, where students apply inductive and deductive reasoning to construct sophisticated proofs and defend complex geometric theorems.

Algebra II/Trigonometry (9)
(Prerequisite: Algebra I and Geometry)
This course builds upon the foundation established in Algebra I, transitioning students toward advanced algebraic reasoning and higher-order thinking. The curriculum provides a formal exploration of complex functions, including polynomial, rational, radical, and quadratic types, alongside systems of equations and inequalities. Students will also investigate sequences and series, conic sections, and introductory trigonometry. A portion of the course is dedicated to data analysis, connecting previous statistical knowledge to probability distributions. Designed for rigor, the course moves at an accelerated pace to accommodate advanced topics and places a heavy emphasis on applying mathematical modeling to real-world scenarios.

Algebra II/Trigonometry (10-11)
(Prerequisite: Algebra I and Geometry)
Building upon the foundation of Algebra I, this course transitions students toward advanced algebraic reasoning and higher-order thinking. Students formally explore complex functions—including polynomial, rational, radical, and quadratic types—and master systems of equations and inequalities. The curriculum includes an investigation of sequences, series, and introductory trigonometry. Students also synthesize previous statistical knowledge by exploring probability distributions.

Algebra II/Trigonometry – Honors (10-11)
(Prerequisite: Algebra I and Geometry)
Building upon the symbolic reasoning of Algebra I, this course provides a rigorous, in-depth exploration of the structure of mathematical systems. Students analyze polynomial, rational, radical, and quadratic functions, utilizing advanced theorems to determine roots and investigate complex inverses. The curriculum expands into the complex number system and provides a comprehensive study of exponential and logarithmic functions. Students will explore conic sections, perform matrix operations, and define arithmetic and geometric sequences. A significant portion of the course is dedicated to trigonometry, including the unit circle, periodic modeling, and the Laws of Sines and Cosines. Designed for high-achieving mathematicians, this course moves at an accelerated pace, emphasizing theoretical proofs, non-routine problem-solving, and sophisticated mathematical modeling.

Pre-Calculus (10-12)
(Prerequisite: Algebra II/Trigonometry)
Designed for students preparing for Calculus, this course provides a comprehensive study of functions through numerical, graphical, and algebraic lenses. Students engage in an advanced analysis of linear, polynomial, and rational functions—mastering the determination of asymptotes, critical points, end behavior, and the approximation of zeros. Additional core topics include modeling with exponential and logarithmic functions, the study of complex numbers, and the geometric properties of conic sections.Throughout the course, students utilize graphing calculators and computer software as essential tools for inquiry and problem-solving to develop the high-level analytical skills necessary to succeed in higher-order mathematics.

Pre-Calculus - Honors (10-12)
(Prerequisite: Algebra II/Trigonometry)
Designed for high-achieving students who have mastered Algebra II/Trigonometry- Honors and are preparing for Calculus, this course provides a thorough study of functions through numerical, graphical, and algebraic lenses. Students engage in an advanced analysis of linear, polynomial, and rational functions—mastering the determination of asymptotes, critical points, end behavior, and the approximation of zeros. The curriculum explores the continuity and composition of functions while extending graphical mastery from the Cartesian plane to the polar and complex planes. As an honors-level curriculum, this course maintains an accelerated pace and emphasizes theoretical depth, utilizing the study of sequences and series as a gateway to limits, derivatives, and integrals. Throughout the course, students utilize graphing calculators and computer software to develop the analytical skills necessary for success in Calculus and beyond.

Calculus (11-12)
(Prerequisite: Pre-Calculus)

This course introduces the fundamental principles of differential and integral calculus. Students begin by evaluating limits and describing the continuity of functions across various representations. A primary focus is placed on the derivative as a rate of change, with students mastering diverse differentiation techniques to solve traditional application problems. The curriculum further explores the integral, both as an accumulation of area and through its inverse relationship with the derivative as defined by the Fundamental Theorem of Calculus. By applying various integration techniques, students develop the high-level analytical proficiency required for success in college-level mathematics and science.

Calculus - Honors (11-12)
(Prerequisite: Pre-Calculus)
This rigorous, honors-level course is designed for students who have excelled in Precalculus-Honors and seek a high-level of mathematical understanding and analysis. Students will master the evaluation of limits and the formal description of continuity. The curriculum focuses on the derivative as a rate of change and the integral as an accumulation of area, exploring their inverse relationship through the Fundamental Theorem of Calculus. Students apply diverse differentiation and integration techniques to solve complex problems and evaluate differential equations. As an honors-level course, it maintains significant academic rigor to prepare students for the demands of collegiate mathematics, science, and STEM programs. Students may elect to take the AP Calculus AB exam to potentially earn college credit.

Probability and Statistics (11-12)
(Prerequisite: Algebra II/Trigonometry)
This is an advanced math course for students who have completed Algebra II. Students will collect, analyze and display data, and will use statistical methods to solve real-world problems. Students will design surveys and experiments, use probability to understand random behavior, and make inferences about a population by analyzing a sample of the population. Students will evaluate statistics in the media. Graphing calculators and statistical software will be utilized to explore data.

PHYSICAL EDUCATION AND HEALTH

Physical Education and Health (9)
This course is designed to enhance the physical, mental, emotional, and social well-being of the student. A scientific approach highlighting exercise physiology is the foundation of student learning. The integration of kinesiology and principles of anatomy and physiology enhances students' understanding of how the body relates to exercise and the science of human performance. Students will understand and consistently demonstrate the components of physical fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. Activities that incorporate these components and enable students to meet their personal fitness needs are emphasized. Students will have opportunities to explore and immerse themselves in various team sports over their four years. Team sports focus on the whole individual, while simultaneously providing the appropriate modifications to allow for differentiation and individual student success.

Health (9)
Topics Include: Endocrine System, Male and Female Reproductive system, STI, Contraceptives, Gender Identity, Consent (N.J.S.A. 18A:35), Stress Abstinence (N.J.S.A. 18A:35-4.19-20), Sexting (N.J.S.A. 18A:35-4.33), New Jersey Safe Haven Infant Protection Act (N.J.S.A. 18A:35-4.40 & 18A:35-4.41), Sexual Abuse and Assault Awareness and Prevention Education (N.J.S.A 18A:35-4.5a.), Sexual Assault Prevention (N.J.S.A. 18A:35-4.3), Breast Self-Examination (N.J.S.A. 18A:35-5.4) and Consent (N.J.S.A. 18A:35), Cancer Awareness (N.J.S.A. 18A:40-33), Lyme Disease Prevention (N.J.S.A. 18A:35-5.1)

This freshman health education course equips students with foundational knowledge and skills to support physical, emotional, and social well-being. Students explore human anatomy (including the endocrine and reproductive systems), puberty and growth, sexually transmitted infections (STIs), contraceptive methods, and New Jersey-mandated prevention education. The course also addresses consent, abstinence, sexting, sexual abuse/assault awareness and prevention, the New Jersey Safe Haven Infant Protection Act, breast self-examination, Lyme disease prevention, and cancer awareness. Throughout the year, emphasis is placed on decision-making skills, healthy relationships, risk assessment, and community health resources.

Instruction aligns with the 2020 NJ Student Learning Standards — Comprehensive Health & Physical Education, emphasizing concepts such as Personal Growth, Social and Sexual Health, Personal Safety, and Community Health Services. Topics are age-appropriate, medically accurate, and designed to support health literacy and responsible decision-making.

Any student whose parent/guardian presents to the school principal a signed statement that any part of instruction in family life conflicts with their personal, religious, or moral convictions shall be excused from that portion of the course where such instruction is given. The student shall not be penalized by loss of credit or denial of a diploma otherwise earned. In such instances where the parent/guardian has requested removal of their child from a portion of the family life instruction, the teacher shall provide an alternate assignment of equal weight and value.

Physical Education (10)
This course is designed to enhance the physical, mental, emotional, and social well-being of the student. A scientific approach highlighting exercise physiology is the foundation of student learning. The integration of kinesiology with principles of anatomy and physiology enhances students' understanding of how the body relates to exercise and the science of human performance. Students will understand and consistently demonstrate the components of physical fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. Activities that incorporate these components and enable students to meet their personal fitness needs are emphasized. Students will have opportunities to explore and immerse themselves in various team sports over their four years. Team sports focus on the whole individual, while simultaneously providing the appropriate modifications to allow for differentiation and individual student success.

Drivers Education (10)
Topics Include: Drivers Education, Organ Donation (N.J.S.A. 18A:7F-4.3)

This required classroom-based driver education course prepares New Jersey high school sophomores with the knowledge, skills, and decision-making abilities necessary for safe and responsible driving. Students will explore traffic laws, safe driving practices, risk recognition, and healthy choices that directly affect driving performance. Central components include motor vehicle law, defensive driving, the graduated driver licensing (GDL) system, alcohol and drug awareness, distraction prevention, and state-mandated organ and tissue donation education. The course culminates in preparation for and administration of the New Jersey Motor Vehicle Commission (MVC) knowledge exam.

Typically delivered across multiple classroom sessions (e.g., 30 hours per NJ driver ed standards) with each session structured in 80-minute blocks. No more than 3 excused absences are permitted during MP1 to sit for the NJ Knowledge Exam.

Physical Education (11)
This course is designed to enhance the physical, mental, emotional, and social well-being of the student. A scientific approach highlighting exercise physiology is the foundation of student learning. The integration of kinesiology and principles of anatomy and physiology enhances students' understanding of how the body relates to exercise and the science of human performance. Students will understand and consistently demonstrate the components of physical fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. Activities that incorporate these components and enable students to meet their personal fitness needs are emphasized. Students will have opportunities to explore and immerse themselves in various team sports over their four years. Team sports focus on the whole individual, while simultaneously providing the appropriate modifications to allow for differentiation and individual student success.

