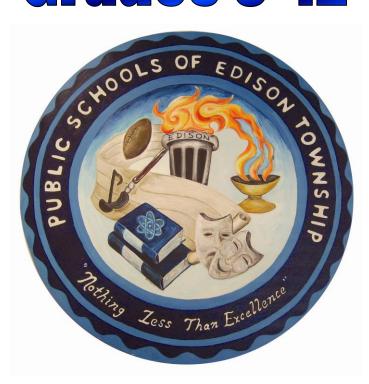
PROGRAM OF STUDIES

Grades 9-12



2022-23

Edison High School Charles Ross, Principal



John P. Stevens High School Dr. Anthony Shallop, Principal



PUBLIC SCHOOLS OF EDISON TOWNSHIP Office of Curriculum and Instruction 312 Pierson Avenue, Edison, NJ 08837

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Mission Statement

The mission of the Public Schools of Edison

Township is to ensure that all pupils achieve at
the highest level of academic success. The
district, in partnership with the community, will
provide a safe, supportive learning environment
which promotes self-worth and encourages
productive contributions to a diverse and
constantly evolving global society.

AFFIRMATIVE ACTION/EQUITY

Students will have equal access to all educational programs and activities without regard to sex, race, creed, national origin, ancestry, nationality, color, gender identity or expression, familial status, affectional or sexual orientation, age, handicap (and/or disability), atypical hereditary cellular or blood trait, genetic information, refusal to submit to genetic tests, refusal to make available results of genetic tests, or any other unlawful category of discrimination.

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PLANNING YOUR HIGH SCHOOL PROGRAM

Our comprehensive high-school program offers courses designed to meet the academic and career needs of all students. By taking advantage of this curriculum and by selecting the most challenging courses, students will be able to achieve their personal goals while obtaining the preparation to pursue higher education or enter the world of work.

The State of New Jersey and the Edison Township Board of Education have established specific graduation requirements. The Edison Township Board of Education requirement <u>exceeds</u> the minimum course/credit requirement set by the state. Please refer to the chart on the following page.

In planning your program, it is important to remember that all courses must be approved by your parent/guardian and school counselor. Additionally, the course selection process must be completed by **June 1**.

CHANGES IN COURSE SELECTION AFTER JUNE 1 WILL ONLY BE CONSIDERED FOR PLACEMENT CORRECTIONS, BASIC SKILLS CLASS ASSIGNMENTS, OR SUMMER SCHOOL/CREDIT COMPLETION ADJUSTMENTS. THESE CHANGES SHALL BE MADE PRIOR TO THE START OF SCHOOL.



GRADUATION REQUIREMENTS

Attendance: Students must fulfill all attendance requirements established by the Board of Education.

New Jersey State Graduation Assessment Requirements: See the New Jersey Department Of Education for up to date requirements.

Maximum Subjects Permitted: Students will be permitted to take a maximum of seven (7) subjects per semester/year. Students enrolled in two (2) lab science courses will be limited to six (6) subjects. **The eighth subject in each student's daily schedule will be a study period.** (Note: All science lab periods will be scheduled during the study period.)

At the discretion of the high school principal, <u>Seniors</u> **MAY** be permitted the option of taking a course in lieu of a study hall depending on his/her overall GPA and the availability of classroom openings. Seniors selecting this option would be permitted to take his/her science lab one day a week during Physical Education/Health period if the schedule allows for it. Seniors taking <u>two lab science courses</u> would be required to take one study hall. This may provide an exception to the six (6) subject limit for seniors who are enrolled in two lab courses.

Required Courses: The following courses are required and must be successfully completed before students are awarded their

diploma. These requirements exceed the state minimums.

Requirement	Edison Board of	New Jersey State
	Education	Minimum
English	4 Years/20 credits	20
Mathematics	4 Years/20 credits	15
Science (Including 1 year of Biology)	3 Years/16 credits	15
World History	1 Year/ 5 credits	5
US History	2 Years/10 credits	10
World Language	2 Years/10 credits	5
Physical Education/Health/Driver Education – Grade 10 (required during each year of enrollment)	4 Years/20 Credits	20
Career and Technical Education	5 credits	5
Visual and Performing Arts	5 credits	5
Economics/Financial Literacy	2.5 credits	2.5
Other Courses	17.5 credits	17.5
Credits	130	120

SUCCESSFUL COMPLETION OF REQUIRED COURSES

Required courses that are failed must be made up in summer school or repeated the following school year -- and must be successfully completed before the next course can be taken in that subject area's required sequence. Students who fail to do this jeopardize their chances of graduating with their class. (This applies to English, math, science, and world languages.) **EXCEPTIONS TO THIS PROCEDURE MAY BE CONSIDERED FOR THE SENIOR YEAR ONLY AND MUST BE APPROVED BY THE PRINCIPAL.**

CLASS TRANSFERS AND WITHDRAWALS

When creating schedules, students are placed in courses after serious discussion has been had between the student, parent, teacher and counselor. Students are always encouraged to develop persistence and resilience in honoring their commitments to course selections by attending and satisfactorily completing the courses in which they enroll.

Students have until <u>June 1st</u> to make adjustments to their course requests. Requests for discretionary schedule changes will not be considered (e.g., teacher, elective courses, physical education, late start and early dismissal).

Schedule Changes:

All changes must adhere to the following:

- 1. Any approved schedule change other than mistakes in placement will result in a Withdraw Pass (WP) or Withdraw Fail (WF) on the student's permanent transcript <u>starting the first day of school</u>. Changes to a class level or dropping a class due to academic struggles will only be considered from the 6th week of school through the end of the first Marking Period.
- 2. In the event that a change in schedule is affected due to course level, it should be understood by all involved parties that grades previously received will follow the student to the new course. Grades in AP/Honors courses will not receive weighted credit once the course transfer is made.
- 3. Students who are enrolled in a class through the waiver process will not be allowed to change classes or class levels.

PROGRAM OF STUDIES ENTRY

Transfer Students: All transcripts of incoming students are analyzed on an individual basis with appropriate credit and weight assigned based upon the course offerings. All transfer classes receive level 2 credit unless the course is from the United States with a clear indication of the word "HONORS" or "Advanced Placement."

Transcripts of students entering the Edison Township School District from a school in another country will be given credit based on the translation of the transcript and equivalency to courses available at our high schools. In addition, courses will receive a P (pass)/F (fail) grading and will not factor into the child's G.P.A.

I. WEIGHTED GRADE POINT AVERAGE (GRADES 9-12)

A weighted grade point average will be computed for each student. A quality point value is assigned to each letter grade according to the following chart:

LETTER <u>GRADE</u>	<u>Honors</u>	ACCL.	REGULAR
A+	6.33	5.33	4.33
A	6.00	5.00	4.00
A-	5.67	4.67	3.67
B+	5.33	4.33	3.33
В	5.00	4.00	3.00
B-	4.67	3.67	2.67
C+	4.33	3.33	2.33
С	4.00	3.00	2.00
C-	3.67	2.67	1.67
D	1.00	1.00	1.00
F	0	0	0

The quality points are multiplied by the number of credits received for each course. The quality points are then totaled and divided by the total number of credits attempted, e.g.:

GRADE 9	LETTER GRADE	QUALIT POINT VALUE		CREDIT	rs	TOTAL QUALITY POINTS	WEIGHTED GRADE POINT AVERAGE
English I (A) French I (A) Geometry (H) Biology (A) World History (A) Art I (R) Physical Education I (R) Health (R)	B A - A B + A B A B	4.00 4.67 6.00 4.33 5.00 3.00 4.00 3.00	x x x x x x x	5.00 5.00 5.00 5.00 5.00 5.00 3.75 1.25	= = = = =	20.00 23.35 30.00 21.65 25.00 15.00 15.00 3.75	
		Total		35.00		<u>153.75</u> = 35.00	4.39

The weighted grade point average shall be listed on the student transcript as an aid to colleges, business and technical schools as well as prospective employers.

II. Unweighted GRADE POINT AVERAGE (GRADES 9-12)

An unweighted grade point average will be computed for each student. The unweighted grade point average is computed by converting grades earned in each course to a numerical equivalent using the following scale: A+=4.33, A=4.0, A-=3.67, B+=3.33, B=3.0, B-=2.67, C+=2.33, C=2.0, C-=1.67, D=1.0, F=0. The unweighted grade point average shall be listed on the student transcript as an aid to colleges, business and technical schools as well as prospective employers.

GRADE 9	LETTER GRADE	GRAD POIN VALU	Т	CREDI	TS	GRADE POINT TOTAL	GRADE POINT AVERAGE
English I (A) French (A) Geometry (H) Biology (A) World History (A) Art I (R) Physical Education I (R) Health (R)	B A- A B+ A B A B	3.00 3.67 4.00 3.33 4.00 3.00 4.00 3.00	x x x x x x x	5.00 5.00 5.00 5.00 5.00 5.00 3.75 1.25	= = = = = =	15.00 18.35 20.00 16.65 20.00 15.00 15.00 3.75	
TOTAL				35.00		<u>123.75</u> = 35.00	3.54

III. CLASS RANK (GRADES 9-12)

According to Board of Education policy, class rank shall not be reported or released except as provided for in the procedures. A weighted and unweighted grade point average shall be reported on the transcript. No information regarding rank in class shall be released or made public except as follows upon request. Such requests shall be made through the Supervisor of Guidance.

- 1. The National Merit Scholarship Program shall be provided rank in class for those students it identifies as eligible for scholarship consideration.
- 2. The New Jersey Department of Education shall be provided with a list of students who may be eligible for NJSTARS.
- 3. The United States military service academies shall be provided rank in class if requested by an academy.
- 4. Scholarship programs or special college programs to which a student has applied shall be provided rank in class if such data is requested or required for the program.

COLLEGE PLANNING

Students planning to attend a college/university are encouraged to take a full academic program each year they are in high school (grades 9-12). Recently, colleges have been increasing their academic standards. For instance, upon admission to any New Jersey public college or university, students are required to take a placement test (county colleges, state colleges, Rutgers University, New Jersey Institute of Technology). Also, many private colleges in New Jersey require a placement test. Placement in remedial English and/or mathematics classes is mandatory for all college freshmen who do not demonstrate a satisfactory level of proficiency on placement tests.

Additionally, students planning to attend college should use Naviance, the College Counselors, and other internet services to research college opportunities. They should be enrolled in challenging college preparatory courses in English, math, science and social studies in all grades. Some colleges prefer more than the minimum requirements and some will accept a variety of course patterns. Many competitive colleges and universities **require** a minimum of 16 academic subjects as follows:

English 4 years
Social Studies 3 years
Mathematics 4 years

Science 3 years (4 years preferred)
World Languages 2 years (3 or more preferred)

Students expecting to major in mathematics, science, or world languages are strongly urged to take four years of study in these areas. Because of the high "dropout rate" during the first year of college, the following advice is offered to all college-bound seniors: It is more important to complete your first year at college than to enjoy your senior year at high school. Thus, your 12th-grade program should be a rigorous academic experience.

Each year, over one hundred representatives of colleges, universities, county colleges, technical, and other specialized schools visit each of our high schools to explain the offerings of their respective institutions. These conferences provide an excellent opportunity for students to compare one institution with another when making choices. Annually, there are college information programs conducted at each high school and at Middlesex County College. Specific dates are announced through the Counseling Department. Parents and students are encouraged to attend these programs.

The PSAT is administered during mid-October. This test is useful in predicting SAT scores. The PSAT scores of junior students are used to determine National Merit Scholars. Students should use the PSAT scores to help them select one or more SAT preparation options such as challenging math and English courses, intensive afternoon/evening programs, commercial programs, and self-directed materials, among others.

Past experience has shown that students who are successful with the SAT and/or ACT are those who have prepared themselves with strong academic subjects. The SAT/ACT should be taken in the winter of the junior year by students planning to attend a four-year college or university. Students may retake either test during the fall semester of their senior year. Some colleges require students to take either the SAT/ACT again in the senior year even if their previous results were quite good.

GENERAL INFORMATION

ADVANCED PLACEMENT – Advanced placement is a program created by the College Board which offers college-level curricula and examinations to high school students. American colleges and universities may grant placement and course credit to students who obtain high scores on the examinations. Courses are offered in certain subject areas for students who have achieved a high level of academic proficiency. Eligibility for enrollment in ADVANCED PLACEMENT courses is dependent upon such factors as report card grades, standardized test scores, student interest, motivation, and reading proficiency. Students seeking enrollment in ADVANCED PLACEMENT courses must have the recommendation of appropriate staff members. Every student enrolled in an AP course is expected to take the AP exam in May.

GROUPING PROCEDURES – Students will be placed in courses based on Grouping Procedures which are available on the district website.

ELIGIBILITY REQUIREMENTS DIVISIONS I AND II INITIAL-ELIGIBILITY REQUIREMENTS

The interscholastic athletic and co-curricular programs provide opportunities for students to pursue their interests and develop their talents through participation in a variety of activities. The eligibility requirements for participation in these activities are as follows:

INTERSCHOLASTIC ATHLETICS - All Board of Education approved athletic activities in grades 9-12 are sanctioned by the New Jersey Interscholastic Athletic Association (NJSIAA)

Eligibility requirements for participation in athletic activities are the same as those adopted by the New Jersey Interscholastic Athletic Association -- with the exception that the Board of Education has adopted the following additional requirements:

- 1. Students must adhere to Board rules and regulations regarding conduct and attendance.
- 2. Academic Requirements
 - To be eligible for athletic competition during the first semester (September 1 to January 31) of the 10th grade or higher, students must have passed during the immediately preceding school year, 25% of the credits required by the Edison Board of Education (25% of 130 credits). Transfer students enrolling in the 10th grade or higher must have passed, during the immediately preceding school year, 25% of the credits required for graduation by the Board of Education in the school district from which they transferred.
 - To be eligible for athletic competition during the second semester (February 1 to June 30) of the 9th grade or higher, students must have achieved an academic record during the first semester which represents on an annual basis successful completion of 25% of the 130 credits required by the Edison Board of Education. Transfer students enrolling in the 9th grade or higher must have achieved an academic record during the first semester which represents on an annual basis successful completion of 25% of the credits required for graduation by the Board of Education in the school district from which they transferred.
 - Be sure to look at your high school's list of NCAA Courses on the NCAA Eligibility
 Center's website (<u>www.eligibilitycenter.org</u>). Only courses that appear on your school's
 List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a
 guide.