Health (11)
Topics Include: CPR/ AED Instruction (N.J.S.A. 18A:35-4.28-4.29) - American Red Cross CPR|AED|First Aid, Dating Violence Education (N.J.S.A. 18A: 35-4.23a) - JBWS, Consent (N.J.S.A. 18A:35) - JBWS, Sexual Abuse and Assault Awareness and Prevention Education (N.J.S.A 18A:35-4.5a.) - JBWS, Sexual Assault Prevention (N.J.S.A. 18A:35-4.3), Domestic Violence Education (N.J.S.A. 18A:35-4.23) - JBWS, Organ Donation (N.J.S.A. 18A:7F-4.3) - NJSharing Network, Mental Health (N.J.S.A. 18A:35-4.39), Bullying Prevention Programs

(N.J.S.A. 18A:37- 17), Gang Violence Prevention (18A:35-4.26), Suicide Prevention (N.J.S.A. 18A: 6-111), Social Media & Body Image, Water Safety (New, '24)

This Junior-level health education course prepares students to make safe, informed, and responsible decisions about their personal health and well-being. Instruction emphasizes emergency response skills (CPR/AED/First Aid), healthy relationships and interpersonal violence prevention, mental health and wellness, community health awareness, and digital citizenship. All content is delivered in a developmentally appropriate manner and integrated with the 2020 NJSLS-CHPE, covering knowledge, skills, and strategies needed for lifelong health and safety.

The course incorporates required areas under New Jersey statutes, such as CPR/AED instruction, dating violence education, consent, sexual abuse and assault awareness and prevention, domestic violence education, organ donation information, bullying and gang violence prevention, suicide prevention, mental health education, and social media/body image issues

Physical Education (12)
This course is designed to enhance the physical, mental, emotional, and social well-being of the student. A scientific approach highlighting exercise physiology is the foundation of student learning. The integration of kinesiology with principles of anatomy and physiology enhances students' understanding of how the body relates to exercise and the science of human performance. Students will understand and consistently demonstrate the components of physical fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. Activities that incorporate these components and enable students to meet their personal fitness needs are emphasized. Students will have opportunities to explore and immerse themselves in various team sports over their four years. Team sports focus on the whole individual, while simultaneously providing the appropriate modifications to allow for differentiation and individual student success.

Health (12)
Topics Include: Drugs, Alcohol, Tobacco, Controlled Dangerous Substances, and Anabolic Steroids (N.J.S.A. 18A:40A-1), Stress Abstinence (N.J.S.A. 18A:35-4.19-20), Mental Health (N.J.S.A. 18A:35-4.39) - Components of Health - Emotional, Mental, Physical, Environmental, Psychological, Sleep, Stress, Nutrition

This senior-level health education course engages students in an in-depth study of substance use/abuse, mental and emotional health, stress management, sleep health, nutrition, and lifelong wellness behaviors. The course emphasizes developmentally appropriate instruction that supports informed decision-making, personal responsibility, and healthy lifestyle practices. Students analyze physiological, psychological, and sociological aspects of substance use, explore strategies for managing stress and optimizing sleep, compare nutritional practices for wellness, and connect mental health with physical well-being, all within the context of the 2020 NJSLS-CHPE.

Any student whose parent/guardian presents to the school principal a signed statement that any part of instruction in family life conflicts with their personal, religious, or moral convictions shall be excused from that portion of the course where such instruction is given. The student shall not be penalized by loss of credit or denial of a diploma otherwise earned. In such instances where the parent/guardian has requested removal of their child from a portion of the family life instruction, the teacher shall provide an alternate assignment of equal weight and value.

SCIENCE

Biology (9)
Biology is a general course that engages students in the life sciences through hands-on, scientific inquiry and the exploration of real-life phenomenon. Aligned with the New Jersey Student Learning Standards (NJSLS) and Next Generation Science Standards (NGSS), the course emphasizes three-dimensional learning; that is, students actively engage with scientific practices and apply crosscutting concepts to deepen their understanding of core ideas across science disciplines. The curriculum is structured around four core units: Biological Evolution, From Molecules to Organisms, Heredity, and Ecosystems. Each unit follows the 5E Model of Guided Inquiry—Engage, Explore, Explain, Elaborate, and Evaluate—and begins with an anchoring real-world phenomenon to spark curiosity and contextualize learning. Three-dimensional assessments,

including lab reports, unit exams, presentations, and group discussions, focus on the mastery of standards and practical application. By the end of the course, students will have a solid foundation in biology, an appreciation for the natural world, and the skills needed to navigate the ever-changing scientific and technological landscape of the 21st century. This course prepares students for both academic and vocational pathways while fostering a lifelong respect for the world around them.

Biology for Biotechnology (9)

Biology for Biotechnology is a full year, laboratory-based course designed specifically for students enrolled in the Academy for Biotechnology. It is designed to develop students' understanding of key concepts related to the life sciences while also putting it into the context of biotechnology career practices. Each unit builds upon students' science understanding of disciplinary core ideas, science and engineering practices, and crosscutting concepts outlined in the Next Generation Science Standards. The performance expectations for the course are designed to support students in gathering knowledge that can be applied across the science disciplines. Students will build, deepen, and apply their knowledge of what scientists do to investigate the natural world, what engineers do to design and build systems for investigating scientific problems, and the critical thinking skills professionals use to problem solve through patients' disease states. The following science and engineering practices will form the basis of each unit: (1) Asking Questions and Defining Problems, (2) Developing and Using Models, (3) Planning and Carrying Out Investigations, (4) Analyzing and Interpreting Data, (5) Using Mathematics and Computational Thinking, (6) Constructing Explanations and Designing Solutions, (7) Engaging in Argument from Evidence, and (8) Obtaining, Evaluating, and Communicating Information. This course will encourage students to think creatively, make critical evaluations of their work, and develop strong problem-solving skills through the successful completion of the outlined material.

This course is fast-paced and more detailed than a general biology course. Information covered meets and extends beyond the scope of the NJ SLS-S assessment boundaries. Additionally, laboratory activities are designed to reinforce the scientific process, utilize mathematics, and develop career-ready transferable skills.

Chemistry (10)

General Chemistry, aligned to the NJSLS 2020 standards, is an inquiry-driven, phenomenon-based course where students explore real-life scenarios through the lens of chemistry. With students driving the investigations, focus will be on working collaboratively to develop a deeper understanding of the science behind the world around us.

Students begin with observing everyday chemical occurrences, using these as a basis for scientific inquiry and understanding complex chemical concepts. The course covers key topics like atomic structure, molecular bonding, stoichiometry, thermodynamics, and infuses NJSLS Earth and Space Science Standards, all connected to real-world phenomena for practical understanding.

Students are encouraged to ask questions about phenomena they experience and work together to infuse content to support their explanations. Emphasizing hypothesis development, experimental design, and data analysis, the course strengthens theoretical knowledge, critical thinking, and problem-solving skills. Collaborative lab work, discussions, and presentations are key, enhancing communication and teamwork abilities. Assessments include laboratory reports, exams, presentations, and group discussions, focusing on both concept mastery and practical application. This approach prepares students for an ever-changing world and fosters a lifelong respect for chemistry.

Chemistry Honors (10)

Chemistry Honors is designed to engage students in an inquiry-based learning environment where they will explore fundamental principles of chemistry through inquiry based hands-on investigations, students will engage in scientific argumentation, modeling, and propose solutions to real world challenges. Aligned with the New Jersey Student Learning Standards (NJSLS), the course emphasizes the development of critical thinking, problem-solving, collaborative skills, and systems thinking.

- **Inquiry-Based Learning:** Students will engage in scientific inquiries, posing questions, forming hypotheses, conducting experiments, and drawing conclusions based on their observations and data analysis. This approach fosters a deep understanding of chemical concepts and processes.

- **Modeling and Sense Making:** Students will develop and use models to represent and explain chemical phenomena. They will learn to construct, analyze, and revise models, enhancing their ability to make sense of complex ideas and predict outcomes.
- **Authentic Learning Experiences:** The course will incorporate real-world problems and scenarios, encouraging students to apply their knowledge to issues such as sustainability, environmental impact, and technological issues and innovations. These experiences are designed to make content relevant, engaging and meaningful.
- **Collaborative Projects:** Students will work in teams to design and conduct investigations, analyze results, and present their findings. This collaborative approach builds communication skills and fosters a sense of community and shared learning and is reflective of the process of science.

Physics (11-12)
This is an inquiry driven, algebra-based laboratory course in the study of physics. In this course students will explore the phenomena of the world around them from the perspective of motion, forces and energy. Students will investigate a variety of physical phenomena through various lenses (e.g. Newton's laws, energy, momentum, etc.), design and perform experiments, and develop skills to mathematically model and analyze physical situations. Inquiry strategies will assist students in developing strong conceptual understanding of physical systems and how they relate to relevant mathematical models.

Physics Honors (11-12)
This is an inquiry-driven, algebra-based laboratory course in the study of physics. In this course, students will explore the phenomena of the world around them from the perspective of motion, forces, and energy. Students will investigate various physical phenomena through various lenses (e.g. Newton's laws, energy, momentum, etc.), design and perform experiments, and develop skills to model and analyze physical situations mathematically. Inquiry strategies will assist students in developing a strong conceptual understanding of physical systems and how they relate to relevant mathematical models. This honors-level course requires students to understand higher-level concepts in physics and apply more complex math to problem-solving.

SOCIAL STUDIES

World History (9)
This course examines the ideas, individuals, and movements from the Renaissance through the 20th century which have been significant in shaping today's world through a humanistic lens. Students will examine social, political and economic principles of the past and draw relationships between all content and contemporary principles. Throughout the course, students will examine history through multiple perspectives and hear from a variety of voices to create an inclusive curriculum. This course will challenge students' ability to research and interpret select historical topics, as well as develop appropriate analytical skills and creative means of applying them.

U.S. History I (10)
The course covers the political, economic, social and cultural growth of our nation from the Colonial period to Emergence of Modern America. Throughout the year, current problems are related to past events. An emphasis is placed upon those themes in the United States which have proven to be part of contemporary North American life. Activities are used throughout this course to develop the student's reading, writing, thinking, and oral communication skills.

U.S. History I – Honors (10)
Students will hone a wide variety of academic skills while studying the political, economic, social, and cultural growth of our nation from the Colonial period to the Emergence of Modern America. Using critical thinking skills to assess the foundations of the United States, honors students will focus on primary documents and recorded evidence to establish a clear understanding of the adversity faced in creating a new nation and gaining credibility on the world stage. In order to gain a better understanding of the human experience, Honors U.S. History I will also investigate the political, social, and cultural divides present in 19th century America through interdisciplinary study of philosophy, literature, language, and art. Various activities are used throughout this course to develop the student's reading, writing, thinking and critical thinking skills. Students will conclude the course with the study of American Imperialism and Progressivism.

U.S. History II (11)
This course covers the time period from World War I to the present. Emphasis will be on a broad-based view encompassing the emerging United States domination of political, economic and cultural values, the multi-ethnic contributions to American Society and the United States' leadership in a constantly changing global environment.

U.S. History II – Honors (11)
This course examines World War I through to the modern era. Topics of study will include: Urbanization and Industrialization, the Roaring 20s, the Great Depression, World War II, the Cold War, the Civil Rights Movement and the Vietnam War. The focus of this course will be how the stated events have molded the world in which we live today. Students will probe primary accounts and documents, as well as film and literature pertaining to the stated topics. Students will demonstrate their understanding of the course content through written work, technological applications and various styles of presentations.

WORLD LANGUAGE

Spanish Language and Culture : Novice Low–Novice Mid
This introductory course is designed for students who are new to world language study and have little or no prior exposure to Spanish. Students begin developing communication skills in listening, speaking, reading, and writing while exploring the cultures of the Spanish-speaking world. Instruction incorporates authentic materials and multimedia resources to build foundational vocabulary and cultural awareness, including the geography, traditions, and daily life of Spanish-speaking regions.

Spanish I : Novice Mid
Spanish I is designed for students with minimal or no prior experience in Spanish. Students develop basic communication skills through integrated instruction in listening, speaking, reading, and writing. Emphasis is placed on meaningful communication and cultural understanding through the use of authentic materials and media resources. Students explore the practices and perspectives of Spanish-speaking communities worldwide in alignment with the New Jersey Student Learning Standards.

Spanish II : Novice High
(Prerequisite: Spanish I)
Spanish II builds upon the foundational skills introduced in Spanish I. Students strengthen their ability to communicate in Spanish by integrating listening, speaking, reading, and writing in daily instruction and assessment. Cultural topics are explored in greater depth to promote understanding of Hispanic cultures and global perspectives. Instruction supports students in moving toward greater accuracy and independence in communication.

Spanish III : Intermediate Low
(Prerequisite: Spanish II)
Spanish III introduces students to the intermediate level of language study and further develops proficiency in listening, speaking, reading, and writing. Students increase their ability to express ideas orally and in writing while engaging in more in-depth exploration of the culture and geography of Spanish-speaking countries. Instruction emphasizes interpretive, interpersonal, and presentational modes of communication to promote confidence and real-world language use.

Spanish III Honors: Intermediate Low
(Prerequisite: Spanish II and teacher recommendation)
Spanish III Honors is designed for highly motivated students seeking an accelerated and enriched language experience. Students demonstrate increasing proficiency in understanding and using the Spanish language through daily discussions, presentations, and written work. Instruction advances students' interpretive, interpersonal, and presentational communication skills while deepening cultural understanding and preparing students for success in Advanced Spanish Studies Honors.

Advanced Spanish Studies Honors : Intermediate Mid
(Prerequisite: Spanish III, Spanish III H, or Spanish Heritage II H and teacher recommendation)
Advanced Spanish Studies Honors is an intensive course that deepens students' proficiency in Spanish through sustained practice in listening, reading, speaking, and writing. Students use sophisticated

vocabulary and complex grammatical structures while working with authentic materials such as literature, news articles, and multimedia sources. The course emphasizes student interaction and cultural understanding through the study of art, history, film, and music, with performance-based assessments and the integration of modern technology and multimedia projects.

Spanish Heritage I : Intermediate High
Spanish Heritage I is designed for students who have grown up speaking Spanish in the home or community and who possess varying levels of proficiency. Students develop and strengthen their skills in listening, speaking, reading, and writing while exploring the multicultural diversity of the Spanish-speaking world. Instruction focuses on building academic Spanish through vocabulary development, grammatical accuracy, and increased literacy skills, while encouraging reflection on personal and cultural identity and preparing students for continued study in Spanish Heritage II Honors.

Spanish Heritage II Honors: Advanced Low
(Prerequisite: Spanish Heritage I and teacher recommendation)
Spanish Heritage II Honors is a continuation of Spanish Heritage I and provides a more rigorous and advanced study of Spanish for heritage speakers. Students refine their academic language skills in speaking, reading, and writing with an emphasis on expressing complex ideas with accuracy and confidence. The curriculum includes in-depth study of Hispanic literature, history, and contemporary social, environmental, and political issues in Latin America and Spanish-speaking communities in the United States, preparing students for advanced coursework and meaningful participation in academic and professional settings.

VISUAL AND PERFORMING ARTS ELECTIVES – 2.5 credits each
The following satisfy the Visual and Performing Arts graduation requirements.

Advertising Art and Design (9-12)
Get ready to create, experiment, and design! In this course, you'll combine hands-on traditional art making with digital tools to create original and exciting artwork. You'll explore everything from traditional drawing, painting, and mixed media to 2D and 3D design. Along the way, you'll learn how advertising artists use concept development, composition, color, audience awareness and reflection to communicate ideas and make their work stand out. We'll check out a wide range of industry leaders and styles, try a variety of new materials and techniques, and push creative boundaries while turning your ideas into finished projects you can be proud of.

Cinema Studies (9-12)
In this half-year long course, students will explore various genres of film and media. The Cinema Studies curriculum is designed to present a general overview of the history, business, genres, and stylistic innovations of recorded cinema and the motion picture industry. The curriculum features 10 units of study designed to focus specifically on major cinematic genres, techniques, or historical periods. The goal of this class is to teach students how to "read" films for structure, style, subtext, and cultural significance -- as well as to explore how the medium of film expands and enhances the conventional study of narrative, character, and symbol. This course explores a wide variety and range of film types, including film history, shot composition, scriptwriting basics, story mapping and editing techniques, and individual genre-based units of study. Additionally, students are introduced to basic script formatting, writing, "pitching," and rewriting skills. Focus includes the development of techniques for analysis in shot composition, story structure mapping, appreciation of silent and scored films, and character development through the visual medium of film. Students begin to analyze works of cinema, research film history and genres, and create original scripts using techniques studied in class. This course is designed for students ***not*** in MultiMedia.

Content Creation & Design (9-12)
Content Creation & Design focuses on developing artistic intent, personal style, and creative problem-solving through hands-on projects. Students create original concepts, tackle design challenges, and refine their visual voice through graphic design, photo manipulation, illustration, and motion media. Working in a collaborative, studio-style environment, students plan projects, experiment with ideas, and engage in real-world creative processes. The course also explores historical and contemporary art media and design trends as inspiration for bold, original work.

Digital Arts and Design (9-12)

This introductory course is all about making art with computers. In this class, you'll dive into the world of digital creativity - concept development, drawing, designing, photo-editing, and even animating your own creations. Remix images, experiment with different styles, and see how artists use color, composition, and space to make visuals pop. We'll take inspiration from art movements like Pop Art and Surrealism and connect them to your own projects. From paint to cameras to screens, art continues to evolve - and this class is your chance to jump into the digital side and start creating.

Foundations of Art
This course focuses on utilizing the Elements of Art and Principles of Design to create interesting and creative compositions using various mediums. Students will learn basic techniques in drawing and painting while also putting the elements and principles into practice. Portraiture, perspective, still life, landscape and a variety of techniques and design approaches are introduced and exercised often with references to art history for inspiration. The goal of this course is to encourage students to explore their own creativity using the mediums and techniques that communicate their ideas best.

Fundamentals of Music (9-12)
This course is designed to explore the fundamentals of music through the core elements of music including Rhythm, Melody, Texture, Form and Harmony through varied music genres. This is a project based class that explores music through listening as well as having a hands on approach to music writing software and a DAW (digital audio workstation) to facilitate the application of each concept. Fundamentals of Music is recommended for students who have a minimal background in music.

Modern Band: Arrangement and Style (9-12):
Prerequisite: Must own a musical instrument and have playing experience.
Modern Band- Arrangement and Style explores contemporary ensemble performance through the study and creation of student-driven arrangements in styles such as rock, pop, R&B, hip-hop, and alternative music. Students will develop instrumental technique, collaborative rehearsal skills, and an understanding of how musical elements like form, harmony, rhythm, and texture shape modern band music. The course emphasizes arranging and adapting songs for different ensembles, encouraging creativity, leadership, and authentic performance practice.

Modern Band: Performance and Production (9-12):
Prerequisite: Must own a musical instrument and have playing experience.
Modern Band- Performance and Production focuses on preparing, performing, and producing contemporary music in a collaborative band setting. Students will strengthen instrumental and vocal performance skills while learning rehearsal techniques, stage presence, and ensemble communication. The course also introduces basic music production concepts, including sound setup, recording techniques, and live or digital performance preparation. Through performances and production projects, students will build confidence, musicianship, and real-world experience in modern music-making.

Music History (9-12)
This course surveys the progression and development of Western music from the Medieval Period to the present. Emphasis will be on the comparison of different styles, forms, instrumentation and composers from various historical periods. Music History will give the students the vocabulary, knowledge and analytical skills to identify music from contrasting periods as well as introduce them to major masterworks as well as develop a deeper understanding of music as an art form and cultural phenomenon.
The class will explore different themes; music as a reflection of the political and social climate of culture, the causes/ reasons behind the progression and development of musical styles, and the influences of the composers and their music.

Music Technology I (9-12)
Music Technology is a course in the principles of audio and sound production. Topics include: loops,editing, signal flow, equalization, microphones and their placement, effects, digital audio formats, and MIDI basic concepts. Emphasis is placed upon advancing students' digital literacy and technical abilities through projects that develop student's skills in the realm of music technology. Students will gain proficiency in music writing software and DAW's (Digital Audio Workstations) These skills can apply to career opportunities that exist in the 21st Century job market: Film scoring, commercial advertising, media production, acoustic

engineering, TV/Radio production, e-media/web production, electronic systems design, music composing, and arranging.

Music Technology II (9-12)
(Prerequisite: Music Technology I)
Music Technology II is a continuation of the principles of audio and sound recording. Topics include: sound waves, acoustics and the audio spectrum, sampling, equalization and compression, microphones and their placement, remixes, digital audio formats, music theory and composition. Emphasis is placed upon advancing students' digital literacy and technical abilities through projects that develop student's skills in the realm of music technology. Students will gain proficiency in music writing software and DAW's (Digital Audio Workstations) These skills can apply to career opportunities that exist in the 21st Century job market: Film scoring, commercial advertising, media production, acoustic engineering, TV/Radio production, e-media/web production, electronic systems design, music composing, and arranging.