Students who plan to participate in interscholastic sports while in college should go to the NCAA website (www.ncaa.org/student-athletes) for eligibility requirements.

Co-Curricular Activities - All Board of Education approved co-curricular activities including, but not limited to, drama, band, choir, cheerleading, band front, student council and class organizations, school newspaper, and clubs

Eligibility requirements for participation in co-curricular activities are the same as those governing eligibility for participation in interscholastic athletics.

ADDITIONAL INFORMATION REGARDING ELIGIBILITY REQUIREMENTS FOR PARTICIPATION IN INTERSCHOLASTIC ATHLETICS AND CO-CURRICULAR ACTIVITIES MAY BE OBTAINED FROM THE PRINCIPAL, COUNSELORS, ATHLETIC DIRECTOR, COACHES AND ACTIVITY SPONSORS.

ENGLISH DEPARTMENT

Listed below are the core courses required to each grade level as well as the elective courses available at each grade level.

Grade	9 th	10 th	11 th	12 th
Required Core Courses:*	English 1	English 2	English 3 • AP Language and Composition (Honors) • AP Seminar (Honors) • Honors • Accelerated • Academic	 English 4 AP Literature and Composition (Honors) AP Language and Composition (Honors) AP Research (Honors) Prereq AP Seminar English Composition (Honors) Accelerated Academic
Electives:	Creative Writing 1 Fundamentals of Public Speaking Theater Arts 1	Creative Writing 1 Creative Writing 2 Fundamentals of Public Speaking Theater Arts 1 Theater Arts 2	Creative Writing 1 Creative Writing 2 Fundamentals of Public Speaking Theater Arts 1 Theater Arts 2 Theater Arts 3 (Honors)	Creative Writing 1 Creative Writing 2 Fundamentals of Public Speaking Theater Arts 1 Theater Arts 2 Theater Arts 3 (Honors) Theater Arts 4 (Honors)

^{*}NOTE: Students will be placed in English based on Grouping Procedures.

COURSE DESCRIPTIONS

ENGLISH

REQUIRED COURSES

Students are required to successfully complete four years of English (1, 2, 3 and 4) for high school graduation. The focus of the English program is the development of the ability in reading and writing/composing, with course content stressing the integrated study of reading/writing/speaking/listening and viewing. These courses are offered at three levels of instruction - Academic (level 2), Accelerated (level 1) and Honors (H). In addition to the four years of required English, students who do not meet the NJDOE State Graduation Assessment requirements will be placed in a NJSLA Portfolio Appeals class in 12th grade to develop the required portfolio.

Summer reading (entering grade 9, 10 or 11) or summer project (entering grade 12) is a requirement for all students in English.

ENGLISH 3 OR 4 - AP LANGUAGE AND COMPOSITION (HONORS) - This course provides an opportunity to study and to write various kinds of analytical or persuasive essays on non-literary topics. By including non-literary topics with a college-level English option in language, rhetoric, and expository writing, this course prepares students for the academically rigorous AP English Language and Composition Examination. In addition, it will prepare students for effective reading and writing in colleges and universities as well as personal and professional endeavors beyond their academic involvement. Some colleges and universities require students to have passing scores in both AP Language/Composition and AP Literature/Composition to receive college-level credit. Students must be committed to this program if they are to realize success in this highly intensive course. ENGLISH LANGUAGE AND COMPOSITION AP fulfills one year of the four-year English requirement. Every student enrolled in ENGLISH LANGUAGE AND COMPOSITION AP is expected to take the AP exam in May.

ENGLISH 3 - AP SEMINAR (HONORS) – AP Capstone is built on the foundation of 2 year-long AP courses – AP SEMINAR and AP RESEARCH – and is designed to complement and enhance the indepth, discipline-specific study experienced in other AP courses. AP SEMINAR develops students' skills in writing, communication, research, analysis, evidence-based arguments, collaboration and presenting—core academic skills that are needed for college, career and life readiness. In AP SEMINAR, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. Students who earn a score of 3 or higher in AP SEMINAR are eligible to take AP RESEARCH (part of AP Capstone). AP SEMINAR is a prerequisite for AP RESEARCH.

ENGLISH 4 - AP RESEARCH (HONORS) – AP Research, the second course in the AP Capstone sequence, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan and implement a yearlong research-based investigation to address a research question. Through this research and inquiry, students further the skills they acquired in the **AP SEMINAR** course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense. Students who earn a score of 3 or higher on the AP Seminar exam are eligible to take **AP RESEARCH** (part of AP Capstone). **AP SEMINAR** is a prerequisite for **AP RESEARCH**.

ENGLISH 4 - AP LITERATURE AND COMPOSITION (HONORS) - This course engages students in the careful reading and critical analysis of imaginative literature. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. Reading in an AP course is both wide and deep. The approach to the close reading involves these components: the experience of literature, the interpretation of literature, and the evaluation of literature; all three are important in AP ENGLISH LITERATURE AND COMPOSITION. Not only will students read actively, they will read carefully and deliberately. Along with the aspects mentioned about reading, writing is an integral part of the AP ENGLISH LITERATURE AND COMPOSITION course. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. Writing instruction includes attention to developing and organizing ideas in clear, coherent, and persuasive language. Other aspects such as precision, correctness, and style are equally important. Throughout the course, emphasis is placed on helping students develop stylistic maturity. Every student enrolled in ENGLISH LITERATURE AND COMPOSITION AP is expected to take the AP exam in May.

ENGLISH 4 - ENGLISH COMPOSITION (HONORS) - This course will include important topics in nonfiction and fiction currently covered in 12th grade English, and also provide a strong focus on college writing. This course is designed to fully immerse students into the expectations and rigor of college writing. Based on introductory writing courses which are required courses at most colleges, students will read, comprehend, analyze, and evaluate non-fiction articles intended for a college audience and make connections between ideas derived from a variety of texts. Through the process of writing multiple drafts of expository essays, students will develop independent theses that respond to the ideas and information in the texts they read. Students will produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. Primary texts for the course will consist of non-fiction academic essays. Enrollment is based on student interest, teacher recommendation, and prior English performance.

CREATIVE WRITING 1 - This course enables students in grades 9-12 to develop their creative writing skills. The writing process will be emphasized as students compose narratives, poems, journal entries, dramatic scenes and novel excerpts. Throughout the course, students will be taught how to select and limit a topic, select an appropriate mode of expression, and write for a particular audience.

CREATIVE WRITING 2 - This course will allow students in grades 10-12 to further refine their writing skills. The writing process will be emphasized as students continue to compose narratives, poems, journals, dramatic scenes and novel excerpts. Students will work with their teacher to compose writing for the purpose of publication (*Writer's Wings Literary Magazine* at JPS or *Echoes Literary Magazine* at EHS).

Prerequisite: Successful completion of **CREATIVE WRITING 1**.

FUNDAMENTALS OF PUBLIC SPEAKING - Effective oral communication is the focus for students learning to speak with poise and intelligence in a variety of situations. Units of study include the basic tools for oral expression, organization of ideas, preparation of speeches, and effective delivery. Various types of speeches, including the impromptu speech, are presented and evaluated.

THEATER ARTS 1 - This elective course begins with a discussion of "stage fright" and a study of the techniques which can be used to overcome this problem. Pantomime and improvisational group work are then introduced to increase the student's confidence and form the basis for a study of the evolution of the theater, as well as a study of the basic techniques of acting.

THEATER ARTS 2 - This course is designed as an advanced course in techniques of acting. In addition to character development, elements such as motivation, concentration, and character and play analysis are stressed. Methods of approach to character creation are reinforced by actual workshop activity in play production. Students will be required to attend one school play and critique it.

Prerequisite: **THEATER ARTS 1** or demonstration of equivalent skills and knowledge as verified by teacher recommendation and approval of the English Supervisor and the Principal.

THEATER ARTS 3 (HONORS) - This course is the continued study of advanced acting techniques, and how the art of acting is derived from everyday social interaction. Theatrical styles and play writing are offered in this course, and the process of career decision-making is approached by using the advanced students' Theater Arts background. Students will be required to attend one school play and critique it.

Prerequisite: Successful completion of THEATER ARTS 2.

THEATER ARTS 4 (HONORS) - This course is designed for the well-trained and experienced drama student to continue development of skills related to the theater. The course will operate simultaneously with Theater Arts III, but will permit greater independent work in acting, directing and writing. Students will be required to attend one school play and critique it.

Prerequisite: Successful completion of **THEATER ARTS 3**.

MATHEMATICS DEPARTMENT

Listed below are the core courses required at each grade level as well as the elective courses available at each grade level.

Grade	9 th	10 th	11 th	12 th
Core Courses:*	Algebra 1 Geometry	Geometry Honors Accelerated Academic Algebra 2 Honors Accelerated Academic Pre-Calculus Honors Accelerated Academic Accelerated Academic Algebra 1 RC	Algebra 2	Pre-Calculus
Electives:				Calculus III (Honors) AP Statistics (Honors) Statistics Accelerated Academic

*NOTE: Students will be placed in mathematics based on the district Grouping Procedures. All prerequisites must be met. Four years of mathematics is required. Students <u>must</u> complete a sequence of Algebra 1, Geometry then Algebra 2, followed by additional courses. Students who take Algebra 1 and/or Geometry in Edison's middle schools must still take four years of mathematics in high school.

MATHEMATICS

Students should refer to page 2 to determine math requirements for graduation.

PRE-ALGEBRA (RC) - This course creates a skill and problem solving foundation. It is aligned with the New Jersey Student Learning Standards, will review, and extend content in preparation for **ALGEBRA 1**.

ALGEBRA 1 (ACADEMIC) - This course is the bridge from the concrete to the abstract study of mathematics. It is aligned with the New Jersey Student Learning Standards, will review, and extend the content of **PRE-ALGEBRA**. The successful completion of Algebra I is required for graduation.

GEOMETRY (HONORS, ACCELERATED, ACADEMIC) - This course is designed for the student who has successfully completed **ALGEBRA 1**. It is aligned with the New Jersey Student Learning Standards, will develop both inductive and deductive reasoning skills, and investigate geometric applications to algebraic concepts. The successful completion of Geometry is required for graduation.

ALGEBRA 2 (HONORS, ACCELERATED, ACADEMIC) - This course has been prepared for the student who has successfully completed **Geometry**. It is aligned with the New Jersey Student Learning Standards, will review, and extend the content of **ALGEBRA 1**.

INTEGRATED MATH A (ACADEMIC) - This course has been designed for the student who has completed the Algebra 1, Geometry, Algebra 2 sequence. It is an integrated mathematical approach of the three courses into a seamless progression. Students will reinforce foundational mathematical skills as a three part spiral of previous math courses.

INTEGRATED MATH B (ACADEMIC) - This course has been designed as a continuation of **INTEGRATED MATH A**. Students who have completed **ALGEBRA 2** with specific prerequisites, are eligible to enroll in this course as an alternative to **PRE-CALCULUS** or **STATISTICS**.

PRE-CALCULUS (HONORS, ACCELERATED, ACADEMIC) - This course is designed for the student who has successfully completed **ALGEBRA 2**. This course will study the behavior of the six trigonometric functions and advanced algebra concepts. Pre-requisites must be met.

CALCULUS 1 (ACCELERATED, ACADEMIC) - This course is designed to prepare the student for a first-year college course in calculus. This is a less demanding course than AP CALCULUS (AB) because some topics are covered with varying degrees of depth. Instead, additional review and emphasis are placed on topics from PRE-CALCULUS. The formal study of pre-calculus is a prerequisite and departmental approval is required from PRE-CALCULUS (ACADEMIC).

CALCULUS - AP (AB) (HONORS) - This is a college level course which prepares the student for the Advanced Placement Examination in AP CALCULUS AB. The content of this course focuses on both differential and integral calculus. PRE-CALCULUS (HONORS), OR PRE-CALCULUS (ACCELERATED) with pre-requisites, and departmental approval is a requirement. Every student enrolled in AP (CALCULUS AB) is expected to take the AP Calculus exam in May.

CALCULUS - AP (BC) (HONORS) – This is a college level course which prepares the student for the Advanced Placement Examination in AP CALCULUS (BC). PRE-CALCULUS (HONORS) and departmental approval is a prerequisite. Every student enrolled in AP CALCULUS (BC) is expected to take the AP Calculus exam in May.

CALCULUS III (HONORS) – This a a college level course that prepares the student for a more in-depth study of mathematics. Emphasis is on the study of analytic geometry and calculus in three dimensions. Topics include, but are not limited to, solid analytic geometry, partial derivatives, multiple integrals, and topics in vector analysis. Approval from the mathematics department is required with mandatory pre-requisites including completion of **AP CALCULUS (BC)**, or **AP CALCULUS (AB)**.

STATISTICS - AP (Honors) - This college level course prepares students for the Advanced Placement Examination in **AP STATISTICS**. The content of the course includes exploring data, planning statistical study, investigating patterns, and statistical inference. Departmental approval is required. Every student enrolled in **STATISTICS - AP** is expected to take the AP Statistics exam in May.

STATISTICS (ACADEMIC, ACCELERATED) - This course has been designed to prepare the student with a strong statistical background for a first-year college course in statistics. This is a less demanding course than **STATISTICS - AP** because some of the more advanced topics are not covered.

HEALTH/PHYSICAL EDUCATION DEPARTMENT

Listed below are the core courses required to each grade level as well as the elective courses available at each grade level.

Grade	9 th	10 th	11 th	12 th
Required Core Courses:	HealthPhysical Education	Driver Education Theory Physical Education	HealthPhysical Education	Health Physical Education
Electives:	First Aid, Fitness & Nutrition (S)	 Contemporary Health Issues (S) First Aid, Fitness & Nutrition (S) 	 Contemporary Health Issues (S) First Aid, Fitness & Nutrition (S) 	 Contemporary Health Issues (S) First Aid, Fitness & Nutrition (S)

HEALTH/ PHYSICAL EDUCATION

HEALTH - This required course is scheduled for one quarter in grades 9, 11, and 12. Health includes the study of personal growth & development, pregnancy & parenting, personal safety, health conditions, diseases, medicines, substance abuse/addiction, community health services & support, emotional/social health, and interpersonal relationships. Analyzing influences, goal setting, decision making, non-fiction reading comprehension, data interpretation, question creation, research, and communication are examples of some of the skill-based objectives over the cumulative high school health experience.

DRIVER EDUCATION THEORY - This quarter course is required of all grade 10 students. Instruction focuses on various aspects of driving including safety, the automobile, laws, liability, insurance, defensive driving techniques and substance abuse as it pertains to motor vehicle operation. Upon completion of THEORY, students will be prepared for simulation and behind-the-wheel instruction.

PHYSICAL EDUCATION - This required course is scheduled for three quarters in grades 9, 10, 11, and 12. Emphasis is placed on movement skills & concepts, physical fitness, lifelong fitness, and skills related to team and individual sports activities. Sportsmanship, teamwork, communication, self-reflection, self-awareness, and setting performance goals are additional skills practiced within an individual or team competition. Students will be encouraged to find activities within the community or utilize school resources to apply class concepts independently. The goal is to create physically literate individuals who will increase their confidence in physical activity, building healthy habits, finding joy through activity, and unlocking their performance potential.

CONTEMPORARY HEALTH ISSUES - (Semester Elective) Using current events and pertinent health topics, students will be examining issues that impact them individually in various wellness domains: Physical, Emotional, Intellectual, Social, Occupational, Environmental, etc. These domains will be discussed in a skill-based setting, revolving around health content matter that is relevant. Upon completing this course, students will become more confident in examining new information critically, embracing multiple viewpoints, and detecting/deflecting influences that don't align with their wellness plans. Students will also increase their self-confidence in decision-making practices and goal setting while learning how their actions can have a broader positive impact; influencing their peers, local community, and beyond. Topics include, but are not limited to: wellness/stress management, substance abuse/use, environmental risks, disease risk mitigation, social dynamics, human sexuality, health careers, and consumer health.

FIRST AID, FITNESS AND NUTRITION - (Semester Elective) The purpose of this elective course is to provide an opportunity for interested students to study First Aid, Fitness, and Nutrition in greater depth than what is possible in their required health education program. Students will demonstrate an understanding of the importance of accident prevention as a facet of first aid and personal safety. Opportunity to acquire first aid knowledge beyond basic emergency procedures will be provided, as well as certification in Adult, Child, and Infant CPR, along with AED certification. Students will gain an understanding of the need and importance of physical fitness and how to develop, measure, and evaluate their own personal fitness program. Students will demonstrate an understanding of the relationship between physical fitness and nutrition, and the role of nutrition and its importance to fitness, health, disease prevention, impacts on body systems, and everyday functioning.

Option II for an Alternative Physical Education

Option II provides students with the opportunity to meet the New Jersey Student Learning Standards (NJSLS) in a setting other than the traditional classroom. Participation in a competitive, elite level outside program such as swimming, can be used as an alternative to a daily physical education class. For more information, visit the counseling website for your high school. Students must complete an Option II request form by June 3rd.

SCIENCE DEPARTMENT

Listed below are the core courses required to each grade level as well as the elective courses available at each grade level.

Grade	9 th	10 th	11 th	12 th
Core Courses:*	 Biology (Honors) Biology 1-1 (Accelerated) Biology 1-2 (Academic) 	 Chemistry (Honors) Chemistry 1-1 (Accelerated) Chemistry 1-2 (Academic) 	 AP Physics 1 (Honors) Physics (Honors) Physics 1-1 (Accelerated) Physics 1-2 (Academic) Integrated Science (Academic) 	Science is strongly recommended, but not required
Electives:			 AP Chemistry (Honors) AP Biology (Honors) AP Environmental (Honors) Forensics Explorations (S) Anatomy and Physiology 	 AP Biology (Honors) AP Chemistry (Honors) AP Environmental (Honors) Physics (Honors) Physics 1-1 (Accelerated) Physics 1-2 (Academic) AP Physics 1 (Honors) AP Physics 2 (Honors) AP Physics C (Honors) Integrated Science (Academic) Forensics Explorations (S) Anatomy and Physiology

NOTE: Students will be placed in Science based on Grouping Procedures. All prerequisites must be met. Priority is given to qualifying Seniors and only open to Juniors if space allows. Please note, <u>all AP</u> classes require a submitted AP Application and Departmental approval. Applications are due by March 21st, 2022.

SCIENCE

Students should refer to page 2 to determine science requirements for graduation. Applications for AP Science courses must be submitted to the science supervisor by March 21st of the current school year. Course Placement is determined by district Grouping Procedures which are available on the school website.

IMPORTANT REMINDER - The recommended science curriculum for college-bound students includes **BIOLOGY**, **CHEMISTRY**, and **PHYSICS**. Students who are considering a science career or science-related career are urged to take this sequence.

BIOLOGY 1-2 – **(ACADEMIC)** - This course will focus on the interrelationships of living things to their environment, structure and functions of cells, genetics and the different kinds of life. Laboratory investigations are an integral part of this program, as is an emphasis on the practical applications of biological concepts.

BIOLOGY 1-1 (ACCELERATED) - This program investigates plant and animal cell structure and functions; the relationships of cells to tissue, organs, organ systems, and organisms; the similarities and differences among living things; and the interrelationships among humans, the lower organisms, genetics, and the environment. Laboratory investigations are an integral part of this course.

BIOLOGY (HONORS) - This course is designed for students who are seeking a more rigorous exploration of the essentials of life science. The course includes a thorough study of biochemistry, cytology, and microbes. Ecological interactions are also discussed. Laboratory investigations are an integral part of the course.

AP BIOLOGY (HONORS) - This college level course involves a rigorous treatment of biology as outlined by the College Entrance Examination Board. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes - energy and communication, genetics, information transfer, ecology, and interactions. AP BIOLOGY is designed for students pursuing a career in the biological sciences. Admission to the course requires an AP application and departmental approval. Every student enrolled in AP BIOLOGY is expected to take the AP Exam in May. Priority will be given to Seniors. Prerequisite: BIOLOGY

CHEMISTRY 1-2 (ACADEMIC) - This is a laboratory based course designed to provide students with opportunity to learn, develop, and use important chemistry concepts and skills through the approach of inquiry and problem solving. The students will examine the study of matter and its changes by understanding the chemistry that is involved in environmental studies, foods, fuels, synthetic fabrics and medicines. Each unit of this course introduces the students to a chemistry-related concern related to their lives and community. The students will apply their chemistry knowledge and skills in investigations designed to model those authentic societal issues.

CHEMISTRY 1-1 (ACCELERATED) - This laboratory based course embraces student investigations of the state of matter and kinetic theory, atomic structure and bonding. It also includes examination of the periodic characteristics of the elements, solutions, acids, bases, salts, organic compounds, oxidation-reduction reactions, chemical equilibrium, and ionization. A strong mathematical foundation is required.

CHEMISTRY (HONORS) - This is a course designed for students who are seeking a more rigorous exploration of the subject matter. Course content includes a study of the structure and state of matter, chemical symbols and formulas, types and rates of reactions, the periodic table, molecular structure and bonding, kinetic theory, gas laws, solutions, acids and bases, and electrochemistry. Extensive problem solving and laboratory investigations are an integral part of the course.

AP CHEMISTRY (HONORS) - This college level course involves a rigorous treatment of chemistry as outlined by the College Entrance Examination Board. Extensive student investigations encompass chemistry concepts such as atomic and molecular structure, chemical reactions (including oxidation reduction and equilibrium reactions), stoichiometry, thermodynamics and an introduction to organic chemistry. Extensive laboratory work is an integral part of this course. AP CHEMISTRY is designed for students pursuing a career in the sciences. Laboratory exercises and problem-solving activities will be employed. Experimental data will be processed using modern computer techniques whenever appropriate. Admission to the course requires an AP application and departmental approval. Every student enrolled in AP CHEMISTRY is expected to take the AP exam in May. Priority will be given to Seniors.

Prerequisite: **CHEMISTRY**

AP ENVIRONMENTAL (HONORS) - This course is a full-year college level course that will cover topics including but not limited to; evolution and ecology, population studies, biochemical cycling, ecosystem energetics, and ecological conservation. This rigorous course of study will prepare students to be informed members of an environmentally conscious society and make decisions that will improve the sustainability of our species by combining classwork with field-work for an authentic learning experience. Admission to the course requires an AP application and departmental approval. Every student enrolled in **AP ENVIRONMENTAL** is expected to take the AP Exam in May. Priority will be given to Seniors.

PHYSICS 1-2 (ACADEMIC) - This is a laboratory based course designed to provide students with opportunity to learn, develop, and use important physics concepts and skills through the approach of inquiry and problem solving. This course engages students through real-world challenges and projects that require physics knowledge coupled with student creativity. The students will be introduced to the physics concepts in a non-mathematical approach. It is believed that with a strong conceptual foundation in physics, students are better equipped to understand the equations and formulas of physics, and to make connections between the concepts of physics and their everyday world.

PHYSICS 1-1 (ACCELERATED) - This is a laboratory based course for those students seeking to complete a comprehensive college preparatory science program. Topics include force and motion, gravitation, momentum and energy, waves and radiant energy, optics, electricity, magnetism, nuclear and modern physics. Throughout the course, the role of mathematics in science is discussed and applied in problem solving and laboratory investigations, and therefore, concurrent enrollment in an accelerated math course is highly recommended.

PHYSICS (HONORS) - This is a college preparatory course involving a rigorous treatment of classical and modern physics. This course Is based upon an intensive study of force and motion, Newton's laws, wave motion, radiant energy, electricity and magnetism, the nature and behavior of light, relativity, and quantum physics. Mathematics is used extensively in problem solving and laboratory investigations using state-of-the-art computer technology. Physics Honors is designed for students pursuing a career in science, particularly the physical sciences.

AP PHYSICS 1 (HONORS) - The college level course involves a rigorous exploration of Physics as outlined by the College Entrance Examination Board. Extensive student investigations encompass concepts in Newtonian Mechanics, Work, Energy, Power, Mechanical Waves and Sound and it also introduces electrical circuits. Extensive laboratory work is an integral part of this course. AP PHYSICS 1 is designed for student pursuing a career in the sciences. Laboratory exercises and problem solving activities will be employed. Experimental data will be processed using modern computer techniques whenever appropriate. Admission to the course requires an AP application and departmental approval. Every student enrolled in AP PHYSICS 1 is expected to take the AP Exam in May.

AP PHYSICS 2 (HONORS) - The college level course involves a rigorous exploration of Physics as outlined by the College Entrance Examination Board. Extensive student investigations encompass concepts in Fluid Mechanics, Thermodynamics, Electricity and Magnetism, Optics, Atomic and Nuclear Physics. Extensive laboratory work is an integral part of this course. AP PHYSICS 2 is designed for students pursuing a career in the sciences. Laboratory exercises and problem solving activities will be employed. Experimental data will be processed using modern computer techniques whenever appropriate. Admission to the course requires an AP application and department approval. Every student enrolled in AP PHYSICS 2 is expected to take the AP Exam in May.

AP PHYSICS C (HONORS) - The college level, calculus based course involves rigorous exploration of Physics as outlined by the College Entrance Examination Board. It is especially appropriate for students planning to specialize or major in physical science or engineering. The Mechanics portion of the course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. The Electricity and Magnetism portion of the course explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Prior exposure to derivatives and integrals is needed as differential and integral calculus is used throughout the course. Admission to the course requires an AP application and department approval. Every student enrolled in AP PHYSICS C is expected to take the AP Exam in May. Priority will be given to Seniors.

Prerequisite: CALCULUS 1 or CALCULUS - AP (AB).

Prerequisite: AP PHYSICS 1

INTEGRATED SCIENCE (ACADEMIC) – The Integrated Science course is a survey science class integrating chemistry, biology, physics, geology and ecology in real world applications. The class also addresses the common science misconceptions with science fact and science fiction activities. The class is designed to develop science literacy and deepen the students' understanding of scientific ideas and concepts. Numerous labs and hands-on activities are incorporated to motivate and interest students, as well as address the needs and abilities of all students. Inquiry based activities encourage problem solving strategies and critical thinking skills.

Forensics Explorations - Forensic science is a semester introductory level course in the application of basic biological, chemical and physical science principles and technological practices in the study of criminal and civil issues. Major themes of study in this course are pathology, anthropology, trace evidence, biological fluids, DNA, fingerprints and forensic psychiatry/psychology. The class is student and inquiry centered with a primary focus on laboratory investigations and writing. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes. Students will learn the history, legal aspects, and career options for forensic science. This is an elective science course and does not fulfill a high school science graduation course requirement.