Public Speaking (9-11)
This Public Speaking course is designed to enhance students' communication skills by providing a comprehensive understanding of speech preparation, organization, and delivery. Throughout the course, students will engage in multiple speaking exercises, ranging from prepared speeches to spontaneous ones, with objectives that include but are not limited to the following: exploring various speech techniques; developing speech preparation skills from researching to writing; honing delivery skills to speak with clarity and confidence; informing, persuading, and entertaining audiences as well as evaluating speakers. Additionally, students will develop critical listening skills and learn to provide constructive feedback to their peers, fostering a supportive learning environment and enhancing their own speaking abilities.

Studio Art
This course focuses on the student's ability to communicate their ideas effectively through art. Students will be given the time and space to consider what they want to say with their art pieces by being given the option to complete independent projects or suggested station projects. Each project will be accompanied by a written artist statement where the student will reflect on each experience as well as a group critique with their fellow artists. The goal of the course is to further develop a personal artistic style through critiques, references to art history and arts practice.

Yearbook (Grade 11 only)
This class is all about creativity and collaboration. Yearbook students serve as the official creative design team behind the school's yearbook, for documenting and telling the story of the school year. You'll work like a professional publication staff - choosing themes, capturing photos, designing layouts and seeing how a big creative project comes together from concept to finish. Along the way, you'll build design skills, work with friends, collaborate, creative problem solve and leave your mark on something the whole school gets to keep! *(limited enrollment)*

OTHER ELECTIVES- 2.5 credits each
The following do not satisfy the Visual and Performing Arts graduation requirements.

Animal Science Exploration (11-12)
In this introductory course, students have the opportunity to discover the fundamentals of animal care and the origins of wild and domestic species. Students learn how zoologists classify animals according to their evolutionary connections, and explore the scientific principles which enable them to ascertain those relationships. They learn about the physical adaptations, starting with cell and tissue types, and then trace the evolutionary process through the skeletal, circulatory, and digestive systems of several groups. Throughout the year, students deepen their knowledge of the practices employed by professionals who work within the animal industry. They use veterinary terms, including Greek prefixes, suffixes, and routes pertaining to animal anatomy and conditions. This course is not available for students in the Academy for Animal Science.

Astronomy (9-12)
This one semester course explores the fundamentals and history of astronomy. Topics will include the formation of the Sun and solar system, the relationships between the Earth & Moon system, the type, formation, and life of stars, and what evidence exists that shows how our Universe was born and what

affected its growth. Students will become familiar with the night sky and space exploration. Laboratory activities include modeling astronomical systems, computer simulations, and field outings.

Biotechnology Exploration (11-12)
This introductory Biotechnology course is designed for students to explore the underlying ethical issues surrounding biotechnology, the environment, research, life and death choices, and medicine. Students will be asked to consider multiple perspectives as well as deepen their understanding of downstream repercussions of decisions regarding ethical issues. This course gives students the opportunity to grapple with some of the most challenging and engaging problems our society is facing as consequences of advances in the life sciences. Throughout the course, students will be using real-life cases to introduce a core set of ethical considerations on each topic that are important for analyzing ethical issues in medicine and the life sciences. Design elements emphasize key bioethical concepts and analytic methods, cutting-edge science content and real world-scenarios. Activities promote active and collaborative learning to help students develop their ethical reasoning and critical thinking skills. This course is not available for students in the Academy for Biotechnology.

Business Exploration (11-12)
This course introduces students to the core business competencies and innovation needed in the development of an enterprise highlighting the importance of strategy and assisting students to identify opportunities to creatively problem solve. Through project-based, collaborative learning and the development of 21st-century skills, students will investigate the advantages and disadvantages of entrepreneurship including global business, communication, accounting/finance, and technology.

Computer Science Exploration (11-12)
Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, Computer Science Principles prepares students for college and career. This course is not available for Computer Science students.

Creative Writing (9-12)
The Creative Writing elective semester course is designed to help all students realize and tap their creative potential, develop writing skills by engaging deeply in the writing process, explore strategies for collaborative creativity, give and receive useful, constructive criticism, and reinforce their emerging voices by carefully considering the impact of rhetorical choices. Throughout this course, students will engage in reading and writing in a wide variety of creative modes, styles and genres, while exploring how story works, where creativity comes from, and how the skills of creative writing can be applied to any discipline or communicative circumstance.

Cross Cultural Perspectives (11-12)
Students learn to describe and analyze cultural phenomena in their own lives, to grapple with cultural differences, and to understand cultural conflicts through an interdisciplinary lens. Through a study of examples across cultures, students examine the fluidity and multiplicity of cultural identities and borders. Central to the course are the ways in which cultures change, how cultures shape and are shaped by individuals, how misunderstandings and conflicts arise within and between cultures, and how those differences evolve. Critical thinking and discourse skills are developed in order to become a more informed global citizen. (FDU credit available)

Culinary Arts Exploration (11-12)
This course provides an introduction to Culinary Arts. Areas of instruction include professional expectations, food safety and sanitation, knife skills, basic baking, and egg cookery. Academic work in conjunction with hands-on practice and production will provide students with these important culinary foundations. This course is not available for students in the Academy for Culinary Arts.

Design Exploration (11-12)
This course explores the elements and principles of design through a two-pronged approach involving both theory and practice. Students will learn basic drawing techniques, two-dimensional design principles, color theory and digital design concepts and skills. Students will begin to build a portfolio for future use. Students

will have the opportunity to explore various career pathways in the design field. This course is not available for students in the Academy for Design.

Economics Honors (11-12)
This course is a comprehensive introduction to both macroeconomic and microeconomic topics including economic reasoning, economic systems and indicators, a study of markets and various market structures, consumer and producer behavior, the role of government and public policy, and international trade. Students who elect to take the honors level course will think critically about the relationship between economics and politics, and be required to apply economic theory (through reading, research, and problem-solving) to contemporary social, political, and economic issues. Students will also be asked to formulate and support opinions on several topics including how scarcity informs personal and business decisions, how the structure of markets impact both consumers and producers, the extent to which economic indicators can inform us about the economy and our well-being, and how much influence the government should have on the economy. (This course fulfills the graduation requirement for Financial Literacy.) (FDU and Seton Hall Credit available)

Education and Learning Exploration (11-12)
This course introduces students to potential careers in education and the overall characteristics necessary to excel in a professional environment. Students explore the qualities of effective educators and learn about the process and requirements to become a certified educator. This includes identifying personal strengths and weaknesses and working toward improving oneself to be able to be successful in a professional educational setting. Students also explore the historical foundations of American education to gain an appreciation of how education has changed over time, with respect to race, socioeconomic status, age, gender, and a rapidly developing technological society. This course is not available for students in the Academy for Education and Learning.

Environmental Science (11-12)
In this inquiry-driven Environmental Science course, students will explore the dynamic relationship between humans and the environment, focusing on understanding and addressing critical environmental challenges through the lens of sustainability. Aligned with the New Jersey Student Learning Standards (NJSLS-2020), this course emphasizes scientific inquiry, collaboration, and critical thinking to empower students to become informed global citizens and stewards of the Earth.

Students will define environmental problems, investigate their causes, and explore why these issues persist in both local and global contexts. Through phenomenon-based learning, they will examine real-world environmental challenges such as climate change, biodiversity loss, resource depletion, and pollution. Students will critically evaluate proposed solutions by integrating scientific evidence, mathematical models, and computational thinking.

Financial Literacy (9-12)
Students will demonstrate understanding about how the economy works and their own role in the economy. They will also develop the necessary skills to effectively manage personal finances. Students will apply knowledge, skills and ethical values when making consumer and financial decisions that impact self, the family, and local and global communities.

Flexibility and Strength Training (Grades 9-12)
Topics Include: Par Q, Smart Goals, Muscle Identification, Muscle Contractions/ Anatomical Vocabulary, Phases of a Contraction, Squat Form assessment and Practical, Bench Press Form assessment and practical, 1RM testing, Fitness Test (mid 1) & (mid 2), Horizontal vs. Vertical Loading, Fitness Styles: Pyramid, Drop Set, Super Set, Block, tabata, Circuit, AMRAP, EMOM, Push, Pull, Individualized student fitness plans

This course elective meets for two marking periods (1-2) (3-4). Students have the opportunity to take this elective for 1:4 years. Students study human anatomy and physiology, kinesiology, nutrition, ergogenic aids, and their relationship and application to conditioning and weight training. Students participate in and develop individual weight training and conditioning programs and work to improve cardiorespiratory endurance, flexibility, muscular endurance,e and overall body strength. Students learn a variety of different training methods and are taught proper lifting form to ensure safe practices. Students have the opportunity to assess their individual progress by taking fitness assessments midway through each marking period. Their

results are reflective of their efforts and their individual goals set forth at the beginning of their first marking period in Flexibility and StrengthTraining.

Forensic Science (11-12)
This full year elective course is designed to survey key topics in forensic science, including the application of the scientific process to forensic analysis, procedures and principles of crime scene investigation, physical and trace evidence. This course emphasizes critical thinking and problem solving through the use of real-world forensic science methodologies. Through lessons, virtual and hands-on labs, and analysis of fictional and historical crime scenarios, students learn about forensic tools, technical resources, forming and testing hypotheses, proper data collection, and responsible conclusions.

Genocide Studies (10-12)
This course will provide students with a greater understanding of the psychological, sociological, cultural, and political roots of Genocide, human cruelty, and mass violence. Students will discuss the Holocaust and World War II as well as other global genocides such as Armenia and Rwanda. Ultimately, this course seeks to uncover the various themes and patterns of Genocides, honor those who have been lost in ethnic conflict, and remember their history and legacy in order to prevent this pattern from occurring again.