ANATOMY AND PHYSIOLOGY - Anatomy and Physiology is a rigorous hands-on science course focusing on the structure and function of the human body. Students will learn the names of the various parts of the body systems (anatomy) as well as their functions (physiology). This course will use animal dissection and clay mannequins as a means to understand and learn the necessary components of the body. A survey of each organ system is presented with initial emphasis upon its anatomy, followed by an in-depth study of its physiology. This course is lab-oriented and teaches proper dissection techniques as well as various physiological phenomena. This course is recommended for students pursuing an education in the medical or allied health sciences. This is an elective science course and does not fulfill a high school science graduation course requirement.

SOCIAL STUDIES DEPARTMENT

Listed below are the core courses required to each grade level as well as the elective courses available at each grade level.

Grade	9 th	10 th	11 th	12 th
Required Core Courses:*	U.S. History 1 • Honors • Accelerated (Level 1) • Academic (Level 2)	U.S. History 2	World History	Social Studies is <u>strongly</u> <u>recommended</u> , but not required
Electives:		Diversity and Multiculturalism in U.S. Society (S) Introduction to African American Studies (S) Sociology (S)	Diversity and Multiculturalism in U.S. Society (S) European History AP (Honors) Introduction to African American Studies (S) Psychology/Topics in Human Behavior (S) Sociology (S) United States Government & Politics AP (Honors)	Diversity and Multiculturalism in U.S. Society (S) European History AP (Honors) Introduction to African American Studies (S) Psychology/Topics in Human Behavior (S) Sociology (S) United States Government & Politics AP (Honors)

^{*}NOTE: Students will be placed in Social Studies based on Grouping Procedures available. All prerequisites must be met.

SOCIAL STUDIES

UNITED STATES HISTORY 1 - The U.S. History 1 course focuses on political, economic, societal, and cultural forces that have shaped the history of the United States. This course covers the colonization of the Americas through the Progressive era of the early twentieth century. This course is intended to develop a broad appreciation for the struggles, achievements, and contributions of all Americans, as well as an understanding of their rights and responsibilities. This course will develop researching, reading, writing, and presentation skills that reside at the heart of the social studies discipline.

UNITED STATES HISTORY 2 - The U.S. History 2 course focuses on political, economic, societal, and cultural forces that have shaped the history of the United States. This course covers the era of World War I through contemporary times. This course is intended to continue the development of a broad appreciation for the struggles, achievements, and contributions of all Americans, as well as for an understanding of the evolution of their rights and responsibilities. This course will continue to develop researching, reading, writing, and presentation skills that reside at the heart of the social studies discipline.

UNITED STATES HISTORY 2 - AP (HONORS) - This course, taught on a first-year college level, is offered to prepare participants for the Advanced Placement examination in American History. The program is designed to provide extensive and demanding challenges to the student and therefore places a high premium on individual initiative and achievement. This course is aligned with the expectations of the College Board, and emphasizes relevant factual knowledge deployed in conjunction with a focus on Historical Reasoning Skills, including, but not limited to, causation, comparison, and continuity and change. Activities include a wide variety of reading and writing assignments related to the period covering from pre-Columbian America to the present. Enrollment is determined by district placement criteria. Summer assignments may be part of this course. Every student enrolled in **UNITED STATES HISTORY 2 - AP** is expected to take the AP exam in May.

WORLD HISTORY - The World History course aims to develop an understanding and appreciation of the complexities that have created and continue to affect human society from the Renaissance to the modern era. Major social, economic, political and cultural phenomena are explored as they relate to the evolution of both Eastern and Western civilizations. This course will hone the researching, reading, writing, and presentation skills that were developed in United States History 1 and 2.

WORLD HISTORY: MODERN - AP (HONORS) — This course, taught on a first-year college level, is offered to prepare participants for the Advanced Placement examination in World History. The program is designed to provide extensive and demanding challenges for the student and therefore places a high premium on individual initiative and achievement. This course is aligned with the expectations of the College Board, and emphasizes relevant factual knowledge deployed in conjunction with a focus on Historical Reasoning Skills, including, but not limited to, causation, comparison, and continuity and change. Activities include a wide variety of reading and writing assignments related to the global period covering from CE 1200 to the present. Enrollment is determined by district placement criteria. Summer assignments may be part of this course. Every student enrolled in **WORLD HISTORY MODERN – AP** is expected to take the AP exam in May.

DIVERSITY AND MULTICULTURALISM IN U.S. SOCIETY (SEMESTER) - An examination of the historical and contemporary experiences of the U.S.'s diverse and multicultural population, including cultural values, lifestyles, and contributions of a cross-section of diverse identities, which include categories such as race, ethnicity, gender, social class, sexual orientation, and disability status. Students apply a sociological perspective to policy issues regarding diversity and multiculturalism, as well as discuss how a person's status in each group influences his or her social interactions, rights and life chances. Grade level(s): 10-12.

EUROPEAN HISTORY - AP (HONORS) – This course, taught on a first-year college level, is offered to prepare participants for the Advanced Placement examination in European History. The program is designed to provide extensive and demanding challenges for the student and therefore places a high premium on individual initiative and achievement. This course is aligned with the expectations of the College Board, and emphasizes relevant factual knowledge deployed in conjunction with a focus on Historical Reasoning Skills, including, but not limited to, causation, comparison, and continuity and change. Activities include a wide variety of reading and writing assignments related to the period covering from the European Renaissance to the present. Summer assignments may be part of this course. Every student enrolled in **EUROPEAN HISTORY AP** is expected to take the AP exam in May. This is a full-term course and enrollment is determined by district placement criteria. Grade level(s): 11-12.

INTRODUCTION TO AFRICAN AMERICAN STUDIES (SEMESTER) - Introduction to the foundations and approaches of African American studies. Examines historical, sociological, psychological, religious and philosophical perspectives of the African American experience. Grade level(s): 10-12.

PSYCHOLOGY/TOPICS IN HUMAN BEHAVIOR (SEMESTER) - In this course, students are introduced to the study of human behavior. Areas included are: the nature of psychological study, learning, human development, personality theory and development, and mental health. Grade level(s): 11-12.

Sociology (Semester) - This course is intended to provide an introduction to Sociology. Academic concepts, definitions of terms, and the principles of social science inquiry will be given consideration along with an analysis of basic sociological themes such as social order and conflict, the socialization process, culture, racial and ethnic discrimination, class and power, social pathology, roles and status, and the family. Grade level(s): 10-12.

UNITED STATES GOVERNMENT & POLITICS - AP (HONORS) - This course, taught on a first-year college level, is offered to prepare participants for the Advanced Placement examination in American Government & Politics. The program is designed to provide extensive and demanding challenges for the student and therefore places a high premium on individual initiative and achievement. This course is aligned with the expectations of the College Board, and emphasizes a variety of Disciplinary Practices and Reasoning Processes, many of them similar to other AP history courses, but also with a unique focus on American politics, government institutions and processes, including but not limited to public opinion, political parties, voting, interest groups, and the workings of and interaction between the three branches of government. Summer assignments may be part of this course. Every student enrolled in UNITED STATES GOVERNMENT & POLITICS AP is expected to take the AP exam in May. This is a full-term course and enrollment is determined by district placement criteria. Grade level(s): 11-12.

WORLD LANGUAGE & ESL DEPARTMENT

Listed below are the core courses required to each grade level as well as the elective courses available at each grade level. Two years (10 credits) of world language are required for graduation; however, a minimum of three years is recommended.

Grade	9 th	10 th	11 th	12 th
WL Courses:	 Italian 1 French 1, 2 French 2 (Honors) Latin 1 Mandarin 1 Spanish 1, 2 Spanish 2 (Honors) 	 Italian 1, 2 Italian 2-H French 1, 2, 3 French 2, 3 (Honors) Latin 1, 2 Latin 2 (Honors) Mandarin 1, 2 Mandarin 2 (Honors) Spanish 1, 2, 3 Spanish 2, 3 (Honors) 	 Italian 1, 2, 3 Italian 2, 3 (Honors) French 1, 2, 3, 4 French 2, 3, 4 (Honors) Latin 1, 2, 3 Latin 2, 3 (Honors) Mandarin 1, 2, 3 Mandarin 2, 3, 4 (Honors) Spanish 1, 2, 3, 4, 5 Spanish 2, 3, 4 (Honors) Spanish 5 (Honors) 	 Italian 1, 2, 3, 4 Italian 2, 3, 4 (Honors) French 1, 2, 3, 4, 5 French 2, 3, 4 (Honors) French AP Latin 1, 2, 3, 4 Latin 2, 3, 4 (Honors) Mandarin 1, 2, 3, 4 Mandarin 2, 3, 4 (Honors), Mandarin AP Spanish 1, 2, 3, 4, 5 Spanish 2, 3, 4 (Honors) Spanish AP (2022-23 and 2023-24 only) Spanish 5 (Honors) Spanish 6
ESL Courses:	• ESL 1, 2, 3, 4	• ESL 1, 2, 3, 4	• ESL 1, 2, 3, 4	• ESL 1, 2, 3, 4

WORLD LANGUAGES

LEVEL 2 (HONORS)

Italian, French, Latin, Mandarin, Spanish

This course is designed for students who have successfully completed the 8th-grade everyday language program in French or Spanish or who have been recommended from Level 1 in Italian, Latin, or Mandarin. Emphasis is on the progressive development of communication skills. Supplementary reading and study of the foreign culture are included in the program.

LEVEL 3 (HONORS)

Italian, French, Latin, Mandarin, Spanish

This course, intended for students who completed **LEVEL 2 (HONORS)**, aims to develop further the basic skills: to understand, speak, read, and write the foreign language with greater facility and accuracy. Supplementary reading and discussions in the language on various aspects of culture are included in the program.

LEVEL 4 (HONORS)

Italian, French, Latin, Mandarin, Spanish

This course, intended for students who completed **LEVEL 3 (HONORS)**, consists of a variety of learning activities designed to apply and to refine the communication skills previously acquired. Although reading is a vital component of the program, the course also provides a review of major structural concepts, conversational practice, a study of various aspects of the foreign culture, an introduction to literature, and optional units of interest to students.

LEVEL 5 (HONORS)

French, Spanish

These courses focus on reinforcing the students' ability to communicate and express their ideas, feelings and opinions both orally and in writing. Oral reports on literary and cultural topics as well as personal experiences will be presented. Readings will focus on essays, short stories, poetry, and newspaper and magazine articles with writing and speaking activities generating from the readings.

AP (Honors)

French, Mandarin, Spanish

Through the Advanced Placement courses, highly motivated and able students may pursue college-level language study while in high school. Participating colleges award successful students advanced standing and/or college credit. Every student enrolled in AP (French Language, Chinese Language, or Spanish Language) is expected to take the AP exam in May.

LEVEL 1

Italian, French, Latin, Mandarin, Spanish

This course introduces students to the sound system, structures, and vocabulary of the world language. Emphasis is on the acquisition of fundamental communication skills. Students develop sensitivity to the culture patterns of another society through the study of its language.

LEVEL 2

Italian, French, Latin, Mandarin, Spanish

The second-year course is committed to the progressive development of communication skills. Supplementary reading focuses on contemporary life and culture.

LEVEL 3

Italian, French, Latin, Mandarin, Spanish

In the third-year course, students further develop the basic skills and are able to understand, speak, read, and write the language with greater facility and accuracy. Supplementary reading and discussions in the language on various aspects of culture are included in the program.

LEVEL 4

Italian, French, Latin, Mandarin, Spanish

This course consists of a variety of learning activities designed to apply and to refine the communication skills previously acquired. Although reading is a vital component of the program, the course also provides a review of major structural concepts, conversational practice, a study of various aspects of the foreign culture, an introduction to literature, and optional units of interest to students.

LEVEL 5

French, Spanish

These courses focus on reinforcing the students' ability to communicate and express their ideas, feelings and opinions both orally and in writing. Oral reports on literary and cultural topics as well as personal experiences will be presented. Readings will focus on essays, short stories, poetry, and newspaper and magazine articles with writing and speaking activities generating from the readings.

LEVEL 6

Spanish

Students who do not enroll in the Advanced Placement course may elect this course which focuses on reinforcing the students' ability to communicate and express their ideas, feelings and opinions both orally and in writing. Oral reports on literary and cultural topics as well as personal experiences will be presented. Readings will focus on essays, short stories, poetry, and newspaper and magazine articles with writing and speaking activities generating from the reading.

ENGLISH AS A SECOND LANGUAGE - Based on results from a district-approved identification process, English language learners (ELLs) are placed in one of four (4) levels of a high-intensity ESL program. This double-period course (for ESL 1-3) replaces the regular ELA and World Language courses, and credit toward graduation is awarded upon successful completion of the course at the end of the school year. Students in ESL 4 receive one period of ESL, while transitioning to a mainstream ELA course. An ELL will be placed in the appropriate level annually, based on results from the WIDA ACCESS for ELLs assessment. Eligibility to exit the program is dependent upon a district-approved exit process. ELLs are subject to all other graduation requirements.

Seal of Biliteracy

The New Jersey Department of Education State Seal of Biliteracy identifies graduating high school students who are able to demonstrate proficiency in English in addition to one or more world languages. The State Seal of Biliteracy certifies that a high school graduate has:

 demonstrated proficiency in English by meeting English language arts graduation requirements or attained the appropriate cut score on the ACCESS for ELLs assessment (for English Language Learners)

AND

 demonstrated a linguistic proficiency level of at least Intermediate Mid in a world language according to the American Council on the Teaching of Foreign Languages Proficiency Guidelines, or demonstrated a level deemed equivalent to Intermediate Mid for languages such as American Sign Language or Native American languages.

French & Spanish

Seniors in French or Spanish will be invited to participate in a language proficiency test to determine their linguistic proficiency. Only students currently enrolled in or who have completed an AP level language course offered in the Edison schools will be eligible to take the proficiency test.

Students who take the AP exam during their junior year of high school may also use these scores to qualify, depending on guidance from the State Department of Education.