Global Issues (11-12)
Students develop essential aspects of critical thinking and apply those skills in evaluating international systems, environmental issues, and human rights questions. Not only will this course demonstrate the global dimensions of crucial contemporary issues, it will also develop the relational thinking that students will be expected to exercise in other academic contexts and throughout the rest of their personal and professional lives. In other words, this course is as much about how to study and think about global problems and relationships as it is a course about specific global issues. (FDU credit available)

Healthcare Exploration (11-12)
This course is an optional course designed to provide students with a basic understanding and orientation to health care services and their delivery. It presents an interdisciplinary perspective, focusing on process skills such as critical thinking, ethical reasoning, effective communication and ways to continue independent learning throughout life. The course shows how all health care providers acquire professional competence in dealing with the issues and problems they face as well as the role they play as informed consumers. This course is not available for students in the Academy for Healthcare Sciences.

Human Behavior (9-12)
The student will study and analyze human behavior from the conceptual framework that sociocultural items greatly influence the development of the individual's behavior and view of the world. The primary social science discipline is psychology. Emphasis is given to the development of personality, learning, thinking, emotion, motivation, conflict adjustment and troubled personality. Opportunity is given for the student to develop attitudes and practices that will strengthen a healthy mental attitude and the understanding of self and others.

Journalism (9-12)
This course introduces students to the various aspects within the journalism field. Students begin the course with a brief overview of the industry's history and how the field has evolved in the modern age. The course explores the First Amendment, legal cases, journalists' rights, ethics/conduct, and responsibilities. Over the duration of the course, students learn the basics of journalism writing structures and will experiment with styles such as broadcast, opinion, editorial, investigative, and feature writing. The course also emphasizes the writing process through the planning, development, revising, editing, and publishing of their own writing, including the skills for interviewing, photojournalism, and basic reporting.

Law and Public Safety Exploration (11-12)
Most of us are familiar with the criminal law from movies and television; however few of us realize that we encounter many areas of civil law every day of our lives. Whether we are going to school, getting married or divorced, renting, buying or selling a home, using a computer or cell phone, or just walking down the street the civil law governs our conduct. The Civil and Criminal Law course starts with a unit on legal philosophy and addresses questions such as: "Why do we need laws?", "Is there an obligation to obey the law?" and "When is breaking the law justified?" as well as others. The course also includes a brief survey of legal

history to better understand where our legal traditions come from. We then cover Civil Law including Torts, Contracts, and Family Law. Basic concepts relating to Criminal Law and Criminal Procedure will be covered next, as well as the elements of major crimes such as homicide. The constitutional protections afforded to those accused of crimes will be examined in detail. The course concludes with a brief study of the law of evidence and a mock trial project. This course is not available for Law & Public Safety students.

MultiMedia Exploration (11-12)
In this course, students will be introduced to the elements and principles of visual design and the tools and techniques needed to create various projects. Students explore the roots of multiple art mediums and the technical programs they build their skills on to create their works. They learn the art form's aesthetic/creative and technical aspects in a supportive and collaborative environment that promotes cooperation, mutual respect, personal creativity, and technical learning. By the end of this course, students will master the fundamental base skills of working with mixed media materials and technology, including cameras, lights, sound. This course is not available for students in the Academy for Multimedia.

Philosophy and Logic (9-12)
The Philosophy & Logic course is designed to equip students with the critical thinking skills they will need in order to be successful adults and informed citizens. The course starts with a brief survey of Western philosophy as well as a comparison between Eastern and Western philosophy. Students will ponder questions such as: "What is real?" "How is knowledge constructed?" "How should one act?" and "How should society be organized?" as well as many others. The second half of the course deals specifically with logical reasoning and critical thinking skills. Students will identify the basic elements of an argument and examine the major logical fallacies in detail. Students will develop strong logical reasoning skills including determining whether a statement could be true or must be true, identifying assumptions, spotting faulty arguments, making valid inferences, and strengthening and weakening arguments.

Social Media Marketing (10-12)
In today's business landscape, social media has become a fundamental tool for communication. This course takes a look at how organizations capitalize on social media, and consumer-to-consumer interactions, to support their marketing efforts. Students will learn to create an effective social media strategy to spark conversation in various social communities, and ultimately enhance the consumer's brand experience. Students will also explore ways to measure the effectiveness of their social media presence to ensure optimal brand reputation.

Study Skills (9-12)
This pull-out resource center program is focused on the science and art of *how to learn*. The primary goal of the course is to equip individual students with personal strategies that will help them become independent thinkers and learners in high school and beyond. To this end, a workshop approach provides a forum where teachers and students become partners in the experience of learning. In mini-lessons, students are exposed to a wide range of motivational tips and learning strategies. As students sample these techniques, they quickly learn what works best for them. Students develop a repertoire of learning strategies that help them achieve their goals for their high school classes. Units of study which address the New Jersey Student Learning Standards (NJSLS) include: goal setting, organizational skills and habits, time management, test rehearsal and test-taking, note-taking, content-area strategies (reading, writing and mathematics) and self-advocacy skills. Based on academic load and individual needs, the case manager in consultation with the student, parent, counselor and teacher (as appropriate) will decide the number of semesters the student will be scheduled in the Resource Center.

Superheroes: Modern Mythology (9-12)
The Superheroes: Modern Mythology elective is designed to capitalize upon the extraordinary cultural phenomenon of superhero films, comic books, and graphic novels in the 21st century. Drawing on students' inherent interest in the subject matter, the course helps students to think and express themselves critically about art, history and pop culture by examining the emergence of modern superheroes, from their roots in ancient classic mythology and world religions, and in historical/current events. From Odysseus to Hawkeye; Thor to, err, Thor; Hippolyta to Wonder Woman; and Zeus to Superman, students in this course will examine why people are so fascinated by these characters, how stories serve as both cultural litmus tests and normative vanguards, and where the line blurs between myth and media.

ACADEMY COURSE DESCRIPTIONS

Following are the Career & Technical Education (CTE) course descriptions for grades 9-11. Options for grade 12 courses can be found on page 37.

ACADEMY FOR ANIMAL SCIENCE

This academy allows students to delve into the fascinating world of animal science. Students in this academy study everything from evolutionary biology to animal ethics and common animal disorders. The Academy for Animal Science houses a varied collection of small animals that students interact with and care for on a daily basis. Much of the program is project-based and hands-on. The program maintains relationships with several local veterinary clinics and hospitals. Animal Science is designed for the student who wishes to specialize in veterinary technology, large and small animal care, preventive medicine, practice management and research.

Evolutionary Biology & Taxonomy (9)

In this first year of study, students have the opportunity to discover the fundamentals of animal care and the origins of wild and domestic species. Students learn how zoologists classify animals according to their evolutionary connections, and explore the scientific principles which enable them to ascertain those relationships. They learn about the physical adaptations, starting with cell and tissue types, and then trace the evolutionary process through the skeletal, circulatory, and digestive systems of several groups. Throughout the year, students deepen their knowledge of the practices employed by professionals who work within the animal industry. They use veterinary terms, including Greek prefixes, suffixes, and routes pertaining to animal anatomy and conditions as those practices are demonstrated while working with the program's live animal collection.

Animal Ethics & Careers (10)

The primary objective of this course is to offer students tools with which to objectively investigate potential career pathways. Units explore various aspects of the animal industry and the themes, norms and procedures which are inherent to all of them. The overarching questions from an opening unit focusing on the ethics of animal usage are revisited throughout investigations of agriculture, biomedical research, wildlife management, zoos, and veterinary care. Students discover industry organizations and several opportunities within each arena.

Animal Physiology & Pathology (11)

During their final year within the Animal Science Academy, students assume responsibility for the live animal collection. These responsibilities are complex and diverse in nature, and account for more than half of the students' time in class. The balance of the learning focuses on animal reproductive cycles and strategies, as well as animal diseases. An opening unit discussing the symptoms and clinical signs of disease indicated by selected parts of sample animal CBC's and urinalyses, is applied in subsequent units which focus on parasites and other pathogens. The year concludes with subject matter relevant to that of the Practice NOCTI and focuses on skills relevant to this academy's completer exam.

ACADEMY FOR BIOTECHNOLOGY

The Academy for Biotechnology is a rigorous STEM program that prepares students for post-secondary studies in majors related to the biotechnology industry. Students in the Academy will develop research and laboratory skills that will enable them to learn in a hands-on, project-based model.

Experimental Design (9)

Much of the lessons that take place in science classes at the secondary level are limited in their ability to accurately represent some of the most critically important realities of real science and true inquiry. These realities are aptly termed the "Nature of Science (NOS)" in science education research and NOS lessons are seldom intertwined into science curricula. This is often due to a lack of time, as content coverage historically trumps ancillary concepts like NOS. In Experimental Design, NOS is at the forefront of the course and serves as the very foundation of the entire curriculum. The course is divided into two halves split over four units. The first half serves to answer the driving question of, "What does it mean to 'experiment' in science?" This question cannot be answered unless students understand what the nature of science is and thus, NOS is explored over the first unit, Unit 1: NOS. In Unit 2: Literature Review, students continue to look at what it means to experiment, but this time, in the specific context of real-life, seminal experimental designs of the

past. Students explicitly connect how past scientists and previous scientific research exemplified the aspects of NOS covered in the previous unit. The latter half of this course is based on answering the second driving question of, "What does it mean to 'design' an experiment in science?" With a thorough understanding of NOS and prior experiments at hand, students can now start to explore the more technical aspects of design, with an initial exploration of standard lab procedure (Unit 3: Lab Technique). Upon successfully learning common biotechnological lab techniques, students are tasked with designing their own novel experiments in which they will collect data and formally present their conclusions (Unit 4: Design).

Bioethics (9)
Bioethics is a full-year course designed for students to explore the underlying ethical issues surrounding biotechnology, the environment, research, life and death choices, and medicine. Students will be asked to consider multiple perspectives as well as deepen their understanding of downstream repercussions of decisions regarding ethical issues. This course gives students the opportunity to grapple with some of the most challenging and engaging problems our society is facing as consequences of advances in the life sciences. Throughout the course, students will be using real-life cases to introduce a core set of ethical considerations on each topic that are important for analyzing ethical issues in medicine and the life sciences. Design elements emphasize key bioethical concepts and analytic methods, cutting-edge science content and real world-scenarios. Activities promote active and collaborative learning to help students develop their ethical reasoning and critical thinking skills.