ESL

English Language learners who attain an overall composite score of 4.5 or higher on the WIDA ACCESS for ELLs assessment <u>or</u> demonstrate proficiency in English by meeting English language arts graduation requirements will be eligible to take a proficiency test in their native language, if available, to determine their linguistic proficiency.

Visit http://www.nj.gov/education/aps/cccs/wl/biliteracy/ for more information about New Jersey's participation in the Seal of Biliteracy.

CAREER AND TECHNICAL EDUCATION

COMPUTER SCIENCE

Grade	9 th	10 th	11 th	12 th
Electives:	 Functional Programming in Python Java Programming 	 Functional Programming in Python Java Programming Computer Science A - AP Computer Science Principles - AP 	 Functional Programming in Python Java Programming Computer Science A - AP Computer Science Principles - AP 	 Functional Programming in Python Java Programming Computer Science A - AP Computer Science Principles - AP

COMPUTER SCIENCE

FUNCTIONAL PROGRAMMING IN PYTHON - This full year course introduces students to the concepts of functional programming in the Python Computer Science Language. Students will learn about the basics of computers and computing, as well as the building blocks of programming such as storage, input/output, control structures, functions, and data structures. Python was chosen for its low barrier of entry, simplicity of available IDE's and popularity as a language for a number of applications.

JAVA PROGRAMMING - This full year course is designed for the student who is interested in learning to program using the Java computer language, and is designed as our intermediate programming course. The course will introduce students to the basic structural aspects of programming: control structures, data structures, static methods, objects and classes.

Prerequisites: Successful completion of **FUNCTIONAL PROGRAMMING IN PYTHON OR** successful completion **of FUNCTIONAL PROGRAMMING IN PYTHON** summer course **OR** passing district computer science assessment.

COMPUTER SCIENCE A - AP (HONORS) - This college level course prepares students for the **Advanced Placement Examination in Computer Science-A.** The content of this course *builds on prior knowledge of any programming language* and focuses on programming with more complex constructs of the Java programming languages. Topics include use of arrays, ArrayLists, sorting algorithms, inheritance and recursive methods. Students will apply object-oriented principles by using, modifying, designing and creating Java classes. Every student enrolled in **AP Computer Science-A** is expected to take the **AP Computer Science-A** exam in May.

Prerequisites: Successful completion of JAVA PROGRAMMING AND departmental approval.

COMPUTER SCIENCE PRINCIPLES - AP (HONORS) - This college level course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. Successful completion of Programming, with prerequisites and departmental approval, is required. Every student enrolled in **Computer Science Principles - AP** is expected to take the **Computer Science Principles - AP** exam in May.

Prerequisites: Successful completion of **Functional Programming OR JAVA PROGRAMMING AND** departmental approval.

CAREER AND TECHNICAL EDUCATION

FAMILY AND CONSUMER SCIENCE

9 th	10 th	11 th	12 th
Creating Spaces: Introduction to Interior Design Fashion 1 Foundations of Food and Nutrition	 Creating Spaces: Introduction to Interior Design Fashion 1 Advanced Fashion Foundations of Food and Nutrition The Art and Science of Food 	 Child Growth and Development Preschool Lab Creating Spaces: Introduction to Interior Design Fashion 1 Advanced Fashion Honors Fashion Merchandising Foundations of Food and Nutrition The Art and Science of Food Honors Culinary Arts 	 Child Growth and Development Preschool Lab Creating Spaces: Introduction to Interior Design Fashion 1 Advanced Fashion Honors Fashion Merchandising Foundations of Food and Nutrition The Art and Science of Food Honors Culinary Arts Tomorrow's Teachers

FAMILY AND CONSUMER SCIENCE

CHILD GROWTH AND DEVELOPMENT PRESCHOOL LAB - Learn how children grow physically, intellectually, emotionally and socially. Explore the areas for caring, nurturing and guiding children ages 0-4years old including prenatal development. In this course, you will plan and implement lessons in our Preschool Laboratory Setting at the high school.

CREATING SPACES: INTRODUCTION TO INTERIOR DESIGN – In Creating Spaces you will explore the field of Interior Design and experience real home and interior design challenges. You will participate in hands-on activities involving the design process, mathematical concepts and technology to create comprehensive design solutions for any room. You will explore career opportunities in Housing and Interior Design professions.

FASHION 1 - This course focuses on introduction to the clothing design process and construction techniques. You will learn basic sewing skills, make and design your own clothing and have a greater understanding of how clothing is made. You will learn how to interpret and use a commercial pattern. You will be given unconventional design challenges to experience problem solving in the fashion industry.

ADVANCED FASHION - This advanced course will prepare you for a career in the fashion industry. You will learn advanced garment construction techniques and design. You will utilize the elements and principles of design to create your own personalized garments. These experiences will include flat pattern design, the appropriate pairing and selection of textiles for the garment and the use of interfacing and trims.

Prerequisite: Fashion 1

Honors Fashion Merchandising - Fashion is everywhere! Fashion is art, talent, aesthetics, and skill; fashion is big business. This course will explore the wide variety of jobs in the fashion industry while continuing to work on projects and technical skills needed for success in this diverse, creative, and demanding field.

Prerequisite: ADVANCED FASHION

FOUNDATIONS OF FOOD AND NUTRITION - Food and its nutrition is a basic and integral part of life. This introductory course focuses on the practical application of food safety and sanitation, food selection, preparation, food costs, food labels and serving of food. Laboratory experiences use technology in food preparation as it relates to safety and time management. Meal etiquette, nutrition and current trends in health associated with nutrition are addressed. Career opportunities in food and nutrition related fields are presented.

THE ART AND SCIENCE OF FOOD - Have you ever wondered why popcorn pops or why cakes rise? Students examine the science of food as it relates to a variety of food preservation techniques, leavening of baked products, emulsions, etc. This course will provide more advanced work in safety and sanitation, food preparation, meal planning, consumer selection and nutrition. Food experiences will take a more creative direction as students discover the visual influence of food with plate presentations and pastry arts. "Hands-on" experience makes this course dynamic and relevant. Career opportunities are explored.

Prerequisite: Foundations of Food and Nutrition.

Honors Culinary Arts - This advanced course is designed for students who have genuine interest in food, nutrition and related careers. Students will master safety and sanitation, the use of equipment and service techniques. Learning to prepare and appreciate a wide range of regional and international cuisines while developing understanding of the significant role of food in celebrations are some of the goals of this course. Quantity food preparation and related careers opportunities in food service, hospitality and entrepreneurship will be examined.

Prerequisites: Foundations of Food and Nutrition and the Art and Science of Food.

TOMORROW'S TEACHERS – Tomorrow's Teachers is an elective program offered to **12**th **grade students** who are interested in pursuing the field of education at the post-secondary level. The course will provide leadership in identifying, attracting, placing, and retaining well-qualified individuals for the teaching profession in our state. The primary goal of the Tomorrow's Teachers program is to encourage academically able students who possess exemplary communication and leadership skills to consider teaching as a future career. An important secondary goal of the program is to provide these future leaders with insights about teachers and schools so that they will be civic advocates of education. As part of the course, students will learn the fundamentals of education by participating in district-level field experiences and reflecting upon their experiences through the development of a summative portfolio.

CAREER AND TECHNICAL EDUCATION

BUSINESS

DUSINESS						
9 th	10 th	11 th	12 th			
 Accounting I Business Applications (Semester) Introduction to Business Marketing and Advertising Personal Finance (Semester) 	 Accounting 1 Honors Accounting 2 Business Applications (Semester) Business Management Economics Introduction to Business Marketing and Advertising Personal Finance (Semester) 	 Accounting 1 Honors Accounting 2 Business Applications (Semester) Business Law and Ethics (Semester) Business Management Economics AP Economics Finance and Investing (Semester) Honors International Business Introduction to Business Marketing and Advertising Personal Finance (Semester) 	 Accounting 1 Honors Accounting 2 Business Applications (Semester) Business Law and Ethics (Semester) Business Management Economics AP Economics Finance and Investing (Semester) Honors International Business Introduction to Business Marketing and Advertising Personal Finance (Semester) 			

BUSINESS

Accounting I - Accounting 1 is an introduction to the theoretical structure of accounting and methods and procedures necessary to achieve effective financial reporting for the successful ongoing operation of a business. During this year-long class, students will learn the fundamentals of accounting using a sole proprietorship and corporation as a basis for study. Students will develop an understanding of the balance sheet, income statement, and statement of cash flows from recording and summarizing basic accounting transactions, preparing financial statements, payroll records, income tax forms through interpreting financial statements as part of the management decision-making process. Grade level(s): 9-12.

Accounting II (Honors) – This course addresses the fundamental principles of cost and managerial accounting applied to manufacturing and service enterprises. Students will receive an introduction to cost behavior, managerial decision models, cost and budgetary planning and control, standard costing, analysis of variance, job order and process costing systems, cost allocation, and responsibility accounting. A combination of manual and PC-based automated accounting systems will be used. *This is an Honors Level course.* Grade level(s): 10-12. Prerequisite: **Accounting I.**

BUSINESS APPLICATIONS (SEMESTER) - This course is intended to expose students to the use of the PC in personal life, to learn the responsibility of digital citizenship, and to become self-directed, lifelong learners and users of technology. Students will gain knowledge of a variety of software products, which are utilized by consumers, and skills which can be transferred to business and school. Through hands-on experience, students will apply these software packages and concepts to solve personal and school-related problems through practice simulations and projects. Some of the software introduced in this course include word processing, spreadsheet, presentation, multimedia and desktop publishing packages. Grade level(s): 9-12.

BUSINESS LAW AND ETHICS (SEMESTER) - Business Law and Ethics is designed to describe laws and regulations affecting business operations and transactions. The course will provide an overview of contract law, ethical decision-making frameworks, and employment law. Students will examine ethical issues, and apply multiple theories of ethical analysis to such issues. The course will also focus on the planning, monitoring, and managing of day-to-day business activities to foster a healthy and safe work environment. Grade level(s): 11-12.

Business Management - This course explores all aspects of business operation and management. Students will be able to describe the history and function of management and understand the importance of effective communication skills. Students will learn about different management styles and how to work with employees in the different personality quadrants. They will learn how businesses define their mission and utilize strategic planning in order to accomplish goals and objectives for the business. The course will also incorporate the principles of business ethics and how to maintain high ethical standards. Finally, students will develop an understanding of how technology has transformed the workplace and identify the ways that businesses can utilize the various forms of technology to remain competitive in a global economy. Grade level(s): 10-12. The course is recommended for students planning post-secondary business studies.

ECONOMICS - This course will give the students a greater understanding of economics ranging from the viewpoint of the individual consumer or small business owner to the global economy. The course will study the law of supply and demand, forms of business, labor unions, government finances and influence on the economy, money and prices, inflation and deflation cycles. The course relates history and politics to the study of economics. *The course satisfies the Economics/Personal Finance requirement for graduation.* Grade level(s): 9-12.

AP ECONOMICS - Advanced Placement Economics is designed to address both micro and macroeconomics to prepare students to take one or both AP Exams. Microeconomics focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course will develop students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Macroeconomics addresses the principles that apply to an economic system as a whole with particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

Prerequisite: This is an AP Level course. Students must be able to read a college-level textbook and should possess strong mathematics and graphing skills. EVERY STUDENT ENROLLED IN AP ECONOMICS IS EXPECTED TO TAKE THE AP ECONOMICS TEST IN MAY.

Grade level(s): 11-12.

FINANCE AND INVESTING - Investing is a study of the major types of investment securities and markets in which trades can be made. The course will address the mechanics of making an investment, including basic analytical and valuation techniques for a stock, along with a survey of investing resources, terms, and descriptions. Upon completion of this course, students will be able to define the basic principles for creating a portfolio through understanding various types of investment vehicles. Students will apply this understanding to a global stock market competition and conduct deeper analysis of stocks, bonds, cryptocurrencies and real estate. Grade level(s): 11-12.

INTERNATIONAL BUSINESS (HONORS) - America's future is rooted in the global economy. This course provides students with a global perspective of economics, political structure and culture, and will open your eyes concerning globalization's impact on day-to-day living and personal finance. Cultural customs and traditions, trade, currency, business travel, geography, current events, international marketing, global issues, and career opportunities will be major topics of discussion. Areas to be covered include the awareness of the impact of International Business, communication strategies, environmental factors, ethics, finance, management practices, and import/export and balance of trade issues. Students will gain awareness of the growing need for becoming active in a global business economy and provides a solid foundation for college courses in business and international studies. *This is an Honors Level course.* Grade level(s): 11-12.

Prerequisite: ONE prior business course is required.

INTRODUCTION TO BUSINESS - This course introduces students to the world of business. Topics covered include types of business ownership, marketing, accounting, human resources, management, finance, ethics, and economics. These concepts are presented through classroom discussion and project-based learning. Students considering business careers or college studies are encouraged to take this course. Grade level(s): 9-12.

MARKETING & ADVERTISING - This course examines the field of marketing and its essential role in all aspects of business. Topics covered include the role of marketing in today's society, marketing careers, product planning and development, pricing strategies, distribution methods, sales techniques, promotion, visual merchandising, and marketing math skills. Marketing principles learned will be applied through industry-specific units on sports, entertainment, travel/tourism, and fashion marketing. Students will learn the history of advertising, its role in today's society, how the advertising industry works, careers in advertising, and the principles and techniques used to create ads for a variety of media. Emphasis is placed on planning and designing print ads, radio and TV commercials, internet and other specialty ads that appeal to certain target markets. Grade level(s): 9-12.

PERSONAL FINANCE (SEMESTER) - You will learn the basics of financial literacy and banking in this course. Topics covered include: money management, credit and debt management, importance of spending plans, non-traditional financial services, being an informed consumer, planning, saving and investing, purchasing your first home, taxes and tax planning, risk management and insurance, estate planning, and keeping money in perspective. *The course satisfies the Economics/Personal Finance requirement for graduation.* Grade level(s): 9-12.

CAREER AND TECHNICAL EDUCATION

TECHNOLOGY EDUCATION

9 th	10 th	11 th	12 th
 Architectural Drawing 1 Electronics 1 Engineering Design 1 	 Architectural Drawing 1, 2 Electronics 1, 2 Engineering Design 1, 2 Robotics 1 	 Architectural Drawing 1, 2, Honors Electronics 1, 2 Engineering Design 1, 2, Honors Robotics 1, 2 (Honors) 	 Architectural Drawing 1, 2, Honors Electronics 1, 2 Engineering Design 1, 2, Honors Robotics 1, 2 (Honors)
 EHS Automotive Technology 1 Digital Media and Photography Introduction to Woodworking 	 EHS Automotive Technology 1, 2 Digital Media and Photography 1, 2 Woodworking 1, 2 	 EHS Automotive Technology 1, 2, Honors Digital Media and Photography 1, 2, 3 (Honors) Woodworking 1, 2, 3 (Honors) 	 EHS Automotive Technology 1, 2, Honors, Occupational Auto (2 periods) Digital Media and Photography 1, 2, 3 (Honors), 4 (Honors) Woodworking 1, 2, 3 (Honors)
<u>JPS</u> ■ Study of Film History ■ Video Production 1	 JPS Study of Film History Video Production 1, 2 	 JPS Construction Technology Study of Film History Video Production 1, 2 	 JPS Construction Technology Study of Film History Video Production 1, 2

TECHNOLOGY EDUCATION

Technology in the 21st century includes both digital learning as well as the creative design process. The technology courses offered require students to think critically as they communicate and collaborate with others. These courses allow students to actively engage in the design process, which helps students realize that failure is not an end, but rather a necessary step on the way to success. Students may be required to pay for those materials in excess of the prorated cost of the construction of their projects. Students must comply with state and school-mandated safety and hazardous substances requirements and demonstrate an understanding of general and specific safety and Right-to-Know regulations in the shop/lab.

Each Mechanical Drawing/Architectural Drawing course will include instruction involving computer-aided drafting technology.

Each Graphic Arts course will include instruction in computerized desktop publishing techniques and a wide variety of individualized photography experiences.

ARCHITECTURAL DRAWING 1 - This course will provide students with principles and techniques essentially related to architectural drawing and design using hand drawing, model building, computer aided drafting and 3D rendering techniques. Emphasis will be placed on basic elements of house construction, local building requirements, traditional house styles, and contemporary house planning. Students will also explore careers related to architecture.

ARCHITECTURAL DRAWING 2 - This course will be a continuation of **ARCHITECTURAL DRAWING 1**. Emphasis will be placed on creative, technical, and aesthetic design concepts, presentation drawings, architectural renderings, new construction processes, and new uses for existing materials. Students will be taught to recognize good design and craftsmanship. Project options reflect student interests.

Prerequisite: ARCHITECTURAL DRAWING 1.

ARCHITECTURAL DRAWING - ADVANCED (HONORS) - This course will be a continuation of **ARCHITECTURAL DRAWING 2**. Emphasis will be placed on advanced creative, technical, and aesthetic design concepts, presentation skills, architectural renderings, new construction processes, and new uses for existing materials. Students will be taught to recognize and apply elements of good design and craftsmanship. Project options reflect student interests.

Prerequisite: ARCHITECTURAL DRAWING 2.

ELECTRONICS TECHNOLOGY 1 - This course is an introductory course dealing with the application of electricity in the modern world. Students will explore AC and DC circuits, various electronic components, and circuit design. During the course, students will have the opportunity to work with tools and machines, design and construct many electronic projects, such as, make their own circuit boards and are given an intro to basic robotics. Scientific concepts and mathematical relationships in electronics are also explored. These concepts are applied in a learner-based problem solving environment.

ELECTRONICS TECHNOLOGY 2 - This course is a continuation of the concepts learned in **ELECTRONICS TECHNOLOGY 1**. In addition, radio, rectifiers, integrated circuits, amplifiers and electro-mechanics is explored. These concepts are applied in a learner-based problem solving environment. Projects such as sound-operated circuits, strobe lights, motors, and intermediate robotics are explored. These concepts are applied in a learner based problem solving environment. Prerequisite: **ELECTRONICS 1**.

Engineering Design 1 – Through the development of various problem solving activities, students will be introduced to basic tools and techniques for hand drafting and computer aided design. Students will be exposed to 3D modeling and rapid prototyping using technology such as 3D printers and laser cutters. Students will also acquire an understanding of the career opportunities in engineering and related fields of technology.

Engineering Design 2 - This course builds upon concepts learned in **Engineering Design 1** to include more complex engineering concepts, systems and drafting techniques. Students will incorporate 3D modeling and rapid prototyping using technology such as 3D printers and laser cutters along with traditional construction techniques. Engineering career options will be explored. Prerequisite: **Engineering Design 1**.

ENGINEERING DESIGN - ADVANCED (HONORS) - Advanced techniques in engineering problem solving and drawing will be emphasized in this course. Students will develop the ability to perceive aesthetic values and the ability to analyze and reason in the engineering field.

Prerequisite: **Engineering Design 2.**

ROBOTICS 1 - This course follows **ELECTRONICS TECHNOLOGY 2**. It will focus on students' ability to construct, control and program robots through investigative and exploration activities. Research projects will expose the students to the engineering process while integrating science, technology and mathematics using STEM Education concepts.

Prerequisites: **ELECTRONICS 1 AND 2 AND/OR PERMISSION OF THE INSTRUCTOR**.

ROBOTICS 2 (HONORS) - This course follows ROBOTICS 1. It will further enhance students' ability to utilize robots efficiently to improve quality of living through the progression of the 21st Century. Students will build on their ability to construct, control, and program robots, implementing what they have learned regarding the engineering process while incorporating various STEM Education concepts. The students will receive a comprehensive overview of robotic systems and the subsystems that comprise them.

Prerequisite: Robotics 1.

Edison High School Only

AUTOMOTIVE TECHNOLOGY 1 - Central New Jersey places great demands on the vehicle owner. This comprehensive course covers aspects of vehicle maintenance and the requirements to stay safe as well as mitigate the cost of ownership. Participating students can expect to work with their hands in a lab type setting. Areas covered are fluids, driveline, wheels and tires, brakes and suspension, as well as basic vehicle systems such as cooling, lubrication, charging, starting, ignition and basic engine operation. Critical topics covered include: electrical theory, Newton's laws, Boyle's law, Bernoulli's Principle, Standard and Metric measurement, materials processing and machine and hand tool operation safety.

AUTOMOTIVE TECHNOLOGY 2 - Using what was learned in the Auto 1 course, students will begin to explore the diagnostic tools and procedures necessary to make specific automotive systems repairs. Systems to be covered are: computer controlled fuel injection, Federal emissions equipment, climate control, antilock brakes/traction control, power steering, and automatic transmissions. Critical topics covered include: Schematic diagrams, Ohms and Watts laws, diagnosing mechanical engine problems and performance. Students use multimeters to measure electrical quantities on shop vehicles

Prerequisite: AUTOMOTIVE TECHNOLOGY 1.

AUTOMOTIVE TECHNOLOGY 3 (HONORS) - Students will engage in an in-depth study of the diagnostic and repair of specific automotive systems. Students will troubleshoot malfunctions using industry standard flow charts and modern diagnostic equipment. A greater emphasis is spent on the On Board Diagnostic (OBD) II computer systems and the operations of modern vehicle systems. Several electrical diagnostic methods are covered including voltage drop, parasitic drain, and signal patterns. Students will make practical measurements on shop vehicles using industry standard equipment.

Prerequisites: AUTOMOTIVE TECHNOLOGY 1 AND 2.

Occupational Automotive Technology (Honors) - This is a double period course. The participants will have an hour and a half each day, allowing the advanced student time to complete each comprehensive task uninterrupted. Topics include: advanced diagnostics, fabrication, engine rebuilding, restoration and industry procedures. This course is especially geared for the student interested in a career as an automotive technician. Automotive Service Excellence (ASE) test question study and preparation is provided throughout the course.

Prerequisites: AUTOMOTIVE TECHNOLOGY 1, 2 AND 3.

DIGITAL MEDIA AND PHOTOGRAPHY 1 - This course is an introductory course designed to provide students with a unique opportunity of integrating the latest trends in multimedia computer graphics and photography. Students will create a variety of products, prototypes, and visual graphics. Students will become familiar with techniques and skills gaining hands-on experience which will allow them to experience a variety of multimedia software within this industry. Students will learn the basics of editing, manipulating and producing top quality digital photographs in Photoshop. In the computer graphics portion of the class, students will use Adobe Illustrator to create text and graphics for the web and print. Exploration in various applications of digital commercial photography will also be introduced.

DIGITAL MEDIA AND PHOTOGRAPHY 2 - This course will cover computer design issues focusing on digital communication tools and various multimedia applications. Projects will incorporate skills in digital multimedia production, digital video, computer illustration, computer internet exploration, website design, and digital photography. The target is to develop professional skills in our students which will be evident in their digital multimedia and photographic design portfolios.

Prerequisite: DIGITAL MEDIA AND PHOTOGRAPHY 1.

DIGITAL MEDIA AND PHOTOGRAPHY 3 (HONORS) - This is an advanced course for students looking to expand their knowledge and understanding of the communications industry. Emphasis will be in digital video and photography. Digital video curriculum will develop knowledge in storytelling, capturing and editing video and audio. Curriculum that develops career and communication skills will be explored in this class. Students will also have the option to concentrate on a specific area of study with the approval of their instructor.

Prerequisite: DIGITAL MEDIA AND PHOTOGRAPHY 2.

DIGITAL MEDIA AND PHOTOGRAPHY 4 (HONORS) - This is an advanced independent study course for career-oriented students. An area of concentration is agreed upon by student and instructor and a contractual agreement is established regarding requirements for successful completion of this course.

Prerequisite: **DIGITAL MEDIA AND PHOTOGRAPHY 3**.

INTRODUCTION TO WOODWORKING 1 - Through the development of various problem solving activities, students will be introduced to the proper and safe use of available hand tools, power hand tools and machines. Characteristics of wood, design fundamentals, construction methods and finishing techniques will be the focus of study. Different materials and manufacturing processes commonly associated with various industries will be explored.

ADVANCED WOODWORKING 2 - With the successful completion of **INTRODUCTION TO WOODWORKING**, the student will be able to develop extensive learning activities and construct projects of their choice with emphasis on advanced machine operations.

Prerequisite: Introduction to WOODWORKING.

HONORS ADVANCED WOODWORKING 3 (HONORS) - Upon completion of INTRODUCTION TO WOODWORKING and ADVANCED WOODWORKING 2, the student has the opportunity to be involved in an independent study program. Students who plan to enter the woodworking or occupational field or interested in advanced woodworking as a leisure time activity can benefit from this course.

Prerequisite: ADVANCED WOODWORKING 2.

J.P. Stevens Only

CONSTRUCTION TECHNOLOGY - Students will be exposed to the tools and construction techniques for the building and repair of buildings made with wood framed construction and related plumbing and electrical systems.

Prerequisites: ARCHITECTURAL DRAWING 1 and 2 OR ENGINEERING DESIGN 1 and 2 and instructor permission

STUDY OF FILM HISTORY - This course will teach students the history of film and how the film techniques have changed over 100 years. Students will study different types of films, different styles of writing, different production companies, varied film techniques and different editing styles. Students will also study the meaning of colors, symbolism, and meaning within films and how these details shape the outcome of a product. Students will study the change in film from the early 1900s to current times and see how each aspect has developed over time. The course will also uncover the different careers within the film industry.

VIDEO PRODUCTION 1 - This course is a hand's on course that will allow students to express themselves creatively through video film. Students will learn the ins and outs of a film production including how to develop a story, write a script, prep and prepare for a video shoot, use a camera to film the story, and edit the film to produce a short form video. They will learn and practice the basics of creating a film and how to work with others through the many challenges in a time-crunch setting. Students will learn everything from pre-production to post production. This course will teach students the many different film roles that are seen in the film industry and allow the students to take on the roles to further develop their skills in time management and collaboration.

VIDEO PRODUCTION 2 - This intermediate course of study has been designed to provide students with a well-integrated approach to learning all phases of media and video production. The curriculum, which is a follow-up to Video Production I, is organized into six core units of study to offer students additional opportunities to explore all phases of media production from the planning stage to final publishing. This hands-on approach to accessing content will draw on the individual strengths and needs of the students to gain a deeper understanding of the course objectives, while teaching them the four specific skills that are most important for preparing students for success in the 21st Century: critical thinking, communication, collaboration, and creativity.

Prerequisite: VIDEO PRODUCTION 1.

VISUAL AND PERFORMING ARTS DEPARTMENT

VISUAL ARTS

9 th	10 th	11 th	12 th	
 Art 1 Ceramics Three-Dimensional Design Painting/Drawing Printmaking and Design 	 Art 1 Art 2 Visual Arts 1-1 Ceramics Three-Dimensional Design Painting/Drawing Printmaking and Design 	 Art 1 Art 2 Visual Arts 1-1 Visual Arts 2-H (Honors) AP Art History AP Studio Art 3-D Ceramics Three-Dimensional Design Painting/Drawing Printmaking and Design 	 Art 1 Art 2 Visual Arts 1-1 Visual Arts 2-H (Honors) Visual Arts 3/AP Studio Art 2-D AP Art History AP Studio Art 3-D Ceramics Three-Dimensional Design Painting/Drawing Printmaking and Design 	

VISUAL ARTS

ART 1 - This is a course to introduce students to all aspects of the creative arts with major emphasis on the visual elements of design. Students learn to use the elements as tools to help express themselves and to evaluate the quality of art objects. Students will explore media such as painting, perspective, portraits, figure drawing, graphics, ceramics, vocations, drawing, lettering, and art history.