Introduction to Biotechnology (10) 1 Semester (Fall)
Introduction to Biotechnology is a laboratory-based course that builds upon the knowledge and skills students bring from Experimental Design and Biology to establish a strong foundation in biotechnology. As students work to master content and understand the broader impact on society, they will work on actual and simulated laboratory work and independent research. Students will develop critical thinking and communication skills that are fundamental to biotechnology industry and academic research. This course will serve as a springboard to applied and advanced biotechnology where students will develop deeper understandings of biotechnology and the real-world uses of laboratory skill gained in the program.

Applied Biotechnology (10) 1 Semester (Spring)
Applied Biotechnology is a laboratory-based course that builds upon the knowledge and skills students bring from Introduction to Biotechnology. While allowing the continuation of skill and content knowledge building in biotechnology, the course focuses student learning around the central idea that biotechnology can be applied to feed, heal, and sustain the world we live in. Therefore, the course explores the application of biotechnology in two major industries, agriculture and medicine. These areas of study will allow students to explore technologies used to grow crops for food, develop medicine, and produce alternative fuels. Engineering concepts will be used to develop student understanding of the role of synthetic biology in the healthcare industry and to prototype solutions of their own. As in Introduction to Biotechnology, students will also continue to explore an independent research topic in the lab and demonstrate skills in communication and presentation as they share their results.

Special Topics in Biotechnology (11)
Special Topics in Biotechnology is a laboratory-based course that builds upon students' knowledge and skills from their 9th and 10th-grade Biotechnology coursework. Therefore, this next course continues to explore the application of biotechnology in multifaceted ways while building students' career-ready skills. Students will continue to explore and engage in new topics, such as environmental biotechnology. They will develop their communication and collaboration skills as they work together to explore cell and tissue culture dynamics or the intricacies of industry regulatory mechanisms. Students will lead their peers through challenging engineering and design problems and develop workable solutions to complex issues. Students will also grow as scientists, engineers, and STEM leaders by continuing to work on and share their independent research projects in the laboratory with others.

ACADEMY FOR COMPUTER & INFORMATION SCIENCES
This academy program provides students with a comprehensive overview of computers, Internet technology, networking administration and security, computer programming and software engineering.

Foundations of Computer Science (9)

This introductory course is designed to acquaint the student with the fundamentals of Computer Science through experimentation, demonstration, discussion, problem solving, programming, and reading. The laboratory experience is an integral part of the course that allows the student to explore concepts through project-based learning.

Students will also discover the building blocks of the tool they code on – the computer. They will actively participate in designing and building a PC and create simple circuits in a simulator. Students will explore other important topics, such as the limits of computers, societal and ethical issues of software engineering, web design/web development, and video game design.

Introduction to Java Programming (9)
This foundational course introduces students to the essential principles of programming and software development using Java, one of the most widely utilized and versatile programming languages. Designed for students with varying levels of experience, including those new to text-based programming, this course covers both fundamental and intermediate concepts. Students will learn to work with data types, conditionals, loops, and methods while also exploring more advanced topics such as arrays, file handling, and creating graphical user interfaces (GUIs). The course emphasizes practical, hands-on learning to ensure students gain valuable software development skills.

A unique aspect of the course is the use of the Processing library, which allows students to prototype complex visual applications while practicing Java's core functionalities. Through iterative development cycles, students will develop teamwork and collaboration skills, preparing them for group-based project work in real-world settings. The laboratory component is integral to the course, providing a dynamic environment for students to apply concepts through project-based learning and interactive experimentation. By the end of the course, students will have built a strong foundation in programming and problem-solving, equipping them for more advanced studies and applications in software development.

Software Design (10)
Students will continue to develop their computer science skills including algorithm development, problem solving, and Object Oriented and Procedural Programming, while using software engineering principles. While the emphasis of the course will be on programming, students will also be introduced to other important topics, such as requirements management, interface design, testing, and creating, managing, and delivering group projects to an actual customer.

Computer Programming I (10)
In this course, students will dive into the exciting world of problem-solving and creativity through coding. Using Python, a popular and powerful programming language, students will learn how to construct their own algorithms by working with concepts like selection, iteration, and data structures. This course is more than just writing code—it's about understanding the inner workings of applications, how technology works and how it can be used to solve real-world problems.

Students explore topics like the creative process behind programming, how algorithms work, and explore big ideas like big data, cybersecurity, and the impact of computing on our daily lives. Along the way, they will discover how computer science connects to the real world and how it can be used as a tool to address challenges and build meaningful solutions. With its engaging and hands-on curriculum, this course is designed to make computer science accessible and relevant, helping students develop essential skills while sparking their creativity.

Emerging Technologies (11)
Emerging Technologies provides a broad review of new, emerging, and rapidly evolving technologies that industry advisors have identified as needed by today's and tomorrow's workforce. Our focus is Cybersecurity and Artificial Intelligence.
Cybersecurity: Using Linux and a virtual machine environment, students explore threats and defenses throughout the world of cybersecurity. This course features a mixture of research and hands-on labs, and covers many topics including malware, social engineering, authentication, networks, cryptography, ethical hacking, digital forensics, current events, ethics, and careers in cybersecurity. Students participate in "capture-the-flag" competitions where they can develop their cybersecurity skills.

Artificial Intelligence: Students will explore topics within this evolving space, including neural networks, machine learning, natural language processing, and generative AI. Our coursework will include research, discussion of ethics, current events, and the creation of projects that use AI.

Computer Programming II (11)
In this course students will take their coding skills to the next level by diving into object-oriented programming, a powerful way to design and organize code. This course focuses on developing students' problem-solving abilities and learning how to design efficient algorithms—skills that are crucial for real-world programming and align with what they will study in a first-semester college computer science class.

Students will also explore topics like data structures, design principles, and abstraction, giving them the tools to write cleaner, reusable, and more adaptable code. The best part? They get to apply what they've learned by working on real-world projects that benefit their community. Using various libraries and Java JDK, they'll create software that solves specific client needs while incorporating their own creative ideas. Students will even have the chance to explore physical computing, blending programming with hardware to bring their designs to life. By the end of this course, students will have a robust portfolio of projects and a solid foundation in computer science concepts.

ACADEMY FOR CULINARY ARTS
The Academy for Culinary Arts focuses on providing learners with a solid foundation of proven culinary skills backed by theory on which they can build a repertoire of professional experience. Heavy emphasis is placed on current industry cooking and baking methods and techniques, while providing an extensive hands-on experience in our commercial kitchen.

Introduction to Culinary Arts (9)
This program is designed for Freshman students who wish to major in the Culinary Arts field. Professional training will be provided in a commercial kitchen. Areas of instruction include professional expectations, food safety and sanitation, knife skills, basic baking, and egg cookery. Academic work in conjunction with hands-on practice and production will provide students with these important culinary foundations.

Cooking Foundations (10)
This course builds upon Introduction to Culinary Arts. Professional training will be provided in a commercial kitchen. Areas of instruction include cooking methods, stocks and sauces, vegetable identification and preparation. Academic work in conjunction with hands-on practice and production will provide students with further development of standard Culinary foundational skills.

Advanced Culinary Skills (11)
This course builds upon Introduction to Culinary Arts and Cooking Foundations, focusing on more advanced culinary practices. Professional training will be provided in a commercial kitchen. Areas of instruction include food costing, poultry identification, fabrication and cookery, laminated dough production, ice cream production. This course heavily focuses on career ready practices and preparation for Senior year Work-Based Learning Experiences.

ACADEMY FOR DESIGN
The Academy for Design provides students with the foundational skills required of the various and diverse careers in the creative world. With connections and partnerships throughout multiple arms of industries reliant upon design and creativity, students will gain valuable exposure and immersion in relevant fields that require the skills they will learn. While our Design programs present opportunities in fine arts and proficiency in current industry design programs, the program is structured to provide learning attributes to lead students on a 10-year trajectory. Creativity is currently a major asset in any industry; cultivating students to possess future-focused attributes including agility, flexibility and adaptability will allow them to transfer what they learn now into new and evolving contexts in their futures. Our program not only creates artists, but innovators positioned to be leaders in their chosen fields.

Design Concepts I (9)
This course provides an initial foundation for the 9th grade Academy for Design students. Students will explore the elements and principles of design through a two-pronged approach involving both theory and

practice. During the year, students will learn basic drawing techniques, two-dimensional design principles, color theory and digital design concepts and skills. Students will begin to build a portfolio for future use. Students will have the opportunity to explore various career pathways in the design field.

Design Concepts II (10)
This course builds upon an initial foundation of the 9th grade Design Concepts I course. Students will deepen their exploration of the elements and principles of design through a two-pronged approach involving both theory and practice. During the year, students will continue to refine and develop drawing techniques. Students will explore the techniques and skills required to create three-dimensional designs. In this course, students will have the opportunity to delve into the art of photography in order to apply and extend design techniques. Students will also be able to practice and apply more advanced graphics fundamentals such as typography, logo development and design. During the course, students will continue to develop their portfolios and build exhibitions of their work. Throughout the academy program, students will explore various career pathways in design and continue to refine their goals and individual learning plans.

Design Concepts III (11)
In this course, students will build upon the previous two years of foundational design principles to explore advanced topics in design. Students will create complex, challenging design pieces and further develop and refine their individual portfolios. Throughout the year, students will work in a variety of design areas including interior design, architecture, form development and digital animation.

ACADEMY FOR EDUCATION & LEARNING
This Academy introduces students to the field of education. Students interested in becoming teachers, school counselors, social workers, therapists, child life specialists, psychologists, and the like, would find this Academy to be a great start to a successful career in those fields. In addition to the theoretical coursework, students in all grade levels have exposure to working hands-on with children of all ages as well as off-site educational settings. Students in all grade levels will work on Career Ready Practices, 21st Century Skills, and college and career exploration to ensure they have a wide-range of marketable skills for any workplace or college setting.

Introduction to the Field of Education (9)
The first year in the Academy for Education and Learning will serve as an introduction to the field of education. This course will introduce students to potential careers in education by allowing them to research different roles in the school community that are of interest. Students will explore the overall characteristics of functioning in a professional environment, the process by which one becomes a professional educator, and the educational requirements needed to do so. In addition, students in this program will explore the qualities of effective educators. This includes identifying personal strengths and weaknesses and working toward improving oneself to be able to be successful in a professional educational setting. Students will then focus on childhood development and the learning process. It begins with an in-depth study of the development of children from ages three through eighteen. All aspects of human development are studied, including the physical, emotional, intellectual, social, moral, and language milestones for each level of schooling (early childhood, elementary, middle, and high school). The development of children and its impact on the learning process will be closely analyzed through observations of the children in the on-site preschool. Freshmen will also explore the historical foundations of American education. Students will gain an appreciation of how education in America has changed over time, with respect to race, socioeconomic status, age, gender, and a rapidly developing technological society To finish the year, students will explore different careers in the field of human services. Students will learn what it means to be a school counselor, child therapist, child life specialist, and similar careers.