ART 2 - This course is a continuation of ART 1 with an emphasis on skill and technique in the use of media. It is designed to develop creative abilities, self-expression, and the appreciation of art in our daily lives. Areas of study include various types of painting, drawing, cartooning, printmaking, commercial art, and sculpture.

Prerequisite: ART 1.

VISUAL ARTS 1 - This course is designed for the serious student who wishes to prepare for a career in the arts or for those students who have demonstrated above-average ability in the arts area. The visual arts program is a three-year sequential program of skill development leading to art school, college, or university study in the arts. The student will be pursuing a program of structured skill development including study in design elements, drawing, painting, graphics, photography, advertising, illustration, fashion design, package design, and computer graphics. Students will be prepared to mount and mat art work, and explore careers of the artist/designer.

Prerequisite: **MS** recommendation or successful completion of ONE of the following: **ART 1**, **CERAMICS**, **THREE-DIMENSIONAL DESIGN**, **PAINTING/DRAWING OR PRINTMAKING AND DESIGN**.

VISUAL ARTS 2 - This second-year course in the visual arts program is designed to develop the student as a professional in the arts. The program explores painting, drawing, graphics, and the commercial areas to a higher degree. The student will be introduced to art history, will prepare creative compositions to be used in the development of a portfolio and pursue personal interests in an independent study program. Emphasis will be placed upon exploring college requirements, scholarships, and goal development. Students successfully completing this course receive HONORS credit.

Prerequisites: VISUAL ARTS 1 and/or approval of department staff.

VISUAL ARTS 3/AP STUDIO ART 2-D - This course is divided into two parts: portfolio development and the study of art history. This course may lead a student to advanced standing in art schools and colleges. The first semester, devoted to portfolio development, will take two directions: drawing skills and the traditional portfolio. The major emphasis is on student responsibility, self-motivation, personal commitment, and slide preparation. The second semester will be devoted to the survey of art objects from prehistoric times to the present, with the intention of relating art production to ideals, values, needs, and hopes of people at different times in history. Students successfully completing this course receive HONORS credit.

Prerequisites: VISUAL ARTS 2 and/or approval of department staff

AP ART HISTORY - The AP Art History course welcomes students into the global art world to engage with its forms and content as they research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the students develop indepth, holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual contextual and comparative analysis to engage with a variety of art forms, developing understanding of individual works and interconnections across history.

AP STUDIO ART 3-D - The 3-D Design AP course will require the student to create a portfolio designed for depth of investigation and the process of discovery. The portfolio is comprised of two sections: the <u>Concentration section</u>, which involves the manipulation of materials such as clay, plaster, and any found objects/materials. The <u>Breadth section</u> will demonstrate the student's strong skills in visual principles and material techniques.

Prerequisites: 3-D Design or Ceramics and/or approval of department staff.

CERAMICS - This course gives emphasis to the variety of ceramic sculptural forms as well as objects for everyday use. **CERAMICS** explores hand-built and wheel-thrown methods of clay construction, introduces glaze design and chemistry, and surveys the history of ceramic design. Individual guidance is offered to students in developing a sense of three-dimensional design and responsiveness to the material. In the second half of this full year course, the emphasis will be on the wheel-thrown methods of construction and on forming spouts, lids, necks, handles, and feet in the production of utilitarian pieces. Sculptural work will also be explored using both wheel-thrown and hand-built techniques. Decorating, texturing, glazing, and staining of pieces will be taught and students will assist in kiln loading and firing. In addition, the historical importance of clay in civilization will be presented and a final project and/or research paper will be required.

THREE-DIMENSIONAL DESIGN - People exist and move within a spatial reality consisting of three dimensions. An understanding of those dimensions is essential if individuals are to relate effectively to their surroundings. This course deals with the elements which make up the visual areas of three-dimensional expressive arts. Areas of exploration are crafts, jewelry, mobiles, sculpture and architecture. In addition, the historical significance of major three-dimensional works will be presented.

PAINTING/DRAWING - Artists use various materials to communicate sensory, emotional, and intellectual reactions to the visual world. The goal of this course is to explore the skills and techniques required to communicate through painting and drawing media. Students will be exposed to the historical importance of artists in the development of painting and drawing. Individualized instruction as well as group activities will be important parts of this course. Various media such as charcoal, pastels, colored pencil, oil and acrylic paint and water colors will be utilized. It is recommended that students successfully complete **ART 1** before taking this course.

PRINTMAKING AND DESIGN - The creating of a design and the application of that design to reproduction is a key to the **PRINTMAKING AND DESIGN** course. Students are exposed to the elements of design through screen printing, lithography, etching, relief printing, and other graphic processes. Students learn the terminology and techniques necessary to communicate through printmaking processes. Individualized instruction, group projects, and technical demonstrations are the types of activities comprising this course.

VISUAL AND PERFORMING ARTS DEPARTMENT

PERFORMING ARTS

9 th	10 th	11 th	12 th		
 Freshman Concert Band Freshman Orchestra 9 Camerata Orchestra 9 Concert Choir 9 Concert Choir 1 (JPS) A Capella Choir 9 Music Theory 1 Introduction to Music Technology/Composition Dance 1, 2 Guitar 1 	 Symphonic Band 1 Wind Ensemble 1 Concert Orchestra 1 Chamber Orchestra 1 Camerata Orchestra 1 Concert Choir 1, 2 (JPS) A Capella Choir 1 Chamber Singers 1 Music Theory 1, 2 AP Music Theory (Honors) Introduction to Music Technology/Composition Music Technology II: Electronic Music & Audio Engineering Dance 1, 2 Dance 3 (Honors) Guitar 1, 2 	 Symphonic Band 1, 2 Wind Ensemble 1 Wind Ensemble 2 (Honors) Concert Orchestra 1, 2 Chamber Orchestra 2 (Honors) Camerata Orchestra 1 Camerata Orchestra 2 (Honors) Concert Choir 1, 2 (JPS) A Capella Choir 1 A Capella Choir 2 (Honors) Chamber Singers 1 Chamber Singers 2 (Honors) Music Theory 1, 2 AP Music Theory (Honors) Introduction to Music Technology/Composition Music Technology II: Electronic Music & Audio Engineering Dance 1, 2 Dance 3, 4 (Honors) Guitar 1, 2 Guitar 3 (Honors) 	 Symphonic Band 1, 2 Symphonic Band 3-H Wind Ensemble 1 Wind Ensemble 2 (Honors) Concert Orchestra 1, 2 Chamber Orchestra 2 (Honors) Camerata Orchestra 1 Camerata Orchestra 2 (Honors) Concert Choir 1, 2 (JPS) A Capella Choir 1 A Capella Choir 2 (Honors) Chamber Singers 1 Chamber Singers 2 (Honors) Music Theory 1, 2 AP Music Theory (Honors) Introduction to Music Technology/Composition Music Technology II: Electronic Music & Audio Engineering Dance 1, 2 Dance 3, 4 (Honors) Guitar 1, 2 Guitar 3, 4 (Honors) 		

PERFORMING ARTS

FRESHMAN CONCERT BAND - This course is open to 9th grade students with previous experience on a band instrument and non-experienced students will require the permission from the director. This course is a follow-up to the middle school band program and will introduce students to high school band literature. Emphasis is placed upon developing individual performance skills. Students may have an opportunity to pursue a secondary instrument of study.

SYMPHONIC BAND 1 - This course is open to 10th–12th grade students with previous experience on a band instrument and non-experienced students will require permission of the director. Students are exposed to sophisticated literature, have the opportunity to perform at specialized venues, and are challenged to further improve individual and ensemble skills. The development of secondary instrumental study is also a component of this course.

SYMPHONIC BAND 2 - This course is a continuation of the **SYMPHONIC BAND 1** course for 11th-12th grade students. Students are exposed to sophisticated literature, have the opportunity to perform at specialized venues, and are challenged to further improve individual and ensemble skills. The development of secondary instrumental study is also a component of this course.

SYMPHONIC BAND 3H - This course is a continuation of the **SYMPHONIC BAND 2** course (**Seniors only**). Students are exposed to sophisticated literature, have the opportunity to perform at specialized venues, and are challenged to further improve individual and ensemble skills. The development of secondary instrumental study is also a component of this course. Students completing two years of study in this course receive HONORS credit.

WIND ENSEMBLE 1 - This course is composed of outstanding instrumentalists who have successfully completed one year of study in **SYMPHONIC BAND 2** or **SYMPHONIC BAND 1** AND 2 and who have secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant wind band literature. Attendance is required at all performance activities in and out of school.

WIND ENSEMBLE 2 - This course is composed of the outstanding instrumentalists who have successfully completed one year of study in **WIND ENSEMBLE 1** and who have secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant wind band literature. Attendance is required at all performance activities in and out of school. Students successfully completing this course receive HONORS credit.

FRESHMAN ORCHESTRA 9 - This course is open to 9th grade students with previous experience on a stringed instrument and non-experienced students will require the permission of the director. This course is a follow-up to the middle school orchestra program and will introduce students to high school orchestra literature. Emphasis is placed upon developing individual performance skills. Students may have the opportunity to pursue a secondary instrument of study.

CONCERT ORCHESTRA 1 - This course is open to 10th-12th graders who have not previously registered for orchestra. Students are exposed to significant literature, have the opportunity to perform at specialized venues, and are challenged to further improve individual and ensemble skills. The development of the secondary instrumental study is also a component of this course.

CONCERT ORCHESTRA 2 - This course is a continuation of the **CONCERT ORCHESTRA 1** course (11th-12th grade students). Students are exposed to significant literature, have the opportunity to perform at specialized venues, and are challenged to further improve individual and ensemble skills. The development of secondary instrumental study is also a component of this course.

CHAMBER ORCHESTRA 1 - This course is composed of outstanding instrumentalists who have successfully completed one year of study in FRESHMAN ORCHESTRA 9, CONCERT ORCHESTRA 1 AND 2 or CAMERATA ORCHESTRA 1 AND 2 and who have secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant orchestral literature. Attendance is required at all performance activities in and out of school.

CHAMBER ORCHESTRA 2 - This course is composed of outstanding instrumentalists who have successfully completed one year of study in **CHAMBER ORCHESTRA 1** or **CAMERATA ORCHESTRA 1** and who have secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant orchestral literature. Attendance is required at all performance activities in and out of school. Students successfully completing this course receive HONORS credit.

CAMERATA ORCHESTRA 1 - This course is composed of outstanding instrumentalists who have successfully completed one year of study in **FRESHMAN ORCHESTRA 9** or **CONCERT ORCHESTRA 1 AND 2** and who have secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant orchestral literature. Attendance is required at all performance activities in and out of school.

CAMERATA ORCHESTRA 2 - This course is composed of outstanding instrumentalists who have successfully completed one year of study in **CAMERATA ORCHESTRA 1** or **CHAMBER ORCHESTRA 1** and who have secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant orchestral literature. Attendance is required at all performance activities in and out of school. Students successfully completing this course receive HONORS credit.

CAMERATA ORCHESTRA 9 - This course is composed of the outstanding 9th grade instrumentalist who has secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant orchestral literature. Attendance is required at all performance activities in and out of school.

CONCERT CHOIR 9 - This course is opened to 9th grade students with or without previous singing experience. This course is a follow-up to the middle school choral program and will introduce students to high school choral literature. Emphasis is placed upon developing individual performance skills. Students may have the opportunity to perform at a variety of venues.

CONCERT CHOIR 1 - This course runs concurrently with the **CONCERT CHOIR 9** course. Students are exposed to sophisticated literature, have the opportunity to perform at various venues, and are challenged to develop individual and ensemble skills.

CONCERT CHOIR 2 - This course is an expansion of the **CONCERT CHOIR 1** course. Students are exposed to sophisticated literature, have the opportunity to perform at various venues, and are challenged to develop individual and ensemble skills.

A CAPPELLA CHOIR 9 - This course is composed of the outstanding 9th grade vocalists who have secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant choral literature. Attendance is required at all performance activities in and out of school.

A CAPPELLA CHOIR 1 - This course is composed of outstanding vocalists who have successfully completed one year of study in CONCERT CHOIR 9 or A CAPPELLA CHOIR 9 and who have secured the recommendation of the department through audition. The focus of this class is on the preparation and performance of significant choral literature. Students enrolled in the course are highly encouraged to participate in all out-of-school rehearsals and performances as scheduled by the choir director as these are crucial to the choral experience.

A CAPPELLA CHOIR 2 - This course is composed of outstanding vocalists who have successfully completed one year of study in A CAPPELLA CHOIR 1 and who have secured the recommendation of the department through audition and/or recommendation. The focus of this class is on the preparation and performance of significant choral literature. Attendance is required at all performance activities in and out of school. Students successfully completing this course receive HONORS credit.

CHAMBER SINGERS 1 - This course is composed of students who, by audition, display exceptional aural, oral and musical abilities. Continual emphasis is placed upon learning to sing and perform mature solo and ensemble literature of the highest level. A limited enrollment will place strong demands on each member of this course and performance is required at all performance events in and out of school.

CHAMBER SINGERS 2 - This course is composed of students who, by audition, display exceptional aural, oral and musical abilities and who have successfully completed one year of study in **CHAMBER SINGERS 1**. Continual emphasis is placed upon learning to sing and perform mature solo and ensemble literature of the highest level. A limited enrollment will place strong demands on each member of this course and performance is required at all performance events in and out of school. Students successfully completing this course receive HONORS credit.

MUSIC THEORY 1 - The beginning student will be taught the fundamentals necessary to interpret, analyze, and create music. Students selecting this course should have formally studied in a musical instrument for at least one year.

MUSIC THEORY 2 - Designed for the serious music student possessing talent in music, this course will serve as preparation for the student planning to major in music in college. This course will focus on the following aspects: (1) chord construction; (2) rhythmic, melodic and harmonic dictation; (3) analysis of music literature; (4) two-, three-, and four-part harmonization; (5) sight-signing; (6) original composition; (7) ear-training, (8) development of keyboard skills.

Prerequisite: Successful completion of **Music Theory 1** and/or teacher recommendation.

AP Music Theory - In addition to the study of advanced harmony, melodic and rhythmic concepts, in established or original music, students will be assigned a variety of composition and arrangement projects individually and in small groups. Analysis of complex harmonic structures and the development of aural skills through sight-singing and dictation will be integral to the course. Upon successful completion of this course, students are expected to take the Advanced Placement Music Theory Test as administered by the College Board.

Prerequisite: Music Theory 1.

INTRODUCTION TO MUSIC TECHNOLOGY/COMPOSITION - This course is designed to introduce many aspects of music technology, including the use of computers for composition and production, basics of hardware and software electronic instruments MIDI, the use of electronics in performance and basic audio recording and editing. Over the course of the year, students will be expected to create a number of original musical compositions and create an album of their work. Previous musical experience is not required but students with little or no previous experience will find this course challenging.

Music Technology II: Electronic Music & Audio Engineering - This course is for students who wish to undertake advanced study in music technology. Students will build on knowledge and skills gained in Introduction to Music Technology/Composition and will continue study in electronic music and audio engineering. Students may choose to emphasize a particular are of study, such as electronic music (including effective use of MIDI and audio effects, programming of hardware MIDI controllers and instruments, principles of synthesis and sound design, and proficiency in the use of an electronic instrument) or audio engineering (including effective use of microphones, mixers and other audio equipment; listening carefully to recorded and live sound; and use of digital audio workstation software to mix, edit and master audio). All students will collaborate to crate major projects integrating multiple fields of study. Students are expected to participate in any extracurricular activities involving the music technology program. Students taking this class will gain significant experience in the music technology field.

DANCE 1 - is a survey-style introduction to the art of dance. The course focuses on developing proper technique and performance skills, as well as an appreciation for a variety of dance techniques and styles. Students acquire knowledge of dance history, class etiquette, injury prevention, and the rehearsal process. They also have several opportunities to explore the elements and principles of choreography by creating original dance works, and viewing professional examples, Students with no previous training will acquire a basic foundation of dance skills and art appreciation; while more advanced students will continue to advance their technique, artistry, and dance awareness. There are no performance requirements for this class. Grade level(s): 9-12.

DANCE 2 – Students taking this course will continue to refine the skills learned in **DANCE 1**. More advanced techniques will be studied through daily classroom practice and instruction. Performance will be integral to the course and include outside performance opportunities. Students will also participate in field trips throughout the year to enhance their training. Students will also have the opportunity to explore the Dance repertoire from different genres and further their knowledge in dance history, anatomy, and improvisation. Students are required to perform in the spring dance concert. Grade level(s): 9-12.

Prerequisite: Successful completion of **Dance 1** and/or permission from the instructor.

DANCE 3 (HONORS) – Students taking this course will continue refining technical skills from DANCE 2 in ballet, modern, and jazz dance. Students will further their knowledge of dance history, anatomy, audition practices, and dance critique. Students will now focus on performance and choreographic skills. Students will develop self-discipline, teamwork, and their artistic voice through group movement studies and practice of technique. Students will create movement vocabulary and set choreography on a soloist, in a duet, and a larger group, as well as be able to critique their work and the work of others. Students are expected to strive toward a higher proficiency and will continue to be showcased in multiple performance opportunities throughout the year. Students will participate in field trips and have opportunities to work with guest artists. Students are required to perform in all showcases including our spring dance concert. Grade level(s): 10-12. Students successfully completing this course receive Honors credit.

Prerequisite: Successful completion of **DANCE 2** and/or permission from the instructor.

DANCE 4 (HONORS) – Students taking this course will continue refining technical skills from DANCE 3 in ballet, modern, and jazz dance. Students will develop self-discipline, teamwork, and their artistic voice through group movement studies and practice of technique. Students will continue to focus on performance and choreographic skills, as well as research career choices and post-secondary opportunities. Students will build an online portfolio of dance works and be involved in all aspects of producing the spring concert. Students will set choreography and expand their movement vocabulary as well as create their own lessons and experience leading a class. Students are expected to strive toward a higher proficiency and will continue to be showcased in multiple performance opportunities throughout the year. Students will participate in field trips and have opportunities to work with guest artists. Students are required to perform in all showcases including our spring dance concert. Grade level(s): 11-12. Students successfully completing this course receive Honors credit

Prerequisite: Successful completion of **DANCE 3** and/or permission from the instructor.

- **GUITAR 1** This course is an introductory beginning level course for students interested in learning how to play the guitar. Music reading skills will be emphasized and practiced on a daily basis. Students will also learn the concepts of reading chord notation. Guitar ensemble music will be integral to the course and include outside performance opportunities.
- **GUITAR 2** Students taking this course will continue to refine the skills learned in **GUITAR 1**. More advanced music reading skills will be learned through daily classroom practice and instruction. Guitar ensemble music will be integral to the course and include outside performance opportunities. Students will have the opportunity to explore solo guitar repertoire from different genres (classical, jazz, etc.)
- **GUITAR 3** Students taking this course will continue to refine the skills learned in **GUITAR 1 and 2**. More advanced music reading skills will be mastered through daily classroom practice and instruction. Guitar ensemble music will be integral to the course and include outside performance opportunities. Students will have the opportunity to explore solo guitar repertoire from different genres (classical, jazz, etc.) Students successfully completing this course receive HONORS credit.
- **GUITAR 4** Students enrolled in **GUITAR 4** will have taken **GUITAR 1, 2 and 3**. They will learn advanced technical and theoretical skills through daily classroom practice and instruction. Guitar ensemble music will be integral to the course and include outside performance opportunities. Students will also explore solo guitar repertoire from different genres (classical, jazz, etc.) Students successfully completing this course receive HONORS credit.

SPECIAL PROGRAMS

9th	10 th	11 th	12 th	
EDISON CCAP 1 (COLLEGE/CAREER ADVANCEMENT PROGRAM) Science and Engineering Academy	EDISON CCAP 2 (COLLEGE/CAREER ADVANCEMENT PROGRAM) Science and Engineering Academy	EDISON CCAP 3 (COLLEGE/CAREER ADVANCEMENT PROGRAM) Science and Engineering Academy	EDISON CCAP 4 (COLLEGE/CAREER ADVANCEMENT PROGRAM) Science and Engineering Academy	

SPECIAL PROGRAMS

EDISON ACES 1, 2, 3, AND 4 - The purpose of this program is to prepare all students for college and career readiness and success in a global society by providing them with skills and strategies to navigate through rigorous coursework. Students will develop a deeper understanding of the connection between various learning strategies and their academic performance. This program includes courses focusing on note-taking, organization, time-management, reading and writing with a purpose and test-taking strategies. In addition, students will learn more about their strengths and interests while exploring different pathways to college and careers. In the spring of 8th Grade, students will be recommended for this program. Interested students will be interviewed by the ACES selection committee during the early Spring-prior to the start of the course selection process. Once a student is selected and welcomed into the program, he or she will be supported all four years of their high school academic career. As part of the ACES curriculum, all ACES students will take ACES 1, 2, 3 and 4 in their freshman, sophomore, junior and senior years respectively.

SCIENCE AND ENGINEERING ACADEMY (EHS) - The Science and Engineering Academy is a highly competitive academic program designed for exceptional students interested in pursuing post-secondary study and careers in mathematics, engineering or the physical sciences. Students from across the District that meet eligibility criteria will apply for admission to the four-year program in November of 8th grade. Eligible students must be enrolled in a full-year GEOMETRY (HONORS) course in 8th grade and demonstrate honor roll achievement in all courses. A writing sample, teacher recommendations and the PSAT 8/9 are also part of the application process. Additionally, the admission screening committee may require a personal interview with the eligible candidates. There is a specific course sequence and requirements that SEA students must follow. Students accepted into the SEA that would normally have attended JP Stevens will receive bussing to Edison High School and become full time EHS students, participating in EHS sports and other co-curricular programs.

SCIENCE AND ENGINEERING ACADEMY COURSES

ENGINEERING INNOVATION - This is required for all freshmen in the Science and Engineering Academy. The Academy is designed to create a broad-based foundation for students who desire a career pathway in Electrical, Mechanical, Graphic or Civil Engineering. Areas of focus will include: design and problem solving, exploration of engineering fields, structures and mechanisms, power and energy systems, ergonomics, robotics, material sciences, green technology, maintenance, structural analysis, biotechnology and laboratory experiences.

The course includes a foundation component to introduce students to the engineering laboratory setting. Areas of focus will incorporate career pathways, historical engineering, and types of engineering, design and construction principles and a strong emphasis on problem solving. Following the foundation component will be specialized units in electrical, mechanical and civil engineering. The electrical engineering unit will explore the field of electrical and electronic engineering. Core components of this field will focus on electricity, electronics, circuitry and robotics. The unit in mechanical engineering will focus on mechanics, structures and mechanisms, material sciences, structural analysis and engineering graphics. The civil engineering unit will introduce students to the design, construction and maintenance of the physical and naturally build environment. Areas of focus are roads, bridges, canals, dams and buildings. This unit will include exploration of career pathways and the many sub-disciplines that fall under the Civil Engineering title. This course is only open to students enrolled in The Science and Engineering Academy.

ENGINEERING GRAPHICS (HONORS) - This course is required for sophomores in the Science and Engineering Academy. It will include advanced units in Electrical, Mechanical, Graphic and Civil Engineering. Students will have the opportunity to select the unit(s) that most interests them to conduct independent research projects. The course will further develop students problem solving skills and the tools needed to conduct scientific enquiry. *This course is only open to students enrolled in The Science and Engineering Academy.*

ELECTRICAL ENGINEERING AND DESIGN (HONORS) - The Electrical Engineering and Design course within the Science and Engineering Academy is designed to create a broad-based foundation for students who desire a career pathway in a variety of engineering fields. Candidates in the Electrical Engineering and Design course will explore responsible engineering positions in design, development, research, applications, and operation in the fields of communications, control systems, digital signal processing, robotics, digital and analog electronic circuits, physical electronics, computer-aided design and power systems. The curriculum is built around a strong basic core of mathematics, physics and engineering science.

Components of this course will give students a hands-on engineering laboratory and real world experience while exposing them to different concepts in Engineering. The content and methods of this course will provide a foundation for future engineering pathways and prerequisites for additional Science and Engineering Academy courses. Field trip experiences. This course is only open to students enrolled in The Science and Engineering Academy.

SENIOR DESIGN AND CAPSTONE EXPERIENCE (HONORS) - Students participate in a senior project to gain hands-on experience in applying engineering and science principles. Engineering students work on a real work engineering problem as part of their graduation recruitment from the Science and Engineering Academy. The students must conceive, design and implement the project; write the description; design brief; document the requirements; secure corporate and community support for the project; and present the final outcome of their work. The project simulates a real-world work environment in a variety of engineering and science fields. The students apply theory, think creatively and develop practical skills such as teamwork, professionalism and leadership. *This course is only open to students enrolled in The Science and Engineering Academy*.

Earn an Associate Degree



MIDDLESEX COLLEGE CONNECTION

High School students can earn an Associate Degree through Middlesex College. This program allows students to attend classes at Middlesex College or to enroll in certain approved courses taught by Edison teachers within our high school and receive concurrent credit.

- Credits earned will appear on both the high school transcript and a Middlesex College transcript.
- A three (3) credit MC courses will satisfy 2.5 credits toward the 130 credits required for high school graduation.
- A total of 15 credits toward the Associate Degree must be taken through Middlesex College. In some cases, the courses will be taught by a college instructor on the high school campus or online.
- There is a \$125.00 fee for each course.
- Student must maintain a "C" average in class to receive credit.

Please visit the Edison district website for more information.

All Edison students have the opportunity to **earn an Associate Degree** or college credits from Middlesex County College by enrolling in specific courses offered at Edison High School or John P. Stevens High School. Students will learn and engage in college-level coursework in the familiar environment of our Edison high schools. With successful completion of the coursework, students have the opportunity to earn an Associate Degree or college credits toward a degree--a great way to begin the college experience!

In New Jersey, by law, public colleges are required to accept associate degrees for related programs. Most colleges across the country may accept up to sixty transfer credits. All colleges reserve the right to accept dual enrollment college credits. If a student plans to attend a four-year university, it is strongly recommended that the student contact the university of intent to inquire about dual credit courses that will be considered for acceptance.

Please note: Student <u>must</u> notify the school counselor of interest in participating in Dual Enrollment when scheduling classes.

PLANNING YOUR PROGRAM

Name:			
Homeroom:	 		

Graduation Requirements Student Checklist

Requirement			Grade 9	Grade 10	Grade 11	Grade 12
English	4 Years/20 o	credits				
Mathematics	4 Years/20	credits				
Science	3 Years/17	credits				
World History	1 Year/ 5 c	redits				
US History	2 Years/10	credits				
World Language	2 Years/10 credits					
Physical Education (Grades 9 -12)	Each Year of Enrollment	20				
Health (Grades 9, 11, 12) (Driver Education – Grade 10)	Each Year of Enrollment	Credits				
21st Century Life	5 Credi	ts				
Visual and Performing Arts	5 Credits					
Economics/Financial Literacy	2.5 Credits					
Other Course	17.5 Credits					
Credits	130					