Childhood Development and the Learning Process (10)
The second year of the Academy will explore teaching. This course will introduce students to the multiple aspects that contribute to an educator's ability to manage an educational setting. Then, students are introduced to the curriculum content standards associated with instruction in the state of New Jersey. Students will learn the role of educational standards and lesson plans. Furthermore, the course will introduce students to instructional strategies and lesson planning for elementary through high school students. In doing so, students will learn the importance of establishing a safe and conducive learning environment. Utilizing the knowledge attained through the development of lesson plans for Pre-K-

elementary aged children, students will learn how well-planned lessons contribute to effective classroom management. Students will engage in various teaching strategies that promote student-centered learning. In addition, students will explore special education, 504s, and IEPs. Students will also learn about classroom settings that require additional consideration and planning, including inclusion classrooms, special education classrooms, gifted and talented, and ESL/ELL classrooms.

Advanced Topics in Education (11)

The third year of the Academy sequence continues with students investigating assessment strategies for the classroom. Furthermore, this class will focus on the governmental structures that impact the school system and notorious court cases that have impacted educators. The course will also analyze the relationships between schools and local institutions and individuals, such as businesses, clubs, residents, and families. Students will learn key educational law cases and how schools are governed. Students will learn the roles of the board of education and school administration. During this course, students will frequently visit various educational settings to get a first-hand account of diverse learners and career pathways in the field. These off-site opportunities will also help prepare students for their senior year field experiences (Structured Learning Experience-SLE). Juniors will create a capstone project as well as continue their college and career exploration.

ACADEMY FOR GLOBAL COMMERCE

Students learn business and financial strategies for success in a career in a global marketplace. Students will also operate their own business in an international closed financial network. Students will gain hands-on experience with industry-standard technology, developing the technical skills and digital proficiency essential for success in today's workforce.

Introduction to Business & International Business Strategies (9)

The ninth-grade Introduction to Business course provides an introduction to areas of business, including communication, management, marketing, accounting/finance, and supply chain. During this introductory course students will also focus on developing 21st-century skills that are key to success in both college and careers, including communication, collaboration, critical thinking, and problem-solving. In International Business Strategies, students explore various topics including the study of the influences on global business, the role governments play in global business, the structures of international business organizations, importing and exporting goods, trade relations, foreign exchange and international finance.

Finance & International Business

Introduction to Business Law & Principles of Finance (10)

The tenth-grade year covers an introduction to business law, including ethical decision making, constitutional rights, court systems, contract law, and legal forms of business organization. Through case study analysis, students will practice developing an opinion and respectfully delivering the opinion to an audience. Principles of finance includes the strategies for executing strong personal finance routines and expands to the financial environment of business. Students will explore the areas of financial management planning, investment strategies, financial records, as well as short-term and long-term financial activities. The principles of finance course fulfills the graduation requirement for Financial Literacy.

College Level Accounting (11)

The eleventh-grade year focuses on accounting principles, such as analyzing and recording transactions, adjusting accounts and preparing financial statements. Financial accounting is a service activity that functions to collect and communicate useful financial information about economic entities. The course will be concerned with processing accounting information assets and liabilities, accounting theory for corporations, and financial statement analysis. This is a dual-enrollment course with County College of Morris and students are eligible to earn 3 credits for Principle of Accounting I.

Virtual Enterprises International (11)

With an emphasis on college and career readiness, Virtual Enterprises International (VEI) is an in-school, live, global business simulation that offers students a competitive edge through project-based, collaborative learning and the development of 21st-century skills in entrepreneurship, global business, problem-solving, communication, personal finance and technology. Drawing on the European tradition of apprenticeships, this multidimensional, experiential learning model, which is part of a global network of student-run businesses in over 40 countries, transforms high school students into independent-thinking business

professionals and their classrooms into offices. Through developing and managing businesses, students gain expertise in problem-solving, decision-making, communication, collaboration, technology, and accessing, using and analyzing information—21st-century skills that are key to success in both college and careers.

Global Supply Chain Management

Introduction to Supply Chain Management & Supply Chain Strategy (10)

The tenth-grade year covers an introduction to supply chain management, where students will understand the global network used to deliver products/services and the relationships between trading partners. Students will analyze the supply chain flow, strategic sourcing and supplier selection, as well as execute ethical decision making. In supply chain strategy, students will explore the areas of project management, continuous improvement strategies (LEAN manufacturing, Six Sigma), transportation and distribution functions, inventory management, and creating and maintaining business relationships. Through project based learning, students will collaborate in teams, formulate solutions and respectfully deliver their recommendations to an authentic audience.

Logistics Optimization and Sustainability (11)

The eleventh-grade year focuses on principles of supply chain, such as ethical sourcing and sustainability, logistics and optimizing production, and capacity planning.

Virtual Enterprises International (11)

With an emphasis on college and career readiness, Virtual Enterprises International (VEI) is an in-school, live, global business simulation that offers students a competitive edge through project-based, collaborative learning and the development of 21st-century skills in entrepreneurship, global business, problem-solving, communication, personal finance and technology. Drawing on the European tradition of apprenticeships, this multidimensional, experiential learning model, which is part of a global network of student-run businesses in over 40 countries, transforms high school students into independent-thinking business professionals and their classrooms into offices. Through developing and managing businesses, students gain expertise in problem-solving, decision-making, communication, collaboration, technology, and accessing, using and analyzing information—21st-century skills that are key to success in both college and careers.

ACADEMY FOR GOVERNMENT AND LEGAL STUDIES

Criminal Justice System

The criminal justice system was created to ensure the safety of people in their communities. In order to ensure this, we as a society have developed rules that we all must live by. The criminal justice system ensures that we all obey these rules and sets up a system of how we will be treated if we disregard these rules. In this course, we will study how these rules become law, who makes up the criminal justice system, how the law is enforced, the rights that we have if we are charged with violating these rules, what the Courts can do if we are found to have violated the law, and finally, what the future will bring to criminal justice. This course is a study of the overall system of criminal justice from its early historical development to its evolution within the United States. Identification of various sub-enforcement, courts and corrections; their role expectations and systems and components - law interrelationships; and basic premises of crime, punishment and rehabilitation.

Introduction to Public Safety Careers

This mandatory first-semester hybrid course is an introduction to careers in the Public Safety field, as well as an introduction to research and writing, ethics, and critical thinking. The course also incorporates student success initiatives designed to address and improve the student experience.

ACADEMY FOR HEALTH CARE SCIENCES

The Academy for Health Care Sciences is a comprehensive program delivered from an interdisciplinary perspective. See below for academy program specifics:

Dynamics of Healthcare I (9)

Dynamics of Healthcare I provides an orientation to health care services and their delivery. It presents an interdisciplinary perspective, focusing on process skills such as critical thinking, ethical reasoning, effective communication and ways to continue independent learning throughout life. The course shows how all health care providers acquire professional competence in dealing with the issues and problems they face as well as the role they play as informed consumers.

Health Science Foundations (9)
Health Science Foundations includes an introduction to medical terminology, human anatomy and a variety of career pathways within the healthcare industry. The course utilizes the Paxton Patterson Health Science Careers Learning System in which students explore careers related to fields of medicine, nursing, and health science programs with professional medical equipment - including but not limited to biomedical engineering, dentistry, medical imaging, pharmacology, and more.

Dynamics of Healthcare II (10)
Dynamics of Healthcare II (10) focuses on healthcare services and delivery of quality healthcare . Exploration of healthcare insurance models and basic ethics and legalities in healthcare. Particular emphasis is placed on the roles and responsibilities of each member of the healthcare team, their tools, and communication strategies that optimize good clinical care. Differentiation between health practitioners, healthcare technicians, healthcare support personnel and health-related professionals as well as the role, responsibilities, and tools of various major allied health care related practitioners.

Medical Terminology (10)
Medical Terminology is the study of words that pertain to body systems, anatomy, physiology, medical processes and procedures and a variety of diseases. It provides specialized language for the health care team, enabling health care workers to communicate in an accurate, articulate and concise manner. This course is designed to give the students a comprehensive knowledge of word construction, definition and use of terms related to all areas of medical science. The course includes but is not limited to terms related to anatomy of the human body, functions of health and disease, and the use of language in diagnosing and treating conditions related to all of the human body systems. This course replaces the earlier study of Latin and Greek for future healthcare professionals, as it focuses on words used in the medical fields. This course serves as an important prerequisite to Anatomy and Physiology. It is useful in preparing students for every career in allied health.

Anatomy and Physiology I (11)
Anatomy and Physiology is the study of the structure and function of the human body. This course follows a sequential development of the major body systems in an organized and structured curriculum. The course is designed to give the students a selective overview of human anatomical structure and an analysis of human physiological principles. Labs will include slide work, dissection of various animals and studies of the human skeleton. The course will also use computer simulated dissection. This course will provide the student an opportunity to earn four college credits from County College of Morris.

Medical Health and Wellness (11)
This course provides a comprehensive overview of health and wellness. The impact of lifestyle choices on all aspects of personal health are discussed including physical, mental, emotional, social, and environmental. The course will explore topics related to nutrition, physical fitness, stress management, disease prevention, substance abuse, and healthy relationships. The information and skills necessary for making informed and healthful decisions to promote wellness will be discussed with an emphasis on self-responsibility. In addition, students in this course learn how to interact with patients on location at one of our partner facilities. Students are also able to shadow a variety of health care professionals who care for the patients and/or residents in our partner facilities.

Principles of Scientific Inquiry (11-12)
This course is an optional course designed to provide students with a basic understanding of what clinical research is and the scientific principles on which it is based. This course follows the five steps of the health research process. It includes an in depth look at how to develop a research study question, select a research study approach, design the study, collect/analyze data, and report research findings. (Rutgers credit available)

Emergency Medical Technician
(For Senior students in the Academies of Health Care Sciences, Biotechnology and Law & Public Safety)
NOTE: This is a 2.5 credit course offered in partnership with Atlantic Training Center and runs every afternoon during fall semester from 8:00 am - 10:40 am.

This course is designed to instruct a student to the level of EMT-Basic, who serves as a vital link in the chain of the healthcare team. It is recognized that the majority of prehospital emergency medical care will be provided by the EMT-Basic. This course includes all the skills necessary for the individual to provide emergency medical care at a basic life support level with an ambulance service or other specialized service. This is a rigorous program of classroom instruction, practical skills, evaluations, and homework assignments. The student must also complete 10 hours of clinical skills in a hospital emergency room. In order to successfully complete this course and in order to take the NJ State Certifying Examination, the student must obtain a grade of 75% on all tests. All absences must be made-up prior to taking the state exam.

ACADEMY FOR LAW & PUBLIC SAFETY

The Academy for Law & Public Safety is a targeted program for students interested in law, criminal justice, forensic science, law enforcement, public affairs and humanities.

Criminal & Civil Law (9)

The course aims to provide a practical understanding of the law and the legal system. It will benefit students professionally through academic texts, supplemental real-world case studies, role plays, mock trials, and research materials. In addition, extracurricular course activities, such as field trips, film presentations, and speaker symposiums, are organized to solidify further and inform student awareness of current issues and controversies in terms that are practical, relevant, and engaging. In addition, these activities strive to improve the understanding of the roles of law, lawyers, law enforcement officers, and the legal system in our society. They will expose students to the opportunities that exist within the legal field.

American Law & the Constitution (10)

This course introduces sophomore students to additional concepts in legal thinking. The class provides students with an advanced knowledge of American law related to the Constitution. Students investigate the purposes of the end of case law as it affects their daily lives. It provides an understanding of criminal punishment and debate. The criminal law units discuss crimes against the person from their state of mind. Discussion continues charging and sentencing, along with the effects of the death penalty as a criminal deterrent. Discussions are on the defenses in criminal prosecutions. The criminal component discusses the Bill of Rights, including but not limited to the 27th Amendment. Discussion continues on the individual rights of those accused of crimes. Students will learn about the 4th Amendment (search, arrest, interview, and interrogation). The civil law component of the course focuses on tort law and contract law. The tort unit introduces the distinctions between civil and criminal law.

Crime in Society (11)

This course aims to develop a general understanding of the criminal justice system's response to crime in society. It is important to note that the general theme of this course involves the delicate balance between community interests and individual rights that criminal justice decision-making requires. Students in this course will explore this theme by examining the criminal justice process in detail, focusing on how the system is structured to respond to crime. This requires an understanding of the core elements of the criminal justice system: police, courts, and corrections. We will explore the criminal justice system in five instructional parts. In addition, students will cover the core principles of forensic instruction. Topics covered include, Crime Scene Investigation and Evidence Collection, Hair and Fiber Analysis, Forensic Botany, Fingerprinting, DNA profiling, Blood and Blood Spatter, Handwriting Analysis, Forensic Entomology as well as other areas of Forensics.

ACADEMY FOR MULTIMEDIA

The Multimedia Academy is an interdisciplinary blend of art and technology, spanning across various academic, clinical, and artistic industries. From the very beginning of their time as a Multimedia student, students build on their foundations of media and professionalism before being introduced to specific disciplines, cultural and historical works of art, and skill sets they'll utilize every year forward. Throughout each year, guest artists collaborate with our Academy faculty artists to bring new tools and techniques to the table that students can adapt to their work. Students are also encouraged to use their interdisciplinary art skills in preparing projects for their academic courses.

Being part of the Multimedia Academy requires a curricular commitment outside school hours, especially during the Academy's biggest event of the year, Media Night. This event is scheduled in the Spring every year, so there is ample time for planning. Students are **required** to stay after school to help with setup,

maintenance, and takedown of the event once concluded. Our junior students also create a yearly Media Magazine to showcase their work to visitors. Additional volunteer roles for Media Night include:

- Brochure Design & Management
- Photography & Videography
- Event Poster Design
- and more!

In addition to Media Night, and throughout the school year, Multimedia students have a multitude of volunteer opportunities within the MCST community they can sign up for. Students can earn volunteer hours for these opportunities, which can be showcased in various MCST clubs and also in the students' individual resumes. In the past, these positions have included:

- Event Promo Editors
- Events Photography & Videography
- Sports Photography & Videography
- Video & Poster Graphic Design
- Photography Demo Course

Multi-Medium Foundations (9)
"Imagination is the beginning of creation. You imagine what you desire, you will what you imagine, and at last, you create what you will." – George Bernard Shaw

The first course that students will complete in the Multimedia Academy is **Multi-Medium Foundations,** which helps to introduce students to the elements and principles of visual design and the tools and techniques needed to create various projects. In this introductory course, students explore the roots of multiple art mediums and the technical programs they build their skills on to create their works. They learn the art form's aesthetic/creative and technical aspects in a supportive and collaborative environment that promotes cooperation, mutual respect, personal creativity, and technical learning. By the end of this course, students will master the fundamental base skills of working with mixed media materials and technology, including cameras, lights, sound, and Adobe Creative Cloud programs (ie. Photoshop, Premiere, Animate, After Effects). Students begin to discover and express their vision and find their voices as digital artists, mixed media artists, cinematographers, editors, motion graphics specialists, sound designers, lighting designers, production managers, and more.

While students develop their skills throughout the year, they'll be tested in their proficiencies and certified in various programs/skills, including the use/identification of cameras, tripod setup and handling, crane safety and handling, safety protocols concerning self, equipment, and others, and also official certifications in Adobe Photoshop and Animate. Some projects students will complete during their Multi-Medium Foundations course include *'Elements of Art & Principles of Design,' 'Fundamentals of Animation & Stop-Motion,' 'Introduction to Cinematography,' 'Introduction to 3D Design,' 'Film Analysis Essay,' 'Introduction to Storytelling,'* and more!

Sight, Sound & Storytelling (10)
"The one thing that you have that nobody else has is you. Your voice, your mind, your story, your vision. So write and draw and build and play and dance and live only as you can." – Neil Gaiman

At the core of human languages is the art of storytelling. From the very beginning of **Sight, Sound & Storytelling**, students learn how to tell stories, studying characters, narrative structure, dialogue, and more from famous works of literature like Homer's *"Odyssey"* and Joseph Campbell's *"The Hero's Journey,"* which later leads them into creating their own stories from the ground up. Students discover that storytelling involves operating technology programs and equipment and solving visual, dramatic, technical, and aesthetic problems to develop characters and mood, affect audience response and maintain narrative interest and unique perspectives.

Through this course, students will take what they've learned from their previous course and experiences and improve upon their skills by tackling new exercises and portfolio projects, such as *"Cinematography Refreshers," "Visual Effects in Film," "Ambient & Professional Sound Design," "2D Animation Workflow,"*

"Introduction to Screen- & Playwriting," and a *"Sophomore Film,"* just to name a few. Just as in previous semesters, students are tested in their proficiencies of the various tools and programs used both in the classroom as well as in the industry.

By the end of **Sight, Sound & Storytelling**, students can analyze the structure and aesthetic attributes of digital media by professionals and peers, use camera/lighting/sound recording equipment safely and competently, understand the fundamentals of screenwriting, directing & editing, and develop technical and artistic skills needed to pursue occupational pathways in the film/video/creative art industry. Each student adds more significant workpieces to their multimedia portfolio, used for internship search and college applications in junior and senior years.

Media Studies & Exploration (11)
"Creativity is more than just being different. Anybody can plan weird; that's easy. What's hard is to be as simple as Bach. Making the simple, awesomely simple, that's creativity." – Charles Mingus

The course of **Media Studies & Exploration** emphasizes several complementary approaches to the study of media: multidisciplinary perspectives derived from the arts, humanities, and social and natural sciences. Throughout this junior year course, students begin polishing their individual visions and creating portfolio projects tailored to media positions they may want to pursue for their internship, or as a career. In addition to individual portfolio exploration, students work together on several mandatory projects such as *"Matte Painting & The Parallax Effect"* and a *"Junior Film Capstone."*

By the end of **Media Studies & Exploration**, students receive the opportunity to submit their work to various film and state contests for prizes or feedback from industry professionals. Through their Multimedia journey, students receive one-on-one experience with professionals while polishing their portfolio, resume, and cover letter necessary for their senior year internship.

Multimedia students are expected and encouraged to develop their artistic voice and vision, master the tools and techniques of their intended profession, manage their time and materials efficiently, and work as influential, supportive, enthusiastic members of the MCST arts community. Throughout Media Studies & Exploration, students hone their voices as artists. They dive deeper into a project-based independent study in an area of particular interest related to their college and/or career plans. As a result, students will create complex, challenging design pieces and further develop and refine their portfolios.

SENIOR YEAR CAREER EDUCATION OPTIONS - ALL ACADEMIES

Senior year is a capstone experience for Academy students. Throughout their first three years of Academy coursework, students hone their skills and explore a variety of career pathways within their career cluster. The Senior Year option allows students to customize their experience to best support a transition to post-secondary pursuits.

College Coursework : Grade 12 Option: Academy Only Courses
Students who meet academic, behavioral, and attendance eligibility requirements may choose to complete their Career and Technical Education (CTE) coursework requirement at County College of Morris (one approved course per semester). There is a list of approved CTE courses for each Academy which can be obtained through the School Counseling Department. Other courses may be approved on a case-by-case basis, and that process is initiated through the School Counseling Department.

College Coursework: Grade 12 Option: All Courses
Students who meet academic, behavioral, and attendance eligibility requirements may choose to complete ALL of their Senior Year coursework (CTE and Academic) requirements at County College of Morris. MCVSD pays up to 24 approved college tuition credits. There is a list of approved courses for each Academy which can be obtained through the School Counseling Department.

Independent Study
The independent study program is designed as a multitrack framework through which junior-class members identify a self-selected course of study, research, or project to be undertaken for credit during senior year. Students seek out and acquire a subject-area mentor and propose their detailed plan to the program committee. Upon approval, students engage in the work on a semester or year-long basis under the mentor's

guidance. Students will be awarded credit based upon the completion of coursework and assessment of an end-of-course project and presentation.